AN HISTORICAL GYNÆCOLOGICAL AND ANTHROPOLOGICAL COMPENDIUM

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EDITED BY ERIC JOHN DINGWALL

WITH MORE THAN 1,000 ILLUSTRATIONS IN BLACK-AND-WHITE AND SEVEN COLOUR PLATES

VOLUME THREE



LONDON WILLIAM HEINEMANN (MEDICAL BOOKS) LTD. 1935

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Printed in Great Britain by The Whitefriars Press Ltd., London and Tonbridge.

WOMAN

VOLUME III

CHAPTER I

DIFFICULT AND ABNORMAL BIRTHS

1. PRIMITIVE CONCEPTS OF CAUSES

ALL obstructions in the normal process of labour are usually called abnormal labour, difficult labour or dystocia. Now, although it appears that among savage peoples, delivery generally proceeds easily, yet with them also obstacles to delivery sometimes occur, and even from the peculiar regulation prescribed among different peoples for pregnant women and women in childbirth, it is possible to infer what opinions are prevalent among them as to the causes of a difficult or obstructed delivery, for the precautions taken by them indicate that they fear and try to avoid quite definite obstacles. An exact description of their ideas as to how obstacles to delivery arise can, of course, not yet be given. Moreover, we must assume that savage peoples with their imperfect observation of nature have generally only a very vague idea of the conditions of a normal or abnormal process.

First of all, however, it seems that abnormal presentations of the child must by some process of thought appear to the lower races to be the principal causes of difficult labour. This is certainly indicated by the very widespread manipulations which are employed by many of them even during pregnancy for the improvement of the position of the child. That the factor of feebleness of labour pains so important in protraction is not unknown to them, we see from the fact that they try to aid the natural mechanism of parturition by all kinds of modifications of a scientifically applied pressure on the abdomen. Among many peoples, too, we come across the idea that the child itself is not doing its duty adequately, and that it is not making enough effort to get out of the uterus, even that it is obstructing delivery intentionally so as not to be born. By no means seldom also, some obstructive magic, but especially demons, etc., are made responsible for the inexplicable protraction of labour. (Cf. II., pp. 426 and 783).

Medical observers in the Indian Reservations of North America record that the Indians have without doubt a certain idea how difficult labour occurs and arrange their treatment accordingly.

In Uganda, children born with the feet first are killed, and, like witches, are buried at a cross-roads. It is believed that they would be the cause of their parents' death, and if the latter were to let them live, the parents would pass away (see Roscoe).

It is also not unknown to savage peoples that a certain disproportion between the size of the child and the dimensions of the genital passage of the mother may cause very considerable obstruction in delivery.

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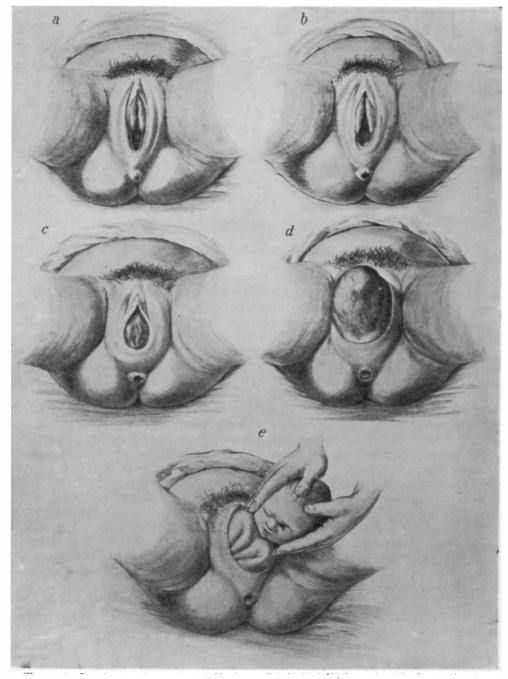


FIG. 781.—Five stages in the course of birth. (a) The vagina begins to open and the walls to relax at the height of a pain; (b) Further gaping of the vagina permits the first sight of the oncoming head. The anus begins to relax; (c) The head appears at the opening of the vagina; (d) The vulva gapes: the anus opens and the wall of the rectum becomes visible: the head is born; (e) The shoulders follow, and the birth is almost complete. (After Sellheim.)

Where physicians take little practical part in midwifery a clear understanding of the individual causes of difficult labour will be lacking. The Greek physicians (Hippocrates, etc.) (as the treatment of normal birth was entirely in the hands of the midwives) had no opportunity of becoming really acquainted with the normal course of parturition; they were only called when difficult labour had already set in; their idea of the abnormal process of birth was, therefore, bound to be erroneous in many ways. And when we find in the obstetric works of Aëtius that Philumenus, who described difficult labour and its causes, recommends his colleagues "to find



FIG. 782.—Dilatation of vagina and anus at the commencement of birth. 10.30. (After Pachinger.)

out all the causes from the midwife," we know also how much Roman physicians were obliged to rely upon the inadequate report of the midwives.

We find a still worse state of things in the Arabian period of the history of obstetrics. For the Mohammedan women were by custom and their religious beliefs quite disinclined to resort to male help. To what lamentable results lead the consultations between physicians who do not see the patients and midwives who, although actually in charge of them, have not found the causes of the difficult labour, can be observed in the East to this day. To make the above clear, the course of a normal delivery is shown (Fig. 781), according to Sellheim, and Figs. 782–785, with which the pregnant woman involved (Fig. 651, II., p. 421) should be compared. Fig. 782 : the beginning of delivery at 10.30 (last pain); Fig. 783 : advance of the head and appearance of the amniotic sac 11.15; Fig. 784 : advance

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of the head and rupture of the membranes 11.45; and, finally, Fig. 785: the X-ray photograph during the delivery. The head is already out of the vagina, the vertebral column of the child lies over the vertebral column of the mother.

2. HISTORICAL DATA

Whilst, among Greek physicians, Hippocrates is the first to speak of the faulty presentation of the child as the cause of difficult labour (dystocia), the later medical writers are acquainted with several other causes of protracted labour.

According to Aristotle, those women suffer specially in parturition who lead a

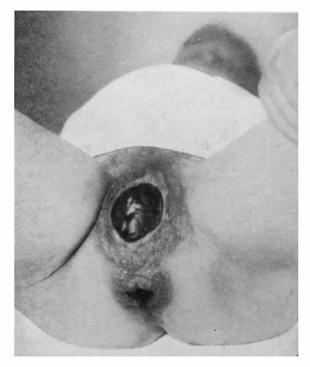


FIG. 783.—The bag of waters becomes visible. Further dilatation of the vulva. 11.15. (After Pachinger.)

sedentary life and have not a good thorax so that they cannot hold their breath well. The obstetric writer, Carystius Diocles, whose writings have been lost, thought, as we learn from Soranus, that primiparæ and young women have comparatively difficult delivery, that a hardened and closed-up os uteri, a remarkably big child, also the death of the fœtus, may cause a difficult labour, and that with moist and warm women delivery is difficult. Cleophantus too says in his writings, which have also been lost, that all women with broad shoulders and narrow hips undergo a difficult confinement in which the presenting part of the child is not the head but some other part. Herophilus blames the obstetric chair as the cause of dystocia.

Soranus divides the causes into those which are due to the child, those which are due to the organism of the mother, or finally those due to the genitals :

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"The mother may suffer difficult labour through psychic influence, affections of the mind as well as from physical reasons, *e.g.*, dyspepsia, dyspnœa, hysteria, *i.e.*, too fat a condition and excessive size of the body, broad shoulders and narrow hips and narrow pelvis; the child, however, can be too big in general or in particular parts (hydrocephalus); there may be several children present; the embryo may have died and then does not assist delivery; and finally it may have a faulty presentation." Among the causes arising from the genitals in an abnormal course of birth, Soranus cites : smallness and narrowness of the os uteri or cervix, closure of the genitals, **c**rooked position of the uterus or of the uterine cervix, inflammation, abscesses or hardening of these parts; further, too thick or too thin foctal membranes, premature discharge of the

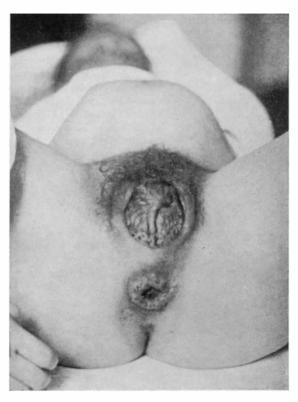


FIG. 784.—The foctal membranes are ruptured. The head appears. Further dilatation of both vulva and anus. 11.45. (After Pachinger.)

liquor amnii; also urinary calculi, exostosis of the pelvis, ossification of the symphysis and too great width of the pelvis may contribute to a difficult labour.

Soranus devotes a whole chapter to the discussion of the question : "Why do most children in Rome suffer from rachitis ?" At the same time, as Pinoff shows, he has first spoken of the narrowness of a malformed pelvis as well as its excessive breadth. Hence, it may be assumed that in ancient Rome rachitic malformations of the female pelvis were not unusual phenomena. There is also to be found in Soranus a statement of Cleophantus that women with broad shoulders and narrow hips have difficult delivery because, with them, rupture of the sac does not take place until the stronger pains set in (Soranus, ed. Ermerins, 266). We find in Soranus for the first time a rational procedure based on a real knowledge of the fundamental causes of difficult labour (cf. W. J. S. McKay, p. 86).

When the patient had an excessively wide pelvis, he had her put on her knees so that the uterus, supported on the epigastrium, was in a straight line with the uterine cervix. This procedure he followed also with corpulent persons; the same method was used for such cases also by the Arabs and the Germans of the Middle Ages. If the os uteri was found to be closed up, Soranus employed softening specifics: rubbing with oil, decoctions of fenugreek, mallow, linseed; softening injections; poultices on the public region, the epigastrium and the loins. If these expedients were of no use, then the patient is to be gently moved to the chair without causing her body to be violently shaken. To keep the patient's mind calm, Soranus recommends words of comfort and admonitions to endure the pain. If swooning sets in, strengthening



FIG. 785.—X-ray photograph of a stage of birth. The head has already emerged from the vagina. (After Warnekros.)

specifics are to be used. If a swelling on the genitals is the cause of the protracted labour, it is to be removed with the fingers or knife. Retained fæces are to be removed by enemas; urine by the catheter; stones in the bladder are to be brought from the neck of the bladder to the top of the bladder by means of the catheter. The unbroken chorion is to be torn with the finger, and in premature discharge of the liquor amnii, injections with oil into the vagina are to be made. Also the procedure in faulty presentations of the child is thoroughly discussed by Soranus.

Another doctor of that period was Philumenus, whose writings unfortunately have not come down to us in the original, but of whom we learn in the works of Aëtius, who refers to him repeatedly. He differentiated four essential groups in difficult labour, namely, those caused by the mother; those by the child; those which are caused by the after-birth; and, finally, those caused by external circumstances.

The causes coming from the mother are, according to him : afflictions of the mind, general debility, smallness of the uterus, narrowness of

the birth passage, crooked position of the uterus, fleshy growths at the os uteri, inflammation, abscesses, hardening of the same, too strong fœtal membranes, too early discharge of the liquor amnii, urinary calculi and excessive corpulence of the patient. Philumenus also spoke of too tight a binding of the genitals which might hinder the necessary dilatation in parturition. Further, he found difficult labour from pressure on the uterus, caused by a faulty condition of the lumbar region owing to fæces collecting in the rectum or because the patient is too old or too young.

The child is the cause of difficult labour if it is too big or if it is a question of a monster. But too great weakness of the foctus or its death may also be the cause of difficult labour, as then the active movements of the child are absent which were thought absolutely necessary for the act of delivery.

A difficult labour may also occur if twins arrive at the os uteri at the same time. Not less obstructive are deviations from the normal presentation of the foctus, *i.e.*, from the head presentation, in which the upper extremities lie extended downwards towards the thighs. These faulty presentations of the child will be discussed later in detail.

Likewise, too thick or too thin fœtal membranes may cause a difficult labour; and, finally, special influences on the course of labour were ascribed to the seasons and the weather.

The ideas of the ancient Hindu doctors on difficult labour we learn from Sušruta :

They regarded certain nervous occurrences, contraction of the genitals, fainting caused by hæmorrhage (with which they also mention plugging), and, further, diseases of the vagina and its adjacent organs, as interfering in the course of delivery.

Delivery becomes impossible from three causes : deformity of the head of the child, deformity of the pelvis of the mother, and a faulty presentation of the child. Susruta designates as abnormal presentations, the knee, breech, shoulder, breast, back and side presentations, and the prolapse of both arms or feet. The chief method for the improvement of all these presentations is turning on the feet or (*e.g.*, in side and shoulder presentations) on the head. In prolapse of the arms, also, the fœtus is to be turned on the head; yet sometimes turning on the feet is easier to accomplish. Dead children which are not born in the normal way are, according to the parts which were presented, to be dismembered by means of sharp instruments, for they are regarded as foreign substances which must be removed from the body.

Susruta mentions the following operative interference in difficult labour, to which we shall revert again :

"In foot presentation extraction; in prolapse of one foot bringing down the other and extraction; in breech presentation, turning on the feet and extraction; in what appears to be transverse presentation, turning on the head. Shoulder presentations (wedging of the shoulders) and the prolapse of both the shoulders are declared to be incurable. Nevertheless, the physician is to try to replace the prolapsed parts and bring about the head presentation. If the worst comes to the worst, the death of the child must be awaited and it must then be removed by cutting off the arms, by the removal of the brain, etc. In the case of the sudden death of the patient in the last period of pregnancy, Cæsarean section is to be resorted to.

The Arabian physicians of the Middle Ages made scarcely one step forward so far as the understanding of difficult labour is concerned. Abulcasis differentiates as causes of difficulty in the process of delivery those which must be ascribed to the mother, those to the child and those to the liquor amnii, to the after-birth or to harmful external things; several of these, however, combined may cause the difficulty. He did not know that a narrow pelvis may hinder delivery. The cephalic presentation of the child is considered by him the only right one, and so, in this respect, he is at a lower stage than his forerunners in antiquity who, at least, recognised the foot presentation as one similar to the natural presentation.

Avicenna, among the causes of obstruction to a normal labour, mentions also the *parva matrix*, and, in addition, also the *via constricta valde in creatione*. v. Siebold has pointed out that Avicenna probably means by these expressions the narrow pelvis.

Rhazes follows the teaching of Aëtius in detail regarding the classification of the causes of protracted labour; but he also mentions the *parvitas matris*, and he recognises the foot presentation along with the head presentation as normal presentations of the child.

The German physicians of the sixteenth century, Rösslin, Rueff, etc., rely entirely on the views of the Roman writers. In his book for midwives, Rösslin directs that when the sac will not rupture of itself, the midwife is to open it between her fingers or with knife and scissors. If she has made this opening too soon, she is to make the vagina slippery with oil of lilies or fat. If the child's head is big, he advises that the vagina and the os uteri be gently widened with the hand. Where a part other than the head presents, manual treatment to be discussed later is recommended.

3. THE CHINESE AND JAPANESE TREATMENT OF DIFFICULT LABOUR

In the popular writings of Chinese physicians, the causes of anomalies in the process of labour are discussed in fair detail. In the treatise translated by Rehmann, the author endeavours to oppose the widely diffused Chinese superstition that labour may sometimes extend over two years. He lays especial emphasis on the fact that nothing can prevent delivery when the right time for it has come. He does, however, give certain conditions which may have the effect of protracting the process of labour, *e.g.*, if the child is lacking in strength. In this case the patient must be allowed to sleep in bed so that the child may get strong. The mother's lying-in bed cannot, in the opinion of the Chinese, hinder labour even when the child lies head downwards. In the opinion of the author, it is also wrong to suppose that alarming the child is not a hindrance to labour, for, during pregnancy, the child has not been alarmed. Further, it is popularly believed that the mother cannot bear the pains of labour well, yet they think that prostitutes suppress the cries of pain in childbirth in order to keep their confinement secret ; if this were so, other women also would certainly be able to endure their labour pains with patience.

Moreover, a hindrance in the process of labour is caused by a faulty presentation of the child brought about by the over-exertion of the mother. It is particularly obstructive if the child issues with the hands or feet or with the back first. In this case, the hands and feet are to be gently bent back, and the patient in case of need is to be allowed to sleep in order to gain strength. Further, in excessive straining of the patient, an "intestine" might come out by which the author probably intends to suggest that excessive bearing down might cause a hernial affection.

An irregular way of living and illness in pregnancy, bad food, high fever, sexual intercourse, hot food and drink, as well as catching cold, may likewise be the cause of an abnormal process of labour.

Among the Japanese, Kangawa states as a very common obstruction in labour the overloading of the rectum with fæces. This is recognised by the examining finger in the vagina. In such a case he recommends the introduction of the finger smeared with honey, jelly, sugar water or fat into the rectum in order to remove the mass of excrement.

Against the supposition of the older Japanese obstetricians that the twisting of the umbilical cord may obstruct labour, Kangawa expresses himself decidedly. He says that the obstruction of labour is always caused by excessive fæces, for he has found that labour always proceeded unhindered although the umbilical cord was twisted round the child's shoulders. He declares that his forerunners are mistaken in thinking that the reason for the cord's twisting round the neck of the child must be sought in a fall of the mother during pregnancy. For since the twisting occurs so frequently that it is observed in 7 or 8 cases out of every 10, it cannot be supposed that the mother had had a fall in every case.

4. DIFFICULT LABOUR DUE TO PHYSICAL DEFECTS IN THE MOTHER

In discussing the physical condition of women in child birth as the cause of difficult labour, the following opinion of Stammler will give expression to what is believed in many quarters even at the present day. This statement reads :

"Difficult labour and impossibility of childbearing must have been rare before the development of the civilisation of the human race and only with the advance of the evil aspects and diseases of civilisation, together with hereditary morbid conditions and traits, could abnormal childbirth have had its beginning and become so common that among civilised nations a perfectly favourable confinement became a rare exception."

Now, does this accord with the actual conditions, or is it merely the result of the common idea that the savages are really the better men ?

To decide this question, we must first of all keep in mind that with the little care which barbarous peoples bestow on their children, the weak ones meet with an early death. Those who survive then have, in general, a proportionately stronger constitution hardened from early years in the fight for existence, and thus in youth, and especially at the age when women bear children, they bear any injury more easily. It is said very justly in a report of the missionary Casalis : "Those of the Basutos who survive their early years must be thoroughly healthy." The same may be said of many other tribes.

A further reason for the greater ease with which savage women go through childbearing doubtless lies in the fact that female physical development with these peoples remains on an average more normal than in civilised countries where the girls, owing to an unsuitable mode of life, often become weaker and less well developed from generation to generation.

There are still, however, further considerations important to race hygiene in the growth of savage peoples. Thus, Külz says very justly :

"The cleansing of the child after birth may not take place at all, but by other peoples again it is done daily with great care by the use of every possible kind of water and decoctions of herbs. With nearly all of them, however, the new-born child is carefully judged as to its value, which discussion according to the customs of various tribes may from one reason or another end even with a sentence of death. Under the influence of European civilisation, however, infanticide has quickly disappeared everywhere. Often a racially hygienic purpose cannot be denied, as, for example, when malformations, deformities, extraordinary frailty lead to exposure and killing."

The civilisation of the missions is, of course, not racially hygienic but ecclesiastical.

Rehmann's Chinese physician expresses the opinion that

"formerly, childbearing was an easy matter, but human beings have themselves made it difficult; it used to be an ordinary and easy matter; now people have made it something to be feared, and just by doing so, unsuccessful births have happened" (cf. G. D. Read).

Also the Chinese physician, whose work v. Martius translated, blames the mode of living for making childbirth difficult ; and he points out that unsuccessful confinements among the lower classes (peasant women) occur much more rarely than among the upper classes.

It deserves special attention that the women of uncivilised nations, contrary to expectation, even bear well the most unsuitable manipulations in parturition. Thus Mallat observes of the violent procedure in the confinement of Malay women :

"How often has the sight of all these apparently barbarous methods of procedure not filled me with contempt and fear, while often enough the result proved that the methods used by the native doctors were crowned with complete success."

Engelmann² writes (p. 16):

"The active mode of life of the American Indian women explains the ease with which they bear children; they do every kind of work, hence the frame and muscles are equally developed; the embryo, which is constantly shaken, is probably driven into the position in which it best fits into the maternal parts, and when settled the longitudinal diameter is kept firm by the hard abdominal walls of the mother, and thus the delivery must terminate well. Moreover, the girl does not marry out of her tribe. Therefore, the head of the fœtus fits the pelvis which it is to pass through. If they deviate from this rule, difficulties ensue (half-breed births among Umpqua Indians have a difficult course). Accordingly, the easy and quick parturition of these women depends on three circumstances : first, they marry their own kind, hence the fœtus keeps a size proportionate to the maternal genital passage ; secondly, there are only healthy strong bodies ; thirdly, the active mode of life they lead admits of only head or breech presentation."

According to these arguments, it might appear as if Stammler's dictum had in reality hit the truth. But Engelmann² concludes his statements with the words :

"If the presentation should happen to be faulty, it is all over with the mother; or she has an extremely difficult confinement. The child with a transverse presentation might just as well not be born and dies with its mother."

This statement raises the question whether in all so-called savage peoples favourable conditions for the normal occurrence of easy labour prevail. In this connection, what Felkin says of his experience is very important. He states that the

opinion is fairly common that the luxurious habits which civilisation brings with it have a very injurious influence on parturition; yet since he had the opportunity of making investigations among about forty Central and East African tribes, he became convinced that difficult labour occurs far more frequently among uncivilised races than people have hitherto supposed. At first he thought that the inclination of the pelvic inlet influenced the choice of position of the woman in childbirth, but he convinced himself that though there is much variation in this inclination, yet it is of no importance, as the variation altogether only amounts to about four degrees.

However, we must not fail to recognise that in these statements of Felkin, only approximate values are involved, and not exact facts based on statistics.

In a number of African tribes we must recognise the custom of sewing up the vulva as an obstruction to the process of labour. This has also been confirmed by von Beurmann. The same is true of Massaua, according to Brehm; but here a second obstructive factor enters, namely, the very youthful age at which the women there are accustomed to have their first confinement. At least 30 per cent. of primiparæ are said to die.

Merker says the same of the Masai, whose midwifery is otherwise fairly highly developed : "With a narrow pelvis obstructing labour, they are baffled. Mother and child both die. While this case is said hardly ever to occur among the Masai living with the tribe, it has frequently been observed among those living in European settlements, and the narrow pelvis was always due to the woman's being too young. These latter Masai, in contrast with the former, marry very early after the fashion of the coast tribes ; and as the wife must always be considerably younger than the husband, and, moreover, as the choice of girls is small, it happens not seldom that when entering into marriage, although they have reached the age of puberty, yet they have not a fully-developed body. This phenomenon, not uncommon among savage peoples, may in general, as well as in this particular case, be traced to premature sexual intercourse, and owing to this, premature menstruation."

Among negresses, elephantiasis, which also affects the female genitals, often causes difficult labour. The circumcision of the girls is said to be a direct cause of elephantiasis in the genitals.

Alexander v. Humboldt has emphasised the rare occurrence of malformed persons among the Indians of South America, and C. F. P. von Martius also observes among them both the great strength and firmness of frame and the extraordinary rareness of curvature of the spine. In Chile also, according to Molina, rickets is unknown, and Berthold Seemann draws attention to the rare occurrence of deformities among the Eskimo of Bering Straits.

Nevertheless, the position as regards childbirth has already been stated by Engelmann.² According to Dobritzhoffer, the Abipones in Paraguay are said to have extraordinarily difficult labour. He ascribed this to their frequent riding on horseback, and he maintains that the women of all mounted nations would have difficult labour. In this connection, he makes reference to the declaration of the physician in ordinary, Yngenhouz, in Vienna, that with young women who ride a great deal, owing to the long sitting and vibration, the coccyx becomes contracted and hard. This statement has not yet had further confirmation, and views to the contrary have already been cited above.

According to Praslow, who practised in California for several years at Monterey, diseases of the genitals, especially leucorrhœa, prolapsus uteri and menstrual disorders, are common. "The two first-named troubles," he writes, "without doubt owe their existence to the extremely rough treatment to which women in childbirth are subjected in accordance with the custom of the place." The Indians of California, according to the statement of the "Statistical Report on the Sickness and Mortality in the Army of the United States from 1855 to 1860," are exposed to the same diseases as among the civilised nations of Europe. Engelmann's ² statement has already been reported above. He adds:

"The hardness and rigidity of the perineum in the Indians is occasionally mentioned as an obstacle to delivery; this the midwives cause by manual enlargements of the genitals" (Engelmann,¹ p. 611).

Likewise, on the islands of the Malay Archipelago and the South Seas, cases of difficult labour have been observed, and, where we have no direct information, certain measures sometimes adopted with these women who die in childbirth prove that parturition among these savage peoples does not always proceed as easily as it used to be supposed.

In Turkey, as in a great part of the Levant, it is the custom to keep the children tightly swathed in bandages for the first six months; the result of this is: "que la plupart des Orienteaux sont de petite taille et que leurs membres, présentant une courbure très considérable, font ressembler leur arche à l'allure ridicule du canard" (Eram, p. 63).

According to Rigler, rickets is common in Constantinople, and hence there are often deformities of the female pelvis, as a result of which abnormal labour is commoner among Turkish and Armenian women than among Europeans. Nevertheless, according to the experience of a very busy midwife in Constantinople, version, owing to transverse presentation, is seldom necessary. Rigler thinks that the sedentary mode of life, and the fact that pregnant women refrain from work of any kind, may have some influence on this.

On the other hand, Damian Georg holds the sedentary life of the women

responsible for the difficult labour which sometimes occurs in modern Greece. Besides this, however, he also blames the unsuitable choice of food during pregnancy, and certain manipulations which the midwives undertake on the labia and in the vagina.

A statement of Montano on the influence of the tropical climate on the European women settled in the Philippines may also be included here :

"L'immunité relative des Européens à l'égard du climat ne concerne que les hommes ; les femmes européennes sont loins de présenter la même résistance. L'anémie survient chez elles beaucoup plus rapidement et ne tarde pas à être aggravée par des leucorrhées et par des menstruations d'une abondance excessive. La fécondité n'est pas atteinte, mais les accouchements sont souvent difficiles ; ils sont rendus fort longs par l'inertie de l'utérus et deviennent souvent mortels par les hémorrhagies incoercibles qui les suivent."

Bartels, in this chapter, relies mostly on half-civilised peoples or those much influenced by Europeans. Thus, it may be said—what was in itself a matter of course—that apart from religio-superstitious excrescences, among savages more favourable conditions prevail than among those who suffer from the blessings of civilisation and religion.

5. THE RÔLE OF THE EMBRYO

It was pointed out above that the idea is to be found at times that the embryo tries to obstruct parturition intentionally. A proof of this idea among the Chinese is imparted by Fest. He states that an empress of the T'ang dynasty was in labour, and, in spite of all the expedients resorted to by the physicians, delivery would not take place. Then they called an eminent colleague into consultation. "He, of course, could not approach the distinguished patient. However, he knew what to do. He had the end of a rope tied round the empress's wrist and held the other end between his own fingers. In this telephonic manner, he was able to determine that the child had grasped the mother's heart and was holding fast to it with both hands, hence the delay in delivery. He suggested acupuncture : the puncture hurt the naughty child so much that it let go at once and was born immediately. No wonder the skilful physician was immediately elevated to the rank of a god of the art of healing."

The Papago Indians imagine that the character of the foctus is a good deal to blame when there is protracted labour; the worse it is, the worse is the child's disposition; therefore, it is better for the whole tribe if the mother and child die than that such a descendant should see the light to the detriment of the tribe $(cf. \text{ Engelmann }^2)$.

6. DIFFICULT BIRTH THROUGH ABNORMAL CHANNELS

Before we leave the chapter on difficult labour caused by the physical condition of the patients, we must call to mind parturition which takes place through unusual channels. First of all, there is the delivery which takes place through the mother's abdominal wall, or, in other words, by Cæsarean section. But as this, owing to its great importance and great interest in the history of civilisation, is to have a special chapter devoted to it, it may be passed over here. A few other passages also which the child is said to have taken in delivery will only be mentioned here briefly, as they play a part only in the fantastic, mythological conceptions of some nations. To these belong the birth of Athene from the head of Zeus, the birth of Bacchus from Jupiter's side; the birth of Buddha from his mother's armpit, and the birth of the Eskimo through the abdominal wall of the father who had become pregnant through eating the mystic herring roe. According to von Reitzenstein, Bartels should really not have mentioned here these mythological forms which have quite different backgrounds; they have in themselves nothing to do with parturition. Compare the news which appeared in the newspapers of the birth of a boy through a man, and the vague reports (as is customary in newspaper notices) of the "birth" of a dead twin, said to have come out of his living brother by operation.

Delivery, however, through the anus cannot be passed over in silence, as it once aroused a great commotion in France and in Rome. First, however, it may be called to mind that one hears among the lower classes of quite normally built women that their child was born through the anus. In the majority of these cases, it is a question of primiparæ, who during parturition have suffered severe perineal laceration. Such a tear may extend through the anterior rectal wall, and in this way the anus will, it is true, be involved with the genital passages, so that we have a certain justification in speaking of a delivery through the anus.

But in rare cases where there is malformation of the genitals, a delivery may really take place through the anus. The case of this kind which has had had the greatest renown was observed by Louis in Paris. Witkowski¹ (pp. 268 ff.) describes this, according to Lefort, as follows :

"Une jeune fille avait les organes de la génération cachés par une imperforation qui ne permettait aucune introduction. Cette femme fut reglée par l'anus. Son amant, devenu très pressant . . . , la supplia de s'unir à lui par la seule voie qui fut practicable. Bientôt elle devient mère. L'accouchement à terme d'un enfant bien conformé eut lieu par l'anus " (p. 268).

Louis wrote a thesis on the subject, "De partium externarum generationi inserventium in mulieribus," etc., in which he described this case. "Le Parlement," continues Witkowski, "rendit un arrêt par lequel il défendait de soutenir cette thèse. La Sorbonne interdit Louis à cause de cette question qu'il adressait aux casuistes : In uxore sic disposita, uti fas sit, vel non, judicent theologi morales ?"

Pope Benedict XIV. took up the matter and gave Louis absolution, whereupon his thesis was printed in the year 1754. Witkowski remarks : "Ce pape pensait avec les P. P. Cucufe et Tournemine qu'une fille, privée de la vulve, devait trouver dans l'anus le moyen de remplir le voeu de la reproduction."

Similar cases are mentioned by Gould and Pyle, pp. 120 ff.

When we speak later of Cæsarean section, we shall see that births through the anus may have been known to the Rabbis of the Talmud.

7. DIFFICULT LABOUR DUE TO THE PLACENTA

In an earlier section were mentioned the methods of assistance resorted to among savage peoples in delayed expulsion of the placenta. The fact that among them also in rare cases the placenta may be retained owing to tetanic contraction of the uterus or because of adhesion to it, is not to be denied. But as a rule these difficulties exist only in the imagination of the women assisting. It is remarkable enough that neither the ancient Hebrews of the Talmud nor the ancient Hindus speak of the extraction of the placenta in normal labour, nor, indeed, of retardation of its expulsion.

The Japanese, before Kangawa, regarded the twisting of the umbilical cord

round the child as the cause of considerable obstruction and delay in delivery. This view, as we saw above, Kangawa opposes strongly, in his book *San-ron* (cf. Vol. II., p. 702).

On the Fiji islands, if the rupture of the membranes does not take place quickly, the midwife puts her finger in the child's ears and pulls, or she knocks against the patient's shoulders to make her press on with the delivery, and at the same time urges her "Exert thyself, help us." Internal specifics for hastening delivery, however, are not used (Blyth).

The old Hindu physicians do not mention the artificial rupture of the amniotic sac which has reached the os uteri in the act of delivery. Galen recognised how unfavourable was the premature discharge of the liquor amnii. But with the ancient Romans (Aëtius), the sac was probably often enough ruptured prematurely by means of a scalpel or the finger nail of the midwife. The Arab Rhazes advises the midwives to open the membranes where necessary with the nails or with a little knife. Abulcasis gives the same instructions. The German doctors in Rösslin's time were also acquainted with bursting the membranes with the fingers as well as with a knife or pair of scissors.

At the present day, too, in Germany, this so-called artificial rupture of the sac is often carried out, and it may not infrequently be observed that for this purpose a finger nail is worn with a specially long point.

Among the Esthonian women, according to Holst (p. 115), this premature rupture of the sac is quite a common custom of the women assisting, and often, thinking they have the sac before them, they sometimes cut the pericranium to the bones with their finger-nails, with knives or some other instruments.

The midwives of the lower classes of the Letts, according to Alksnis, warn against "rupturing the membranes prematurely because, by doing so, the dilatation of the genital passages is impaired. The sac should rather be left to burst by itself, or, in case of need, ruptured with the finger nail."

In Southern India the membranes are not ruptured : this is left to nature, and, according to Shortt's report, they wait patiently till this happens of itself.

CHAPTER II

DIFFICULT LABOUR IN POPULAR BELIEF

1. SUPERNATURAL HELP IN DIFFICULT LABOUR

OWING to the expressions of pain, the moaning and groaning, the efforts to be quit of the foetus, the bearing down and resistance, phenomena almost always observable in greater or less degree in women in childbirth, parturition, especially among peoples of low civilisation, is a highly alarming process for those near by. The feeling of anxiety seeks and finds comfort and support in the belief that supernatural powers and forces can help; and this belief gives help, which in a mental direction is not ineffective. This is done in various ways according to the purpose and form; sometimes the mystical treatment has a calming effect on the patient, by prayer or incantations, by means of which it is hoped to summon or banish the spirits and demons according as they are good or evil.

First of all it is believed that various magical processes which come from the belief in ancestors, play a certain part, for the souls of the dead try to incarnate themselves in the women of their stock in order to be reborn. But other spirits also try to do likewise. These are the bearers of danger to woman and child. A further reason is the marriage contract, owing to which the woman withdraws from the sphere of her own ancestors and goes over to that of her husband; and thus it has to be contrived by means of ceremonies that the ancestral spirits of the husband and his stock are incarnated in the wife. Thus inimical powers arise anew, and further menaces are present, as we saw, from the discharges of the female body (menstruation, effusions in parturition, but also partly from the semen, etc.). Only at a very late stage are clear, sharply defined figures of demons and spirits, and, finally, clearly defined gods formed from these primitive demon forms.

There are differentiated *favourable* (*i.e.*, belonging to the family) and *inimical* (*i.e.*, strange to the family) powers of demons, spirits and ghosts. Sometimes attempts at conciliation both by prayers and sacrificial offerings are made, but it is considered more effective to banish the latter by exorcisms and to keep them away with amulets. They also close all entrances to the house to prevent them from entering, or they are prevented by means of a thread or chalk line from approaching the woman in labour. Not seldom also the attempt is made to keep the evil demons away from the house or tent by force. This is usually the duty of the husband and his friends, who endeavour to drive the demons from the neighbourhood of the woman in childbed with shrieking and howling and much disturbance of the air, or with shots.

Many customs cannot be explained otherwise than by supposing that people try by means of them to lead the pursuing demons on a false scent. With these must be reckoned the custom of causing the woman in labour to have her confinement not in her own hut but in a strange house. There is, moreover, another expedient at the root of which no doubt similar ideas lie. The demons penetrate into the lying-in room, but they find there not the woman pursued by them but the "husband" (cf. Vol. I., 462, & ff.). This man, however, is the woman in labour who has put on her husband's clothes. The sympathetic methods which are used are likewise of many kinds. Above all, however, stands the idea that the woman's womb must not be opened unless everything about her is loose and open. Owing to this, the birth of the child can be made impossible by crossing the knees or by folding or interlocking the hands. Also all locks and lids, sometimes even all the doors of the house, have to be opened, and above all the woman in labour must remove ceremoniously the chief restraint of her body, namely, her girdle.

Besides these, there are certain allegorical performances. The husband frees her from these by means of a magic spell or helps her by certain mystical touches. The woman must take certain paths otherwise strange to her; or she must crawl through certain narrow passages. At the root of this widespread custom lies usually the idea that a kind of imitation of the process of birth takes place, since the newborn child is to pass through a narrow passage. (Gaidoz, in whose work as well as in Zachariæ's one can look up more detailed statements, is of the opinion that the stripping off of a disease is in question; in fact, men and children resort to a creeping cure for every possible illness, *e.g.*, even whooping cough, where there is no question in any respect of overcoming a narrow passage.) Linked with this is the allegorical taking over the pains of labour by the women assisting, who either cause actual physical pain in themselves, or else, by groaning or lamenting with the patient, give themselves the appearance of feeling the pains.

With these sympathetic expedients must be reckoned also those which are to be carried on the body or brought into contact with it which, however, do not act in the sense of an amulet; and joined with them are the purely psychic expedients, singing, music and frightening the women in labour.

The expedients also, which are to make the unborn child leave its old home, the womb, are of various kinds, but they always have a similar motive, namely, that of enticing the child to come out. They rattle money before it, they have someone dance before it, so that it may feel stirred to make similar dance movements, and in this way dance out of the womb. Also the blows which, among many peoples, the husband has to make on the patient's sacral region, may apply to the child, and rouse it to energetic movements. Sometimes the father has to go alone to the mother's womb, and then go away so that the child shall try to follow him. As a means of enticing the child also, people lay the husband's clothes before the mother or they dress up a doll in them.

2. SUPERNATURAL HELP IN LABOUR AMONG ANCIENT CIVILISED PEOPLES AND THEIR SUCCESSORS

In the old Babylonian Etana-myth in which is told how Ishtar, the goddess, in searching for a king whom she intended to set over the country hitherto without a ruler, explains her search to Etana, whose wife is looking forward to the birth of a child, the herb of birth plays a great part. As in the well-known tale, the Water of Life is only to be gained with very great difficulty, so Etana, in this tale, has to wander from place to place to get the herb of birth ; finally, in highest heaven, he had to present his request before Ishtar, the mother of women in childbirth :

> "Give me the herb of birth Show me the herb of birth ! Tear from it my product And make for me a name " (son).

We do not know any more as the text is incomplete (O. Weber).

We have in Fig. 786 a typical representation of Ishtar on a clay bas-relief found at Telloh (South Mesopotamia) and now in the Louvre. The goddess holds a vase from both sides of which water flows—the oft-mentioned water of life or fertility—a representation which is often found, as also in Fig. 787. This figure probably belongs to the late Babylonian period and comes from Mesopotamia. The breasts and genitals are strongly accentuated.

How we are to imagine the menacing power of demons according to the spirit of ancient Babylonian thought is shown by an interesting representation. In Figs. 655 and 656 we see a bronze tablet from the de Clercq collection in Paris. On



FIG. 786.—Ishtar with the Water of Life. (After M. Jastrow.)

front in the first row we notice several symbols of gods (Anu, Ea, Adad, Marduk, Nebo, Ishtar, Shamash, Sin and Sibitti); and in the second row, seven demonic forms which correspond to the seven demons of the exorcism text. In the third row, the expulsion of the demons of disease, and lying in the middle the sick man who is possessed by demons. Beside him are two priests of Ea in fish garments; on the right of this a demon is driving away two other demons, and hence a guardian spirit. In the fourth row is the form of Labartu, half kneeling on an ass with two snakes in her hand and two little pigs at her breast. Beside her is a demonic figure which is chasing Labartu away with a whip.

Among the ancient Hebrews, Lilith (see A. Kohut,² pp. 86–89) was regarded as a specially dangerous demon for women in childbirth and those lying-in (Landau: w.-vol. 111. c

Bergel, p. 25). She knew how to make cunning use of the story after the separation of the first couple of human beings and to bind Adam to herself. But soon she fled from the love connections of which she had wearied and would not go back to Adam. At Jehovah's command, nevertheless, she was sought out by the three angels, Senoi, Sansenoi and Samandelof, and the command imparted to her to unite with Adam again. If she refused, she was to lose a hundred of her children daily by death. She chose the latter. To avenge the loss of her children, she constantly tries to



FIG. 787.—Ishtar with the Water of Life. Louvre. (After M. Jastrow.)

strangle new-born human children in the first days of their life; only where she finds the names of those three angels she dares make no hostile attack.

According to another version (Jungendres), the three angels were to drown her in the sea. However, they relented owing to her prayers for her life. For this she promised to spare all lying-in rooms in which she found the names of these three angels inscribed.

This ancient belief has persisted, and even to-day orthodox Jews hang on the walls of the lying-in room placards on which these names are written. In the Bible (Isaiah xxxiv. 14) also this demon occurs. In Germany, many Jewish families still have a chalk line drawn round the woman in labour and write on the door :

"May God let the woman bear a son and grant him a wife who resembles Eve and not Lilith."

The German Jews in the eighteenth century also inscribed the names of the three angels, and also "Adam! Eve, out with Lilith!" To make delivery easier, the husband had to walk before the door of the lying-in room and read devoutly three times the fifty-fourth chapter of the Prophet Isaiah. Jungendres continues:

"If she is not delivered during the reading, then they bring the decalogue in writing from the temple and set it at a place in the room where the said woman is striving for delivery; this they consider a powerful remedy and firmly believe that much alleviation is brought about by the devotional book."

Occasionally they summon six men from the synagogue who have to pray in the lying-in room. The Jewesses in Bavarian Franconia bite off the stalks of the paradise apples to get an easy confinement (C. F. Majer).



FIG. 788.—A Jewish lying-in room. The woman is seated on the parturition chair. (After Jungendres.)

Of the women in Bosnia and Herzegovina, Glück records that :

" among the Jewesses, immediately the first pains begin, a small sum is given as alms, and a dish of oil, after the patient has looked in it as in a looking glass, is sent to the temple. If delivery is protracted and they fear that the patient may die, they bury her headgear in the grave of a deceased relative, read to her the week's section from the Book of the Prophets, open the Ark of the Covenant, or, finally, have blown over her bed the so-called shofar (a flattened ram's horn blown all day long to invoke the mercy of God). Besides these superficially Jewish expedients, the expedients used by women of other faiths are as a matter of course also employed."

Among the Caucasian Jews, when delivery will not take place, they take earth from the grave of a person who has died in the course of the previous forty days, put the earth in a glass with water, and give some of it to the patient to drink ; if this is of no avail, then they get more earth, but from deeper down in the grave, and proceed as before. However, all this is done without the knowledge of the Rabbis, who do not approve of such a procedure. The Jews in Greece consider shouting in the vicinity of the woman in childbirth as favourable to delivery (Damian Georg).

In ancient Greece, the midwives, as we learn from Plato in the *Theaetetus*, besides certain medicaments, also resorted to striking up melodies in order to stimulate labour pains and also to soothe them when they wish. Lichtenstädt, like

Schleiermacher and Welcker² (p. 70), is inclined to understand by $\epsilon \pi q \delta \epsilon \iota \nu$ mere incantations. Thierfelder has tried to prove that here an actual chanting of certain sentences and phrases of religious or mystical signification, but without magical manipulations, took place. He says :

"Partly from the procedure of the Thracian Orpheus and his disciples, the Orphics, who healed illness by songs, partly from the earlier temple services of Asclepius at Tricca, Epidaurus, Melos and several other places, partly from the cures which still occurred in Plato's time, especially from the places where oracles spoke as at Harma or Knopia and at great festivals, people knew the great virtue of religious singing and had great faith in certain possibly often incomprehensible mystical phrases pronounced with religious unction which, originally a prayer to a god of healing, might later be a magical formula, when the original meaning had been lost and superstition had taken the place of faith. Moreover, no expert in psychic healing powers will deny the possibility of the influence ascribed to the sacred magical melodies ($\epsilon \pi \phi \delta \alpha \iota$) for curative purposes, which pieces were originally always phrases with music, and in later use, no doubt, phrases without music."

During the labour pains, Greek women held a palm twig in their hands; as the palm was the symbol of victory, they believed that such a twig had the power to help overcome the hardships of delivery.

The untying of the girdle was regarded as an act of magic favourable to delivery, and the Greek poets therefore called Eileithyia also Lysizone, the girdle loosener, as has already been mentioned above.

In Rome, women in childbirth made vows to the goddesses Lucina, Postversa, Meno, etc. If labour proceeded with difficulty, they believed it was made easier if the husband put his girdle round his wife amid prayers, after which, however, he took it off again and put it on himself. Also they threw over the house in which the woman in childbirth lay, a javelin with which a wild pig and a bear had been killed; still better, was supposed to be a lance which had been pulled out of a human body and had not touched the ground. In Rome, the uterus of the mule and the dirt from its ears were regarded as amulets for women in childbirth; Soranus says these are supposed to act by antipathy, but their effect is deceptive.

In ancient times, there was a widespread superstition that wicked men had the power to obstruct or even to frustrate delivery by means of a spell skilfully carried out. In particular it was folding the hands on the knee of one leg which had been crossed over the other which caused such an obstructive spell. Pliny (*Hist. nat.*, XXVIII., 17) speaks of it :

"To sit near pregnant women or someone who is being operated on and interlock the fingers is a spell. It is said that this first came to light when Alcmene was brought to bed with Hercules. It is still worse if one closes the hands thus interlocked round one or both knees; furthermore, if one crosses one leg over the other so that knee lies on knee. For this reason, our forefathers forbad this position in all assemblies in war and peace, because it obstructs all transactions. They also forbad anyone being seen thus at sacrifices or vows."

However, even in Homer's *Iliad* (XIX., 114 ff.), it says of Alcmene in childbirth :

"Scare seven months gone lay Sthenelus's wife She pushed her lingering infant into life; Her charms Alcmene's coming labours stay And stop the babe just issuing to the day." (Pope.)

Hera, according to the tale, practised the spell described till Galanthias ran

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into the lying-room in the form of a weasel and Hera, frightened by it, separated her hands. Now the spell was broken and Heracles was born.

In Swabia it is still believed that the spell of anyone hooking his little finger prevents a woman from being delivered. This, therefore, has to be avoided, just as the Romans had to refrain from folding their hands.

Perhaps it is a mistaken echo of this superstition when in Lower Bavaria, as Panzer reports, the midwives have the husband press together the knees of his wife in difficult labour.

Among the ancient Hindus, according to Su \bar{s} ruta's report, the woman in labour was given the fruit of the *Myristica moschata* Thumb. (7) in her hand to make labour easier; she was also surrounded by boys and saluted with blessings and good wishes. If the child could not be extracted, the doctor pronounced an exorcism :

"May the divine ambrosia, Moon, Sun and Indra's horse dwell in thy house, O deeply afflicted mother !"

For this purpose Anila, Pavana, god of the wind, the sun, and Vásava (Indra), as well as the gods to whom salt and water belong, were invoked for relief for the woman in labour. Only when this was without result did they proceed to dismember the embryo.

Likewise in other ancient Hindu works, which have been described by Schmidt,⁸ are to be found supernatural means of easing confinement. Thus it runs in one passage : "The woman who fastens $g\bar{u}nj\bar{a}$ -root (*Abrus precatorius* Linn.) divided into seven pieces, in the region of the hips, achieves by this means an easy confinement."

Another prescription requires that the $g\bar{u}nj\bar{a}$ -root be fetched on a Sunday and fastened to the hips and head of the woman in labour with a blue thread. Also an *alambusā*-root (*Mimosa pudica* Linn.) is supposed to ease labour considerably. We have already seen above that exorcism formulæ are used in protracted labour. For this also the old Hindu sources furnish a few further examples. The exorcisms, however, were not pronounced directly over the woman in labour but over some water which the patient was afterwards to drink: "After words had been spoken over water with these exorcisms, it was given to the pregnant woman to drink; immediately she brought forth the child without it being retained."

One of these exorcisms runs : "God of love ! shake the skill of the river ! Hanging belly ! Let go, let go easily ! (the fœtus). Svāhā !" With this formula, the water in question, "well warmed water from the first waters," must be consecrated seven times. According to Schmidt,⁸ by "Hanging Belly" is meant the god Ganesa who makes and removes obstruction.

Another exorcism is similar to that quoted from Susruta : "Om ! here in thy house may nectar, the moon, the shining sun, thou beautiful one, and Uchchaih-Śnavas, the celestial horse, dwell. May thy wife expel the child easily by the help of her who brought that nectar out of the waters ! Then may peace bring thee fire, wind, sun and light along with salt water clouds !"

Now the formula turns into an incantation which is applied to the embryo. It will be given at a later place. The following is renowned as the best of the incantations: "Om! God of love! Shake, shake out the body of the child! Let it go, let it go easily! Svāhā!" Thanks to this incantation, the woman is then delivered easily and quickly.

3. SUPERNATURAL HELP IN LABOUR AMONG THE ANCIENT TEUTONS AND SCANDINAVIANS

The magical contrivances of the ancient Teutons which were supposed to promote delivery have been already spoken of when their midwifery was under discussion. Certainly it has taken a long time for Christianity to overcome this magic. Thus in Hainault at Leptines in the year 743, a Council (see Sirmond, I., 537 ff.) was held at which not less than thirty heathen usages and old Germanic customs, which had suddenly become "wicked" customs, were anathematised (see Saupe). Among these prohibited customs, as Rochholz emphasises, the nineteenth runs : " Of the bundle of straw." * The explanation is as follows : It is well known that Teutonic female demons (Holda, Perchta (cf. Vol. II., pp. 302 ff.,) and Freya) were regarded not only as patron goddesses of lovers but also of marriages and likewise as guardians of women in childbirth. Galium verum Linn. was specially sacred to them, a plant still called among the common people "Our dear lady's bed straw." A bundle of the very straw condemned in that Council was put in the bed of pregnant women to make delivery easier. Now just as, according to the belief of our orthodox forefathers, demons often haunted the beds of mortals in the form of ears and stalks, so people doubtless thought that guardian spirits were present in this bundle of straw. And when, after the introduction of Christianity, the Virgin Mary entered into the inheritance of the old Teutonic guardian demon, the old German custom (to the Christian priests, of course, the "hateful" German custom) was, in spite of all prohibitions and councils, preserved for a long time more; now, of course, under their protection people call the bundle of Galium verum Linn. from this time onwards the "bed straw of our dear Ladies" or else "Mary's bundle." Moreover, in later centuries, quite in accord with the above, people made a potion from the plant "to cure the afterpains of the woman in child bed," as Brugger's manuscript receipt book states (see Söhns and Rochholz¹, II., 101).

Supernatural specifics of other kinds were also supposed to ease delivery. Rueff in the chapter of his text book for midwives, which

"teaches some strange and natural things and medicines, are supposed to promote natural delivery and make it easy and quick if contrary to the usual custom of nature it is obstructed."

He cites among other specifics :

"Also the eagle-stone, as thou knowest, used and tied to the left hip. Jasper too is tried for this."

The eagle-stone or aëtites was mentioned by Pliny (*Nat. Hist.*) and later by Bishop Marbodus as giving help in confinements. According to Pliny, it is found in the nest of the eagle, and an old broad-sheet says of it:

"Inside it is hollow and has a little stone or kernel which, when it is shaken, gives forth a sound. These stones are of many shapes, some round, some long, etc."

In the mediæval Book of Stones from the Cosmography of Zakarijá ibn Muhammad ibn Mahmud al-Kazwíní, it is said of the stone that it is a "delivery helper" or "mushil al wilâdat." Ibn al Beitar reports that, according to Aristotle,

"it is an Indian stone. If one shakes it, one hears in the inside the noise of another stone." Its property of easing delivery was learnt from the vulture. That is to say, when the time for

* [The section reads, De petendo quod boni vocant Sanctae Mariae and the above interpretation rests on reading petenstroh (bed-straw) for petendo. I am not convinced as to the necessity for this.]

laying is approaching for the vulture its life is in great danger owing to the excessive exertion; indeed sometimes it dies of pain. In these circumstances, the male vulture flies to that mountain, takes some of this stone and puts it under the female. Now the people of India learnt this from the vulture, and so when some of this stone is put under a woman whom the labour pains torture, it eases her labour and likewise that of any animal (see Ruska).

According to the author above-mentioned, there are also several other stones which ease delivery if they are tied on the thigh of the patient. Thus, *e.g.*, onyx, meerschaum and emerald. The last, at the same time, protects women in childbirth from epilepsy, that is, from eclampsia, occurring during parturition. Lodestone also promotes delivery if "a woman who is in labour hangs it on her right breast (see Ruska).

A fine example of an eagle-stone which was in the possession of a "peasant doctor" in the vicinity of Reichenhall in Bavaria, and, as its appearance shows, has been much used, was presented to the Museum für deutsche Volkstrachten und

Erzeugnisse in Berlin by Herr von Chlingensperg-Berg of Kirchberg, near Reichenhall. The stone is reproduced almost in its natural size in Fig. 789 and is shaped like a flattened pear. Its upper surface is rough and uneven, and in a few places one sees that some of it has been scraped off, presumably for administration as an internal medicine. It is a brownish-yellow, earthy iron ore, with a loose kernel in the middle. A narrow indented strip of brass is round its edge and has at the top a ring so that the stone can be worn as a pendant. It was probably also tied on the left hip with the help of this metal ring.

Among the Italian lower classes the eagle-stone is still esteemed. Bellucci in Perugia possessed several examples which are called *pietre della gravidanza*. They have curative powers both for men and animals, and therefore are hung round cows' necks while they are calving. This "pregnancy stone" is usually set in silver and is kept in a little purse. When the first labour pains set in, it is



FIG. 789.—An eagle-stone used at Reichenhall as a remedy in cases of difficult labour. (Photo: M. Bartels.)

brought out of its concealment and tied to the left thigh of the woman in labour.

Max Bartels, thanks to the kindness of the owner, was able to see the collection personally. In his very interesting book, *Il Feticismo primitivo in Italia*, Bellucci² reproduces four different forms of these stones from the most primitive to the most Christianised form, adorned with the cross and the monogram *Jesus*. This last had been offered as a votive gift and thus was no longer used in the original way. These stones, too, have quite considerable value for the possessor also because they are lent for money and are offered as pledges. They are in such demand that often immediately after the stone has done its duty and one birth is successfully over, it is lent to another woman. The stone is worn during the whole pregnancy, fastened by a silk thread to the left arm (with cattle, worn on the fore part of the body) till the first labour pains set in, and during this period it gives protection from abortion ; whilst at the beginning of labour it is tied to the left hip and effects an easy and quick delivery.

According to Bellucci's very attractive explanation, the fact is that the stone contains inside it a concretion, and thus is itself, as it were, pregnant. This has led to its use in pregnancy and labour.

The Icelanders likewise had a stone which was said to make parturition easier. They call it the "loosening stone" (*lausnarstein*). 24 SUPERNATURAL HELP IN LABOUR AMONG THE ANCIENT TEUTONS AND SCANDINAVIANS

In his essay on Icelandic customs, etc., Max Bartels¹² has compiled what is known about it; from this will be given here only an observation of Ólafsson and others.

One must put it in a clean glass and pour white wine upon it, which women in labour should drink warm. It is either simply laid on or scraped into the drinking water, or into warm French brandy. It is, moreover, not to be denied that there are many examples of quick delivery due to the prescribed drink. The warm wine itself strengthens and refreshes the woman who has great confidence in this specific and often gets fresh courage and strength from it, and this is without doubt the actual cause of the rapid change for the better.

Another method of expediting a protracted labour in Iceland consists in tying over the patient a "visiting knot" (*sigurhnútur*) or "victory loop (*sigurlykkya*); the delivery proceeds quickly and with very little pain (Max Bartels ¹²). The form of this "victory loop" is shown by the carved ornament of a wooden spindle-whorl



FIG. 790.—The sigurlykkja, a band tied over a woman in labour to ease delivery. Carved wood, Iceland. (From a drawing by J. Schlemm.)

from Iceland, which represents the *sigurlykkja* (Fig. 790). This spindle belongs to the first half of the nineteenth century.

In the work of J. T. Taberaemontanus we read: Adder's wort tied to the hips is said to be helpful to women who have difficult labour. Similarly, with a skull bone in the Germanic Museum in Nuremberg (see Fig. 791).

From a Castle Wolfsthurn (Sterzing) manuscript of the fifteenth century, Oswald von Zingerle³ published the following blessing :

"That a woman may be delivered easily.

"That a woman may have a quick and easy confinement, these words shall be written on a card and put on the woman's belly : De viro vir, de virgine virgo, vicit leo de tribu Juda, Maria peperit Christum, Elizabeth sterilis, Johannem baptistam. Adjuro te, infans, per patrem et filium et spiritum sanctum, si masculus es vel femina, ut exeas de wulua. Exinanite, exinanite ! (p. 177).

"And when the child is born, then the card with the written words is to be taken away at once from the woman's body."

It would be a great mistake if people thought such a superstition impossible in Germany at the present day. In Bavaria in difficult labour, J. B. Schmidt found, in 1886, under a patient's pillow a napkin containing a prayer book entitled : *Geistliche Schildwacht*, printed in the year 1840 by Louis Enslin : in it is written :

"He who carries this prayer with him will not die a sudden death, etc.; every pregnant woman will have an easy delivery, and the child will be favoured by God and men."

Max Bartels also possessed a similar little book which measured 11 cm. by 6 cm. It can therefore be conveniently carried in one's pocket. It was printed in Mainz in the year 1847. It bears the title : Geistlicher Schild, gegen Geist-und leibliche Gefährlichkeiten allziet bei sich zu tragen. In it there is a "Merciful Prayer," of which it is said that it was found on a holy grave at Jerusalem, and of it Pope Marcellus II. (1555) affirmed that he who carries it on him and repeats it daily devoutly will obtain the following mercies. He will not die unshriven. He will not become insane or possessed by the devil. He will not be overcome by paralysis or struck by lightning. He will be sure of temporal justice for himself and for his enemies. And if it is placed on the head of a woman in labour, she will have a successful delivery.

SUPERNATURAL HELP IN LABOUR AMONG THE ANCIENT TEUTONS AND SCANDINAVIANS ~~25

In the same book it also says : "A beautiful, a well-tried holy blessing on land and water against all the enemies encountered in his path. First printed at Prague." Then follows :

"If a pregnant woman carries this holy blessing with her, and repeats devoutly, as said above, she will get special help and support in her time of travail."

Then it continues :

"A very useful prayer which Pope Leo sent to his brother Carolo against his enemies, with this indulgence that he who gives it as a present or carries it with him will not die suddenly and neither fire nor water, nor enemy can do him harm. And in whatever house this prayer is, no fire will harm it and every pregnant woman will be delivered easily and the child will be in great favour with God and man."

So we see that in all these cases repetition of the prayer with faith is not enough. The prayer must rather be *in the house*; people must carry it on them or it must be

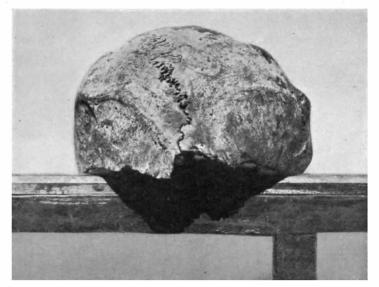


FIG. 791.—Scrapings or other preparations derived from this skull cap can only be efficacious against such evils as gout, difficult labour, or poison if the man from whom it was taken was young, had died a violent death and remained unburied. (Germanic Mus., Nuremberg.)

hanging up, or, finally, it must be laid on the head of women in childbirth. Thus the basic idea is magical and continues to be so for Christendom (see von Reitzenstein¹⁸). The printed prayer really becomes an amulet and, as such, displays its supernatural efficacy.

In Bavaria, according to Hoefler, some of a *Frauentaler* * has to be scraped off and this swallowed in order to make confinements easier.

In Swabia, pregnant women invoke Saint Christopher, and women in labour Saint Rochus, if they have tried natural methods in vain. Vulture feathers are also put under the feet of women in childbirth (see Buck, pp. 26, 28).

Above all, however, Saint Margaret, leading the dragon by her girdle, is invoked. This Saint Margaret (there are several saints of this name) was the daughter of a distinguished priest born in Antioch and became a Christian and suffered a martyr's death towards the year 290; she is commemorated on the 20th July (see Blain).

* [A token on which was an image of the Virgin and Child.]

When, because of her faith, she was languishing in prison, a demon approached her, and the devil appeared to her in the form of a fiery dragon and rushed hissing at her as if it would devour her. But she put her foot on its neck and bound it with her girdle. For this reason Saint Margaret has the "untying of the girdle." This, of course, is a legend attached to her later, for the "girdle," as an instrument for breaking spells, is far older. For this ceremony a string or handkerchief is taken, tied in the name of the Trinity round the hips of the woman in labour while invoking Saint Margaret. This is reminiscent of the girdle of Juno Lucina and the girdle of strength of Gridur, Greth or Graith ; likewise, people in Swabia made pilgrimages to "Maria Schrei" near Pfullendorf to have easy delivery (Buck, *loc. cit.*). This deer skin girdle for women in childbirth of half an inch width and with a buckle for fastening is still in common use in the neighbourhood of Aulendorf in Swabia. (Birlinger,² p. 238).

In Schildturn, where the three holy virgins Ainbeth, Barbeth and Willbeth are worshipped, barren couples obtain children, and women in childbirth successful delivery, if they set in motion the silver cradles there (see Panzer¹ and Kuhn, p. 301).

In Lauingen in Swabia, Saint Leonhard is the powerful helper in all kinds of distress. His ancient chapel is full of votive images. One of these, according to Birlinger, shows a woman in labour. This plaque bears the inscription :

"Liest in dangerous travail His intercession will save thee." (Cf. v. Reitzenstein ¹³.)

There are in Styria also many sympathetic expedients for making childbirth easy. When the pains are coming on they put certain objects under the pillow, pray to Saint Margaret or Saint Rochus, or drink "St. John's water" (which has been consecrated on St. John the Evangelist's Day, *i.e.*, the 27th December). Women in labour, moreover, stick images of saints on their bodies, hold a prayer book in their hands, e.g., the above-mentioned Geistliche Schildwacht. For feeble labour, a chamois gland, swollen at rutting time and with a penetrating smell, found behind the popliteal space, is put into the patient's hand (Fossel, p. 52). The gland is cut out by the huntsmen and dried for this purpose. In protracted or difficult labour, the midwife makes the patient walk round a table three times, ties a Frauentaler above the wrist, or makes her swallow scrapings off such a token (at Nebelbach). In Emstale, to make delivery easier, women put round the abdomen a viper skin, a hare skin or the skin of a deer shot at a certain time. Human milk also, secretly given to the patient, helps to shorten the labour pains. A male individual must split properly a piece of firewood which has been imperfectly split (in Köflach), and in Ennstal someone must turn a wooden tile on the roof and put it in again upside down.

In the Harz, if a pregnant woman goes past her time, she must put oats in her apron and give them to a white horse to eat and, at the same time, beg it to see to her being soon delivered. This custom is to be found in the *Gestriegelte Rocken-Philosophia*, a book which tried to combat the prevailing superstition in Germany. This is certainly an echo of old beliefs, for the white horse was regarded by the Teutons as the animal sacred to Wodan, and a horse's head protected them from evil spells and from demons.

In Vogtland, women in labour used to have the night-watchman sing a hymn to them. The men used to appear unbidden at the house for this purpose. Now people open all the locks in the house, give the woman caraway plucked at the twelfth hour of St. John's Day, and also fumigate her with onions (J. A. E. Köhler, p. 435).

In Pomerania, if a woman cannot be delivered, then, according to Jahn, they must write on a wooden plate :

"With God the Father, I seek thee; With God the Son I find thee, With God the Holy Ghost expel thee."

Then the writing must be washed off with wine and given to the woman to drink. Also certain mystic characters are written down and they make her drink them in the same fashion or put them on the patient.

In Upper Austria and in Salzburg, it makes labour easier if the woman puts on some of her husband's clothes (Pachinger). This is a custom reported from Slav countries as well and from France.

In Rosenau, 60 years ago, people used to put a silver coin and some dill in the bed of the woman in labour, and she then said : "I am lying on silver and dill, anyone can see this who will." If the patient knelt before the fire, delivery took place more easily (Deutsch-Kreuz). If labour is difficult it is reported that in St. Georgen the bell in the church tower is washed and some of this water is given to the patient to drink (see Hillner, p. 15).

With the Saxons in Transylvania, shortly before delivery, the pregnant woman is supposed to jump from a chest, blow into a glass bottle or press against the door with her feet; labour then proceeds more easily (Schurosch *). As soon as labour begins, all the locks on doors and boxes in the house are opened.

In Sweden, the woman crawls through a so-called elves' hole, such as results when several branches of a tree grow together.

In Denmark, the women creep through the out-stretched chorion of a foal (Zachariae).

Likewise, as Linné has informed us, it was regarded in Öland and Gotland as an expedient for having a good and easy delivery if the woman, when going to church, did not tie her shoe laces; for the same purpose, she had, as soon as she came out of church, to put her head quickly through the dried placenta of a mare (see Buschan²).

In Norway, according to Liebrecht (p. 322), when labour sets in, all knots to be found in the house, e.g., on clothes, etc., are to be untied. If it looks as if it would be a difficult labour, the husband must cut in two a sledge, a plough or some such thing.

Likewise, among the Lapps, according to Fritzner, a woman in childbirth must have no knots on her clothing not untied.

Asbjörnson¹ says that the clasping of the hands round the knees, which was known to the ancients as obstructing labour, is also a Norwegian superstition.

A very interesting memorial of this is to be seen on the porch of St. Jakob's Church in Ratisbon, Regensburg, usually called the Schottenkirche, and begun about 1150. There is quite a number of representations there which may, according to von Reitzenstein, be understood as ancient marriage ceremonies (not, as was so popular a few years ago, as representations of the Apocalypse). In the third row on the right, we see a bearded man with a covering over his head, who holds a crown like a circlet and, wrapped in a long rope, is sitting on a chair. He has his feet wide apart,

* [No reference is given.]

while he presses his knees tightly together with both hands. Beside him, a monster and Mary. There is no doubt that a spell is here intended to be represented for the obstruction of delivery, which the obstructing demon has already effected, and that Mary as releasing guardian goddess is intervening.

In Holland, the witte Juffers are distinguished from the witte Wibern, who are quite opposed in character; for while the former often abduct women in childbirth and children, the witte Wiber help and support women in childbed helpfully (J. W. Wolff, p. 312).

Among the Flemish population of Kempen, in the Belgian Province of Brabant, all doors from the room are closed during a confinement so that *eene kwade hand* in some form may not creep in. If labour is difficult, a consecrated band with a relic is hung round the patient's neck. Nearly every family possesses one and keeps it as a treasure from generation to generation. If the midwife or a doctor has to be fetched, the peasant, if it is late in the evening or at night, certainly does not go alone, but takes one or two companions with him who, like himself, arm themselves with good sticks so as to protect themselves against any magic (I. v. Düringsfeld, p. 130).

4. SUPERNATURAL HELP IN LABOUR AMONG THE LATIN PEOPLES

Supernatural specifics to promote delivery were in use in mediæval Italy. Trotula recommended holding a magnet in the right hand; putting strings of coral round the neck; wearing the Album quod invenitur in stercore accipitris, a stone found in the belly or nest of the swallow, etc. Franciscus de Pede Montis, who taught at Naples about 1340, praised with great confidence as promoting delivery, such specifics as magnesia sprinkled with the ashes of asses' and horses' feet taken in the left hand; the psalm "Miserere mei Domine" up to the words "Domine labia mea aperis" was drunk by women in childbirth after it had been written down with pen and ink, then rinsed off with water which was then drunk (cf. v. Reitzenstein ¹⁸). Or into the right ear was said: "Memor esto Domine," etc., along with three Paternosters; or the "Dixit Dominus Domino meo" was written on "Charta non nata" threaded with a woollen thread by a virgin and hung round the neck of the woman in labour (E. C. v. Siebold, I., p. 340).

In cases of dangerous labour, consecrated images of the saints or relics were hung round the room or swallowed (E. C. v. Siebold, I., p. 116). In the book "Lilium medicinæ," the teacher at Montpellier, Bernardus de Gordonio (1285), cites especially among specifics for promoting delivery *superstitiosa*; and the teacher at Oxford, John of Gaddesden (1300), like Trotula, praises, in his *Rosa Anglica*, lodestones and corals.

Among modern Italians, the so-called "Conception Tickets" are of special importance when they have been sprinkled with the Epiphany water and when this is followed by a prayer in honour of the birth of Christ and the Immaculate Conception of Mary or three Paternosters, three Ave Marias and three times "May God the Father, etc.," together with a "creed" and then a full Amen. If shortly before her confinement the woman swallows one of these, then the child is said often to bring it into the world with it, on its brow, or between its lips, or between its fingers (Finke,² pp. 28 ff.).

In Bologna, according to Frh. v. Reinsberg-Düringsfeld, in difficult labour, people use the rose of Jericho (*Anastatica hierochuntica* Linn. (see Fig. 792), which is there called *La rosa della Madonna*. When the first pains begin, it is put into water

in a withered state and people are convinced that the pains will pass away in the time necessary for the plant to expand in renewed freshness. In the Rhine Palatinate the woman in labour is given the "freshly blown" rose of Jericho to smell in order to relieve her violent pains.

In Modena, according to Riccardi, in a difficult labour, a black hen has to be killed quickly, then trussed, and, half severed, is put on the patient's head like a bonnet; then all will go well.

From the Provinces of Belluno and Treviso, Bastanzi reports that to make labour easier, people used to fasten an image of St. Libero, so that it touched the patient's head, *perché la paziente possa al più presto liberarsi*. Putting the holy cord

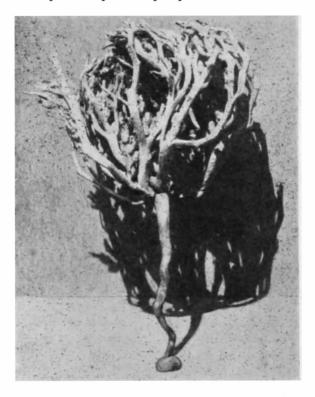


FIG. 792.—Rose of Jericho. (Germanic Mus., Nuremberg.)

of St. Francis also round the waist of the woman in childbirth hastens delivery. A further expedient consists on Easter Sunday in throwing into a warming pan filled with red hot coal, all mixed up together, consecrated olive leaves, wax candles, paper images of saints and Madonnas, cock feathers and hairs from the husband, and then fumigating the woman in labour with it from below upwards. It is also considered very efficacious to put a crucifix on the woman's stomach.

Pachinger tells of an amulet much used in Italy for making labour easier. It takes the form of the so-called Aloysius-phials, made of finely ground glass and in cases of gold filigree work and containing a fragment of the coffin of St. Aloysius. One of these phials is given into the hand of the woman in labour—the right hand if it is supposed to be a girl, the left if a boy. Pachinger observed this custom in



FIG. 793.—Madonna del Parto. Marble figure by Jacopo Sansovino, S. Agostino, Rome. The figures and the altar are crowded with offerings.

Salzburg also, although it might, of course, be an ecclesiastical device in imitation of an old custom.

As is easy to understand, Mary also is regarded as a powerful helper in childbirth. But here, too, it is seen again, as is so often found in the worship of Mary, that it is apparently not *Mary* as such but only one of her *images* which is to be found in a certain church, and in this church on a particular altar, in the beneficial action of which people put their trust. To her image on the other altars and in other churches and places people do not ascribe the same power. One such marble figure of Mary with the Christ Child which brings mercy to women in labour is to be found in the church of S. Agostino in Rome. It is called *la Madonna del Parto*, *i.e.*, the Madonna of Childbirth, and was executed in the sixteenth century by Jacopo Sansovino. Fig. 793 shows a photographic reproduction of it. From the great number of women's offerings which are hung on her and the Christ Child and on her altar, one can judge of the extraordinary importance which attached to this figure of Mary among the pious. Even watches are included among the offerings.

In France it is believed that labour is made easier by tying the woman's girdle on the church bell and making the bell sound three strokes (Boddin). The French also think that it promotes delivery if the wife puts on her husband's trousers, stockings or boots (see Thiers).

5. SUPERNATURAL HELP IN LABOUR AMONG THE PEOPLES OF RUSSIA AND THE SLAVS

Among the peoples of Russia Sumzow stated in 1882 that there still prevailed many kinds of mystic customs for making childbirth easier. Thus in the province of Vilna, the midwife held a lighted taper before the patient's eyes; besides this she knocked on the ceiling of the room with a broom ; in doing this she was applying to the house spirit, the protector of the family. Similarly, the woman in labour during the pains knocked three times on the threshold of the hut with her heel. In Little Russia, the custom was observed of leading the woman in labour over a stone plate and a shovel. Into a sleeve of the shirt, which was put on the new-born child, was tied a little piece of stove loam, some coals and some small change. In some parts of South Russia, in difficult labour, the patient was led to a table, the edge of which was covered with salt. She then took a grain of salt from each corner. An attempt was made to keep the moment of delivery secret from the relatives. In the Province of Poltava, the woman was led over the red girdle. In the Provinces of Kharkov and Perm the people in the house raised a false alarm and cried Fire ! In many parts of Russia and Serbia, they opened all the locks in the house, untied all knots and loosened plaited pigtails. The woman generally tried to hide herself to escape the "evil eye."

In the Province of Stavropol, when labour began, the old woman who was to act as midwife, appeared in the house and prayed before the images of the saints. Then she led the woman in labour through the room and through the whole homestead and said to her : "Observe, my dear, the place where you are to give birth to your child." Although the patient's feet would no longer support her, yet she was obliged, supported by still another woman, to keep on walking and, in order to ease a difficult labour, the husband lay face downwards on the floor and the patient had to step over him (see Fig. 794). This custom of stepping over the feet of the husband or over the threshold is to be found, according to J. W. Barsow, in the Province of Rjasan. In the Province of Viatka, according to Ossokin's state32 supernatural help in labour among the peoples of russia and the slavs

ment, the woman in labour was also led about : and to make delivery easier a piece of the horse's harness was put into the bed.

In the village of Korablenko (Province of Rjasan), in difficult labour, wedding candles were lighted; the patient was given oats to drink and her plait of hair was loosened. On the River Orel, according to Barsow, locks are opened and bags untied. If that is of no use, then the priest is asked for the "Church girdle" so that the patient may have it put round her. The girdle, the great importance of which is well known in all regions in the East, plays a great part even at the present day. There is no doubt that the following custom handed down from olden times is connected with it :

In the book of Herberstein, *Rerum Moscovitarum Commentarii*, is to be found in the section "de feris" which treats of the difference between the aurochs and



FIG. 794.—In order to ease delivery a Russian peasant woman steps over the legs of her husband and over a part of the harness of the horse. (After Pokrowsky.)

the bison, the following passage after the discussion of the aurochs, the progenitor of our domestic cattle, the firm hide of which was praised :

"Hoc certum est, in precio haberi cingulos ex uri corio factos et persuasum est vulgo horum præcinctu partum promoveri. Atque ; hoc nomine regina Bona, Sigismundi Augusti mater, duos hoc genus cingulos mihi dono dedit ; quorum alterum serenissima Domina mea Romanorum Regina, sibi à me donatum, clementi anima accepit " (118 v.).

The lighting of the wedding candles before the image of the Mother of God was also customary in Orel, but, in addition, the Pope was implored to open the main door of the church.

In the Province of Smolensk the following procedure was employed to effect an easy delivery. At the consecration of a house, one wax candle was fixed to each wall of the house to be consecrated ; one of these candle ends was put on the thresSUPERNATURAL HELP IN LABOUR AMONG THE PEOPLES OF RUSSIA AND THE SLAVS ~~33

hold and the pregnant woman was led over it three times. Moreover, the young wife could arrange matters as early as the wedding night so that the labour pains passed to the husband by rolling over him three times (Paul Bartels ³).

In the Province of Archangel the woman drank water over which magic formulæ had been said, which ran: "May the Mother of God descend from the throne of heaven; may she take her golden key and for the servant of God, so and so, open the fleshy door and let the child out into the world." The woman in labour was washed with the same water.

In Esthonia, according to Demič, the woman in childbirth had to hold on her knees a dish from which the others must eat. Also in the evening the husband was given a great deal of beer to drink which was mixed with *Ledum palustre* and then, when he had fallen fast asleep, the woman in labour crawled secretly between his legs.

Among the Letts, exorcisms play a great part in protracted labour. Alksnis has told us some of these. The following are probably connected with the opening of the os uteri.

"Wanderer, wanderer, stand up, get into the carriage, take the reins in thy hands, drive home! Hasten, hasten to open the gates !"

Or: "Jesus, open the mountain gate! The traveller is already on the way so that he can pass through."

The following exorcism appears to allude to the extrusion of the amniotic sac:

"Shoot forth, green pike, from the sea ! Men are travelling, men are travelling, the golden sails are swelling !"

The green pike as well as the men are supposed to signify the child setting out on its journey into the world, whilst the golden sails are the fœtal membranes.

In order to have intelligent children and an easy delivery, Petrowitsch in 1876 states that it is customary among the Serbians for the bride to untie all the knots on her clothes before the journey to the church for the wedding. When labour begins, all knots on the clothes are untied and even the plait of hair is loosened. Before the delivery, the wife must drink water out of her husband's shoes. Also an egg is thrown on the ground through the opening at the top of the chemise, and afterwards the chemise is torn from top to bottom. A gun is fired over the woman to spur the child in the womb into action. Or a sack is turned over on the left side and from this the woman has to drink water. Also a little powder is thrown on the fire through the chemise. Further, the Serbian carries his wife about the room when she is in labour; whilst doing so he says: "I gave thee the burden, so I will also rid you of it." Then he blows three times into her mouth and the woman does the same to her husband; this, however, must be so arranged that the husband does not remember why she does it. For the same purpose, they draw the woman through a hoop of a cask which has sprung of itself. When the labour pains begin to be strong, the patient has to blow into a tube, and also she has to drink water from her husband's mouth. The woman in labour is beaten on her sacral region with a stick by which a frog has been freed from a snake. This expedient is considered particularly beneficial, not only to women but also to animals in childbirth. The husband places himself in the middle of the room and the wife has to creep through between his legs, whilst he beats her on the sacral region with her wedding dress.

The practice of beating the loins of the woman in childbirth as an expedient w.-vol. III.

having a psychic effect in a protracted labour is known also to the Bulgarians. We can see this from a Bulgarian epic published by Strauss. There it says :

"The queen lies in bed For nine days has lain Old woman nine Of the old women The Turk loosens the girdle Beats her on the loins. In the pains of childbirth. For nine hard days They stand about her couch The ninth Turkish woman Is away from her body Queen deliver now A child at once, a son."

Among the magical methods which the South Slav midwives use in Bosnia, Herzegovina, etc., according to the report of Krauss,¹ besides the things already quoted here and the praying of a Paternoster, the following is to be mentioned. Ten eggs are cooked in boiling water until the eggs burst in pieces; then the patient is given the water to drink; every knot on her clothes is untied and her hair unplaited; the patient is fumigated with roasted sea-onion skins; she is made to drink out of her husband's shirt some untouched spring water which has not been used for anything else. A " crawling-cure " (as in Serbia) consists in drawing her through a hoop which has sprung of itself from a vat or cask; also, as in Serbia, an egg is let fall through the breast of her chemise and the chemise is torn from breast opening to hem. Here there crops up again a custom resembling one which is indigenous to the Harz, namely, that a horse eats from the lap of the woman in labour. If the woman during her pregnancy has seen mares grazing, it is feared that her pregnancy, like that of a mare, may last 11 months. In order that this may not happen, a male foal is led to her, to which she gives salt to lick in her lap when just over the threshold of the house.

Glück quotes of the customs in Bosnia for promoting delivery, and also the following :

"If labour is protracted for some reason, then the room is first heated and the woman in labour is ordered to make movements near the hot stove with a wood chopper in her right hand and a spindle in her left. This measure, which I myself saw in Foča, was explained to me as a method of enticing the child. That is to say, if it is a boy, it will run after the chopper ; if a girl, after the spindle. Or a raw egg is put unexpectedly on the back of the patient's neck so that it rolls down along her back. Of sympathetic expedients, a few more are mentioned here : tearing the front opening of the chemise ; untying all the knots on the clothes and loosening the patient's hair ; stroking the abdomen with the corners of the garment which women, who have already had children, have bound round their abdomens ; a light blow with the girdle of a maiden on the patient's loins (with which a special formula is spoken) ; untwisting a girl's plait of hair over the patient ; laying a comb on the abdomen ; taking a mouthful of water from the husband's boots ; licking the ashes of a wooden shovel ; and, finally, strewing nuts between the patient's legs, probably as an enticement for the child which is supposed to play with them."

"If the pains are very great, then among the Mohammedans they have both doors of the nearest Džamia (mosque) opened, give alms to the poor and feed homeless dogs. Of the extraordinarily numerous amulets used, unfortunately, I know only two which, however, are said to be very efficacious : the first four sentences of the 84th Sura (The Splitting Asunder) which are tied on the abdomen; and the following amulet, a copy of which is put in each of the patient's hands:



"A drink of water from the holy well of Abuzemzem (this is said to be the same well which an angel showed the exiled Hagar in the desert when her son Ishmael was very nearly dead of thirst, and every Mecca pilgrim, as everybody knows, brings at least one bottle of this wonder working water home so as to be fortified against any eventuality); and a piece of lighted candle from the grave of Mohammed are the *ultima refugia* in labour among Mohammedan women."

Among the Poles in the neighbourhood of Cracow, it is believed that women in labour are attacked by nixies; they are protected by means of the blue-bell (Kopernicki²).

6. SUPERNATURAL HELP IN LABOUR AMONG THE MAGYARS, GIPSIES AND MODERN GREEKS

In Hungary, the young wife believes she can do something even at the wedding to prevent difficult labour. For this purpose, after the wedding ceremony, on leaving the carriage, she jumps on a sack filled with meal. By this act of magic, delivery is supposed to be as easy as shaking the meal from the sack (v. Csaplovics, II., p. 290).

Of the tent gipsies of Transylvania, v. Wlislocki reports that as soon as labour sets in, they untie every knot on the woman's clothes and in her vicinity. The husband mislays the axe or the hammer and then by means of a reed or straw lets a few drops of water run from his mouth into his wife's mouth. In difficult labours, the patient's fellow tribeswomen come to her aid, and each of them lets an egg fall through between the patient's legs, in doing which the following incantation is murmured :

> "Little egg, little egg is round Everything is round, Baby come forth sound ! God the Lord calls thee forth !

Among the modern Greeks, the midwife opens all the locks of the house, doors, boxes and chests, for it is believed that only when everything is opened can the birth proceed well. Sonnini, when he was present at a birth, was not allowed to leave the room before it was finished, and nobody could enter the room, for it is feared that by doing so delivery might be interfered with. If, in spite of all this, delivery does not advance, the husband of the woman in labour has to remove all obstructions by giving the woman three blows with his shoe, and at the same time crying loudly: "It is I who have put this burden upon thee, now I remove the burden for thee !" To make labour easy, the house is strewn during labour with a certain plant shaped like a hand. This is no doubt a symbolical action, without any medical effect from this plant being expected.

According to the information of Röser in Athens, here and there in Greece, in

accordance with ancient custom, the head of a cock is cut off at the moment when the child is supposed to be coming through ; Röser thought that in doing this, they may have thought of the sacrifice to Asclepias, to whom, as is well known, the cock was sacred.

7. SUPERNATURAL HELP IN LABOUR AMONG THE JAPANESE AND CHINESE

In the mythological works of the ancient Japanese translated into German by Florenz,¹ it is told that the lying-in hut for the goddess Toyo-tama-hime was covered with cormorant feathers. Aston mentions the Japanese belief that a woman will get relief in her confinement by holding a cormorant feather in her hand. "For the same purpose, the *Koyasugai*, 'egg delivery shell,' a kind of cowrie is used. It is also important for a woman in childbirth not to have insulted the broom god



FIG. 795.—A woman brings a magical formula to a Japanese who is undergoing a difficult labour. Mus. J. Völkerk., Berlin. (From a Japanese woodcut.)

 $(H\bar{o}ki\text{-}no\ kami)$ by bad treatment of the household broom, as, for example, treading on it or throwing it down, etc." (see Florenz¹).

In Japan also, pregnant women swallow, before their confinement, a piece of paper, on which the patron saint of women in childbirth is drawn, in the hope of thus having an easy confinement. Others drink with this intention a decoction made from unborn deer calves which are dried, ground, and then boiled (H. v. Siebold). In many temples, papers under the name of *Setzu Bun* are sold. When believers have thrown the money into the box, these papers are hung on a high place, but are kept in constant motion by a priest with a fan, so that it is difficult to catch one of them. If one is obtained, the two words are cut apart, and then one half is cut up into quite small pieces and swallowed; this promotes delivery. The expression *Setzu Bun* itself signifies the custom of strewing peas on New Year's Eve in order to drive away evil spirits (see Miyake).

In the earlier mentioned Japanese Encyclopædia of the Art of Fortune Telling (Yeddo, 1856) is the representation of a woman in labour in front of whom a woman is kneeling and holding in her hands an object which is probably meant to be a folded paper (see Fig. 795). Professor F. W. K. Müller was good enough to translate the text referring to it for M. Bartels, as follows:

"Magic formula to be used if the woman cannot be delivered. One writes down this formula and folds red and white paper like the shape of this magic formula. Then one has the patient swallow it at the time when the woman cannot be delivered. Delivery will then proceed quickly."

The paper folded in the shape of the magic formula is reproduced in Fig. 796. Of the places marked with writing the two corners must be red and the two little enclosures white. The magic formula ends with the words : " $ky\hat{u}$,

 $ky\hat{u}$ nyo ritsu rei," which, according to Hepburn, mean approximately, "Let this be as certain as law," a formula which is appended to all incantations and exorcisms.

H. ten Kate mentions the following rule which holds good in Japan : "When a birth is to take place, do not wash the cooking pans from which people have eaten, but have them standing half filled with water. This is supposed to effect a favourable course of labour, especially as regards the liquor amnii. The association of ideas is very plain here.



FIG. 796. — Folded paper containing magical formula to ease a difficult labour. Japanese. (From a woodcut.)

In easy as well as in difficult labour in China, amulets play

a great part. Sorcerers, both male and female, have to banish the evil spirits. The woman in childbirth puts on special stockings which have been ordered from the Dalai Lama and have been consecrated by him beforehand; or she swallows pills of paper on which special incantations are written (Staunton, II., p. 536). A Chinese doctor advised that the prayers which are customary in China during parturition be omitted:

"Beware lest anyone begin to pray in her presence or invoke heaven and the saints" (see v. Martius).

Rather shall the patient, as the doctor requires, keep calm, be patient, and they are to speak words of comfort to her.

The Miaotsze in the province of Kwantung, in difficult labour, pray to the demons, for only to them is interference in the process of labour ascribed. Hence, medicines are not used in this case. To conciliate the demons, a fowl is sacrificed on this occasion by the priest (Krósczyk).

The Chinese, as v. d. Goltz records, make magical swords from copper coins. On two iron rods about 2 ft. long, about a hundred coins, very old where possible, or issued by the same emperor, were fastened with red thread or wire. The swords thus made are hung up near the bed in a horizontal position. This is supposed to make parturition easy.

8. SUPERNATURAL HELP IN LABOUR AMONG THE PRE-COLUMBIAN INHABITANTS OF MEXICO

As to the customs observed in women's confinements among the Mexican Indians before the time of the Spanish conquest, we have the records on the one hand of Hernando Cortes, and on the other of Diego Garcia de Palacio, the latter of whom, a high government official in Central America, gave information in 1576 to the King of Spain about the provinces of Honduras and San Salvador. Hack tells that among the ancient Mexicans, if a woman could not be delivered and various expedients of which we shall speak later were without avail, they made the husband take off some of his clothes and place them on the patient's abdomen. Then the husband offered up blood from his ears and tongue. If this still did not promote delivery, then the midwife sacrificed some of her own blood. In doing this, she sprinkled it in all directions whilst uttering prayers and magic formulæ.

Bancroft reported also that

when labour seemed to be difficult and dangerous, the midwife said to the patient : "Be strong, my daughter, we can do nothing for thee. Thy mother and thy relations are present here, but thou alone must bring this matter to a conclusion. See to it, my daughter, my well beloved, that thou art a strong and brave and resolute woman ; be like her who first bore children, like Cioacoatl, like Quilaztli." And then if after a day and a night the woman could not bring forth the child, the midwife took her apart from all the other persons and brought her into an isolated room and said many prayers invoking the goddess Cioacoatl and the goddess Yoalticitl and other goddesses.

9 SUPERNATURAL HELP IN LABOUR AMONG THE AMERICAN INDIANS

The Payagua Indian woman in South America has, as a rule, no assistance at childbirth; nevertheless, if labour is protracted or her neighbours hear her groaning, they come with little bells or rattles in their hands and shake them as hard as they can; after this, they go away and leave the woman in childbirth to her fate.

Among the Galibi Indians in Guiana, the people who intend to bring supernatural aid gather, not round the woman in labour, but round her husband; and whilst the wife is being delivered outside, the husband's hut is being noisily filled with women friends, whilst a native medicine man has a drum beaten in order to drive away the evil spirit (Boussenard).

As to the help in difficult labour which is customary among the Indian tribes in the East (in Kansas, Colorado and Indiana), *i.e.*, among the Cheyenne, Arapaho, Kiowa, Comanche and Eastern Apache, a doctor gave the following information :

"Meanwhile the chief doctor of the tribe made great efforts in a neighbouring hut to help the woman by means of expedients which I was not allowed to see, but the setting into operation of which could be plainly heard. The ceremony was performed apart in a closed hut and consisted, as far as I discovered, in drum beating, singing, shouting, dancing, running round the fire, jumping over it, manipulating knives and other tricks. This kind of medical help is very common among the Indians and is always carried out seriously and ceremoniously and with full confidence in its efficacy. The main idea is that illness is an evil spirit entered into the sick person, from whom it must be driven or frightened away by magic powers or by flattering words" (see Engelmann,² p. 65).

Another time, something was apparently blown into the mouth of the woman in labour by the magician.

Among the North American Indians, a mental shock has sometimes to come to the aid of tardy nature. A doctor who assisted a Comanche woman reports that with her the effect of a fright is supposed to expedite delivery :

"She was brought out from her couch and Eissehaby, a well-known warrior, mounted a swift horse; and in war paint and equipment, he galloped towards her, and only stopped short at the moment when she expected to be pierced through and crushed to death. As is reported, the expulsion of the child followed this terrible trial of courage immediately" (Engelmann,² p. 27).

Early authors also tell of a similar procedure; thus, P. F. X. de Charlevoix states

that among the North American Indians, when labour is protracted, the young people of the place assemble before the patient's hut and raise a sudden terrible shouting

"and the surprise gives her a shock which immediately brings about the delivery."

In the Argentine, in cases of difficult labour, a cross is made on the woman's abdomen; and this is done with the foot of a man whose name is John (Mante-gazza 5).

10. SUPERNATURAL HELP IN LABOUR AMONG THE AFRICAN TRIBES

Of the Bombé in Central Africa, Buchta reports that, in difficult labour, they are accustomed to call in the help of the magician.

Similarly, among the Niam-Niam, if labour begins to be difficult, the witch doctor, who is at the same time a soothsayer, is called in. Before he vouchsafes his

support to the woman in labour, he informs her what answer the omenshave given about her fate. Besides this, Piaggia states that the husbands also use a kind of augury in order to learn something about the course of delivery when their wives are overtaken by labour pains. They dip a cock with its head under water and thus expose it for a time to the risk of drowning. If it comes up again alive, this is a good sign for the future, but if it is dead that indicates misfortune. According to Felkin.¹ the women beat drums and make music during the confinements of Niam-Niam women (see Fig. 797); and during the confinement



FIG. 797.—Niam-Niam woman undergoing delivery whilst seated by the side of a stream. By her side her friends play musical instruments. (After Felkin.)

of a Kidj negress, the loud singing of her friends continues incessantly, and they do everything they can to inspire her with courage.

In Abyssinia, according to H. Blanc, whilst parturition is going on, the people round the woman cry out continuously; also "sympathisers" in great numbers stand round her. Then, if the labour is difficult, the father takes off his sandals, walks round the house barefoot, and deals blows at the outside wall with the flat of his sword whilst inside the house, the women who are helping intone a prayer to St. Mary, the patron saint of mothers (Rheinisch).

Among the Somali, if labour does not follow the normal course and it is feared that there is danger to mother and child, an amulet of some kind, or a chaplet of the teeth of the dugong, is hung up over the entrance to the house (cf. Haggenmacher). Paulitschke reports of the same tribe :

"When the time of delivery approaches, the friends of the woman in labour give help by whispering words of encouragement and blessing to her during the labour pains and no doubt render surgical service as well."

According to Hartmann³ (p. 405), a snake skin, especially of the python, is tied round the abdomen of Senaar women when in labour; religious blessings are

pronounced over them, and amulets are hung on them. The latter is also common among many negro tribes.

Rohlfs (p. 246) ascertained by asking questions what was the procedure in Morocco in difficult labour.

"First a fakir is brought to the woman in labour and he tries to cast out the devil by burning incense and by pious quotations, for in Morocco also the devil is the cause of every ill, including protracted labour. If this is no avail, they write passages from the Koran on a wooden tablet, wash them off, and then make the patient drink the water used for this. If this procedure too proves vain, then passages of the Koran, written on paper, pulverised and mixed with water, are administered to the patient. However, Satan has sometimes taken possession of the woman to such an extent that he is not to be cast out even by the Sacred Book. Then all kinds of amulets are arranged, *e.g.*, the hair of a great saint, sewn into a little bag, is put on the woman's breast, or they make her drink water from the Semsem well (which is situated in the middle of the grounds of the sacred temple of Mecca and, according to Snouck Hurgronje, contains a slightly bitter water). Some dust from the temple in Mecca is also put on the woman's couch.

Then the devil sometimes abandons his prey, and the labour proceeds to a successful conclusion."

Quite a number of cases, however, occur where the *Iblis* (the devil) has taken such possession of the woman that he will yield to no expedient; the woman helpers then engage in battle with him. Amid exorcisms and continually calling *Rhamek-Lah* ! (God have mercy upon thee !) they undertake mechanical manipulations.

On the Loango Coast, in difficult labour, the neighbouring huts are cleared out without consideration; the children are sent out of the village and the helpers lift up their voices in order to drown the patient's cries of pain by general noise (Pechuel-Loesche). When the queen is confined, someone taking no part must drink an oath of purification to the faith of the woman in labour.

Among the Wolof negresses, every woman who is expecting her hour of travail has to name the begetter of the child, in

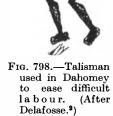
default of which she is left without help in her labour; indeed, mother and child would be left to perish were the former to rebel against this custom (W. Höfler). The name given by her is then bestowed on the child also. Besides this, the parents and neighbours who squat in a room in the hut, or, when this consists of one single room, on the doorstep, are accustomed to strike up a monotonous singing and to clap their hands at regular intervals.

Of a great number of talismans which Dybowsky brought back from his mission to Fernand-Vaz from Dahomey, Delafosse ² describes one which is intended to make labour easy. Probably this talisman is, like all the others, made by the Hausa marabout; it is inscribed with Arabic formulæ; besides the written characters, there is also a representation of a female figure on it (Fig. 798).

The Talisman "représente une negresse enceinte, dotée de tous les apanages de son sexe et de son état, tels qu'ils apparaissent d'habitude sur les dames du continent noir ; seins longs et tombants, ventre gonflé en forme d'outre, rien ne manque à cette peu esthétique silhouette."

Delafosse² gives the following translation of the magic formula written beside it :

"C'est Lui (Dieu) dont nous implorons le secours : Explication : Tu écriras à la femme enceinte qui portera un fruit dans un etat avancé, ce qui suit :



"Qu'Il (la) protège, Dieu, Dieu, Dieu, Dieu le Diligent, le Diligent, le Diligent, Celui qui entend tout, Celui qui entend tout, Celui qui entend tout, Le Constant, le Constant ! Dis : C'est Lui le Dieu unique, le Dieu éternel : Il n'a pas d'enfants et n'a pas enfanté ; Il n'a point d'égal. Salut, salut, salut, salut, salut, salut, salut, salut sur le sceau de Hayifoua. Sois heureux en Dieu qu'Il soit exalté ! "

" Margani Hayifoua !

"Sois heureux en Dieu qu'Il soit exalté !"

Delafosse ² rightly regrets that it is not stated with what, and on what part of the body of the pregnant woman the formula must be inscribed. The written characters are placed in a cabalistic manner.

Near Agitome in Togoland, Kling found little human figures in clay which were set up before the village when a birth was expected. Certainly women are to be shielded and protected in childbirth in this way. Whether these figures, which are incredibly crude, are supposed to be sentinels against demons or whether they are offered to the demons as substitutes for the woman in labour is, so far, not certain.

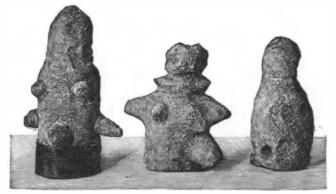


FIG. 799.—Clay figures set up before villages in Agitome (Togo) when women are in labour. Mus. f. Völkerk., Berlin. (Photo: M. Bartels.)

Through Kling, the Ethnological Museum in Berlin has come into possession of these figures, photographs of which are reproduced in Fig. 799.

11. SUPERNATURAL HELP IN LABOUR AMONG THE ASIATIC PEOPLES

Among the Turks, when a woman is in labour, the husband betakes himself with his friends to the State schools; there they give the schoolmaster a present and request him to grant the pupils a holiday; this is supposed to make childbirth easier. For the same purpose, the fathers buy a bird and set it free. Damian Georg records also that those who go into the lying-in room write down a passage from the Koran and place this in a corner of the room in order to expedite delivery.

Türk describes the confinement of a Samaritan lady in Jerusalem as follows :

"On the evening before my departure from Jerusalem, some people asked me to hasten immediately to the house of a Samaritan lady. In the middle of a wide hall, I saw in an oldfashioned arm-chair, a matron in pain, wrapped in a mass of garments and surrounded by about 50 people, some acquaintances, and some servants. I felt her pulse : it was full and strong; the skin was cold and moist. I was about to put some questions to her when some of those present drew me with noisy impatience to the door and implored my instant help. From their confused talk, I could gather nothing but that the trouble was still fresh; their gestures, however, led me to conclude that there was some abdominal trouble. But hardly had I reached the vestibule when sudden shouts of joy were heard. They rushed upon me, thanking me for the favourable result of my visit and, at the same time, I learnt that I had been called in to give medical help in a difficult labour. The arm-chair itself, which on other occasions is very rarely used, might have told me how matters stood, were it not that, in these climates where childbirth takes place with such ease that the help of science is practically never required, the presence of a doctor or any male individual at all is strictly forbidden at such a time. Even the midwives are superfluous and the usual support is the mother or an elderly maid servant."

Vámbéry says of the nomad Turks of Central Asia :

"As the wife among the nomads is spared no labour and exertion during the whole pregnancy, even in the last days, she is sometimes overtaken by the first labour pains in the midst of her work. The first help is given as a matter of course by the older women of the *aul*, who have taken good care to rid the patient of the harmful influence of the *albasti* (literally 'illusion'), this evil-bringing spirit, by means of magic, for which purpose the *tumars* (amulets) which the pregnant woman has been wearing round her neck for a long time, were duly prepared



FIG. 800.—Tatar Shamaness dancing round the fire. (After Rechberg.)

and breathed upon. When the pains become stronger, a favourite *nuszch* (talisman), kept in readiness, is dipped in water, which is then given to the woman to drink, on the assumption that the miraculous power of the words has passed into the black ink and this will now be immediately efficacious. In other parts, people try to chase away the wicked *albasti* by means of noise. They knock on the outer walls of the tent with sticks, begin shouting and howling wildly, or where they have firearms at their disposal they keep on firing guns : while there, where Islam has not yet a firm footing, people, as a survival of ancient Shaman beliefs (see Fig. 800) make sacrifices by throwing pieces of lambs' fat into the blazing fire, and if all this is of no use, then, finally, the magic bond is used. The woman in labour is firmly bound with a cord by a strong man's hand so that for a long time afterwards her arms show weals. By this, according to ancient Turkish custom, the evil spirit is deprived of its power and its influence is made harmless."

The Songars ascribe difficult labour to the influence of evil spirits; in such cases, a man walks round the hut and shouts with all his strength, cutting and thrusting with a club, and calling out "Garr Techetkirr," i.e., "devil begone." Besides this, the people present pray to the gods, and the women try their skill on

the patient. The priests keep away as far as possible, and at most serve the higher classes with certain amulets among which consecrated stockings, indulgences, etc., play a part (Klemm).

Among the Kalmucks, when labour is soon to begin, their idol is set up and a lamp is lighted to it (Krebel). If labour is protracted, they call in a witch doctor; he hangs written prayers and spells round the patient's neck and round her abdomen, so that the demon which is obstructing delivery may be driven away by them. At the same time, the abdomen of the woman in labour is pressed together by a man standing behind her (H. Meyerson).

Pallas says :

"Among the Kalmucks, when an ordinary woman is confined, a priest is summoned who has to read aloud the appropriate prayers by the tent. The woman's husband meanwhile spreads a net round his tent and, until the child is born, has to make a continual thrust in the air round the tent with a club in his hand and cry out '*Garr Tchetkirr*' (devil begone) so as to keep off the satanic messenger. In the case of people of high rank, so many praying priests are placed round the hut that this guard is sufficient to drive away the evil spirits."

Among the Bashkirs and Kirghiz, a devil exorcist, soothsayer or magician is almost always summoned at childbirth (Krebel, pp. 43, 47).

Zaleski (p. 25) records :

"Les femmes des Kirghises réclament souvent un présent des voyageurs qu'elles rencontrent. On amène volontiers des étrangers près des femmes en couches, dans l'idée que leur présence facilitera la venue au monde de l'enfant ; ils font un tapage extraordinaire, convaincus que l'effroi aide à la délivrance de la mère."

Mrs. Atkinson, who lived for several years among the Kirghiz tribes in Siberia, says that people beat women in labour with sticks to drive the devil out of them.

Among the Kirghiz in the district of Semipalatinsk, when labour does not progress, all the women are first banished from the yurt of the woman in labour because they suppose that one woman among them is evil and possessed of the *Shailan* (Satan). The men, however, assemble inside, and the rest of the inhabitants of the aul gather round the yurts. They shout, make noises, howl, crack whips round them, even, at intervals, they strike, but only as a pretence, at the woman in childbirth. Now they call in a "dragon," *i.e.*, a man entrusted with the practice of medicine, that is, a kind of doctor, but more often a *baksa* (a kind of Shaman). The latter plays a stringed instrument (*kobysa*), falls into trances, and in this condition he can effect cures. In exceptionally difficult cases they even call in two *baksas*. There can also be women *baksas*, yet these are rare.

The ceremony practised by the *baksa* proceeds as follows :

"All fire is extinguished except that in the middle of the hearth. The patient is then laid down near this while the *baksa*, dressed in a long white shirt, kneels down and places his *kobysa* (a three-stringed mandoline-like instrument) before him. First he begins to play slowly, bending from side to side over the instrument; from time to time he shakes it so that the metal appendages on it jingle; then he sings with trembling voice a strange and wild melody. Now and again the song is interrupted by loud inarticulate cries; now and again the accompaniment of the instrument ceases. At last, all is still, but only for a moment : the *baksa* springs up with rolling eyes and disturbed face, throws the instrument from him and begins to walk in a circle round the yurt; obviously, he is not in control of his senses. He walks, he stumbles, he falls on the bystanders, he gets up as if in convulsions, then he jumps up, seizes a cushion with his teeth and casts it away; in short, he acts like a madman. When, as sometimes happens, two *baksas* have been fetched, then the behaviour is really mad; they try to outdo each other; they bite each other, throw red-hot firebrands at each other, etc., and do not stop till the weaker *baksa* falls to the ground exhausted. Meanwhile, in the opinion of the Kirghiz, delivery is supposed to take place as a result of this madness " (see Globus, 1881).

Among the Goldi, Adrian Jacobsen found a wooden image in the form of a woman on whose abdomen is the figure of a child. This gives help in difficult parturition, and, for this purpose, it is placed on the abdomen of the woman in labour. One can understand that this method is not without favourable influence,



FIG. 801.—Wooden figure, weighing 9½ kg., used by the Siberian Goldi for laying on the abdomen of a woman in difficult labour. Mus. f. Völkerk., Berlin. (Photo: M. Bartels.) for, in the first place, its coldness will have an effect, and then, too, with its length of 73 cm., it has the not inconsiderable weight of $9\frac{1}{2}$ kg., and that such a weight, when placed on the body, can induce strong contractions of the uterus may easily be understood. This figure is now in the Ethnological Museum in Berlin; a photo of it is reproduced in Fig. 801.

Among the Altaians, when a woman is about to be confined, the female relations assemble in the yurt of the mother whilst the men stay near it. The latter have obviously the task of driving away the evil spirits, for as soon as the labour pains begin they raise a frightful howling and shouting, run round the yurt and fire guns. This noise continues till the child is born (Radloff).

"Untying" is also done among the Gilyaks on Sakhalin; the husband unties everything possible (Pilsudski).

"Without a girdle, a picture of misery, he slinks from one corner to another, or lies idle and thinks over what he might still undo or untie, for, in his opinion, his wife's labour pains and their duration depend upon whether he may not have left something unnoticed which he has neglected to open." But he is not allowed to do anything; only when the stump of the umbilical cord has fallen off the child is he allowed to go about his business again.

Zachariæ found in two old books of travel of the seventeenth century by Pietro della Valle and by Dapper, the description of this custom of "creeping through" practised in Persia, the first part of which is given here :

"Now, while we halted there, a pregnant woman came to our camel driver and begged him to let her creep through under a camel, or rather under a female camel, because these people imagine that by doing this, delivery is promoted." The woman

crawled through three times from left to right under the belly of the female camel. This informant adds that he saw this several times more.

Zachariæ found in Sir S. W. Baker's work on the Nile Tributaries the statement that Arab women who are pregnant creep through between the fore and hind legs of a very strong camel, thinking that by so doing, the strength of the animal will be imparted to the child. Zachariæ considers that this motive is not the original one. An Armenian pupil told him that this custom is still much practised in Armenia at the present day. In Persia, people usually pray on the roofs to Allah during childbirth for the completion of the act of delivery.

In Kazwin, in Western Persia, guns are fired when a woman is in labour in order to drive away the demons, while, for the same purpose, the women lay a sabre beside the woman in labour and, on the flat roof of the house, set in motion by means of threads, a row of dolls dressed as soldiers.

If, in spite of this, the child will not appear, the husband makes a white horse eat barley from his wife's bare breast. Many horses have acquired quite a reputation by their fortunate influence on parturition, and it sometimes happens that, when in a village two peasant women are overtaken by labour pains at the same time, their husbands come to blows over the wonder-working animal (Dieulafoy).

Among modern Parsees, during labour a great fire must burn for three nights in order to drive away the $d \alpha v a$, the evil spirits (Duncker,² p. 356); the usage is ordained by Zoroaster's religious laws, and the same custom appears again also among the nomad gipsies in Transylvania. Among these latter, however, the fire is less to keep the demons away from the mother than from the child, for which purpose, also, special exorcism verses are to be sung.

The modern Hindus summon a fire-worshipping fakir when the time of labour approaches, and he has to pray to the god Śiva in front of the house of the woman in childbirth in order to bring about a successful confinement. In cases of difficult labour, a magician is sometimes summoned, who begins by working at the patient's abdomen with a stick in order to cast out the devil (Arnott).

Among the Konkan Kumbi (in North India), if a woman lies in labour and cannot be delivered quickly, a gold ornament from her hair is taken to a $r\bar{u}i$ plant (in North India *dhāk*, *Calotropis gigantea*, R. Br.); the earth at the roots is dug up, one of the roots is taken out, and the ornament put in its place. Then the root is taken back to the house and put in the woman's hair. It is thought that by this means she will have an easy confinement. As soon as she is delivered of her child, the root is removed from her hair and taken back to the $r\bar{u}i$ plant, the earth dug up at the roots, the ornament taken out and the root put back in its old place. The idea in this seems to be that the evil influence which obstructs delivery is in this way transferred to the plant (Schmidt ⁹).

If the groaning of a woman in labour among the Chevsurs is heard for a long time and a difficult labour occurs, the husband approaches the place carefully and fires a gun (Radde).

Among the Pshavs, the same expedient is used. The woman has to be delivered quite alone in a remote hut. If labour is protracted (and this is recognised from the whimpering and crying of the poor woman), then men creep up near the hut and fire off their guns in order, as they believe, to make delivery easier by so doing (Eristow).

Among the Caucasian tribes of Christian faith, the Virgin Mary is regarded as the patron goddess of women in childbirth. Among the Gurians, the image of Mary is set up at the head of the bed and a priest reads the Gospel until delivery takes place (see Krebel). Among the Georgians, when a woman is in labour, a crowd of her relatives come and pray with burning candles before an image of the Virgin. To facilitate delivery a thread made from the hair of a black goat is wound round the bed (see Eichwald).

Among the Battak (Sumatra), the pregnant woman blackens her face as soon as she feels the first pains of labour, so that she will not be recognised by the many evil spirits which torment pregnant women (Römer).

SUPERNATURAL HELP IN LABOUR AMONG THE ASIATIC PEOPLES

In protracted labour on the Sula islands, the reason is sought by means of bits of *pinang*, or by cutting ginger root, or they deliberate as to what can be the cause of it, and then take measures. If, *e.g.*, the woman in labour has had differences with her parents, then they must wash their faces and hands in a basin of water, and at the same time promise to bring an offering to the *Nitu* or *Niaba* after a successful process of labour. Part of this water is given to the patient to drink, while the rest is sprinkled over her head. When the issue is favourable, the nearest kin and the priest are entertained, the latter having previously said a prayer before

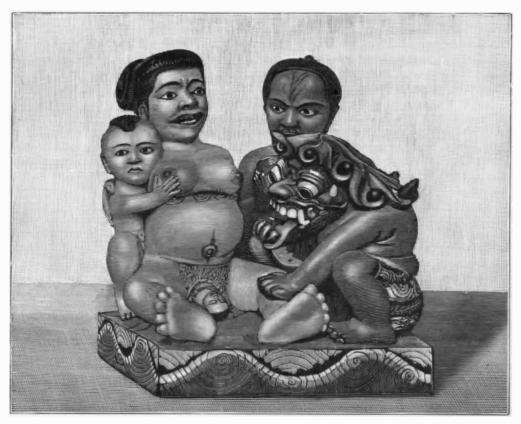


FIG. 801A.—A demon watches the labour of a Balinese woman who is supported by a man and a child. Mus. f. Völkerk., Berlin. Cf. Figs. 711, 712, 757. (Photo: M. Bartels.)

the *sirih-pinang* trough which stands in the middle of the house or by the main pillar. Likewise the house is, on this occasion, sprinkled with water consecrated by the priest for which he receives a present of from 40 to 150 cents.

On the Islands of the Sawu Archipelago, in the Dutch East Indies, the *Wango* is regarded as a spirit which obstructs labour. People try by means of thorn bushes to keep it from pushing its way into the house (Riedel).

It has already been mentioned that the natives on the island of Bali believe in demons which have a harmful influence on childbirth. In Fig. 801A is a group reproduced in terra cotta made by these islanders. It is in the Ethnological Museum in Berlin. The woman in labour is seated on the ground and is supported in her travail by a man and a child. The head of the child is already born, and the shoulders are about to emerge. But a demon has crouched down near the woman and with lustful greed is licking its right fore-paw with its long tongue.

On Nias, they have standing near the woman in labour an idol in the form of a pregnant woman, called $Ad\dot{u}$ Fangóla or $Ad\dot{u}$ Ono alàve. The god protects the new-born child, but it also protects pregnant women from the persecution of the demon *Béchu matiana* (cf. Modigliani).

In protracted labour in Achin, they take a rose of Jericho (Anastatica hierochuntica Linn.), let it open in luke-warm water, and then give the water to the woman in labour to drink.

We have already seen that in Bologna, too, the same plant, when it has opened, causes delivery to take place, and that in the Rhine Palatinate it has the same effect if the woman in labour smells at the "freshly blown rose." Jacobs ² adds the following interesting observations. The plant grows in the Arabian desert and is highly esteemed in Arabia for the above-mentioned purpose. The Achinese also owe their knowledge of it and its effect to the Arab priests. Thus, it is not improbable that it was transplanted to the European lying-in room by the Crusaders. It is called *rosa della madonna* because it is supposed to have sprung up where the Virgin Mary set her foot in the desert on her flight to Egypt. The Mohammedans call it after Fatima, the oldest and best-loved daughter of the Prophet, and according to their legend it grew out of her grave.

A demon very dangerous to women in labour in Achin is, according to Jacobs,² the ghost (*boeroeng*) called Těnkoe Rabiah Tandjoeng. Si Rabiah was the unfortunate daughter of a pious man. She was made pregnant illegitimately by her lover, and as he was well aware that he would incur the death penalty if the matter became known, he persuaded his lover to fly with him. But while they were resting by some bamboo bushes and the weary Si Rabiah let her head lie in her lover's lap, her unfaithful companion suddenly cut her throat and threw the corpse into the bamboo thicket. Now, as she herself could not participate in the joys of motherhood, her spirit was filled with envy of other pregnant women and it constantly endeavours to make delivery impossible for them, or at least to delay it and make it as difficult as possible. She is able to creep through the smallest cracks and clefts, especially at night, and when once she is in, she forces her way through the big toe of the woman in labour, turns the child in a wrong direction, gives it a wrong position, prevents the complete dilatation of the womb, and torments and tortures the poor woman in every way even to madness and death.

They have to make every effort to keep her from entering the house. For this purpose the chief thing used is a branch of the thorny mamake or moeroeng tree which hangs from the ceiling of the lying-in room. Then four little wood fires, especially if parturition takes place at night, are lighted at the four corners of the house, and into them from time to time salt, pepper, sulphur and horn are strewn. This gives out a horrible stench. Finally, the midwife has to rub the patient's big toes with a mixture of finely ground pepper, white onions and asafetida. The big toes are, as we have seen, the entrance gates for Těnkoe Rabiah Tandjoeng. Thus thorns and stench are to prevent her entering.

The aborigines of the Philippines (the Aëta and Negrito), as de Rienzi records, fear the Patianak. This is a demon which seeks the life of the pregnant woman and the child. To render it harmless, the husband, when the labour pains are at their strongest, carefully locks the hut, lights a big fire, discards the few clothes which cover him, and swings the kampilan furiously until his wife is delivered. The Osuang or Asuang is also a similar demon (see Vol. II., p. 426).

SUPERNATURAL HELP IN LABOUR AMONG THE PEOPLES OF OCEANIA

The Tagals describe the Patianak as dwarfish in form; the Osuang appears sometimes as a dog, sometimes as a cat or kitchen beetle; among the Tagals and Pampango also in the form of a bird. The food of both consists of human flesh. If a birth is to take place in a house, then both these demons appear accompanied by the tictic bird, which serves them as spy and guide. The singing of this bird in the vicinity of a hut in which lives a pregnant woman is, therefore, regarded as an evil omen. The Osuang flies up, settles on the roof of the next house, and from there stretches its tongue into the house of the woman in childbirth and draws out the intestines of the new-born child through the anus so that it dies a pitiful death. The Patianak is less intent on causing the death of the child, although it does this also sometimes; it prefers to make delivery difficult or impossible, and is much more dangerous to the mother than to the child. Usually, it settles on a tree, which is quite close to the house in which the woman in childbirth lies, and sings a monotonous song like boatmen when rowing. To prevent the monsters beginning their destructive work, these people make use of various expedients. Thus, to outwit the demons, they take the pregnant woman into a strange house when labour begins. Usually, in order to prevent the invasion of the Patianak and Osuang, they stop up the doors and windows so closely that "healthy people grow ill with the heat and stench and sick people have difficulty in recovering." This custom has been preserved even in those places where superstition has died out ; here, as Jagor found, " in their fear of draughts, people have found a new explanation for an old custom.'

"As the Patianak especially is very shy of everything naked, the husband in whose wife labour pains have just set in, climbs on the roof of his house quite naked or only covered by an apron; he is armed with sword, shield and lance; friends similarly take their places round and under the hut (resting on piles); they all begin cutting and stabbing in the air with furious rage; by this means, they believe they frighten the monsters and make them withdraw. Buzeta and Bravo mention that when among the Tagals labour proceeds with difficulty, they fire guns well loaded with powder in the immediate vicinity of the woman in childbirth; perhaps this is done also with the intention of frightening away the Patianak and Osuang. According to St. Croix, the Tagals used formerly to protect themselves from monsters by fires made round the hut. The new-born child, according to Mas, is not safe from these evil spirits until it is baptised; therefore, when they take the child to be baptised, they are accustomed to make smoke to frighten away the Osuang. Although in the vicinity of places where the Indians come much into contact with white men, this belief appears to be extinct (often, however, merely concealed for fear of the priest), yet many customs connected with it have been retained, and in remote villages the Patianak and Osuang still carry on their existence undisturbed" (F. Blumentritt 1).

In difficult labour, as well as in all occurrences where human aid is not sufficient, the *inawo* and little offerings consisting of millet and such-like things, are set before the *Kamoi* by the Ainu in Japan. The *Kamoi* are helpful spirits, and the *inawo* are sticks of maple wood, at the ends of which thin curly shavings are cut; they are regarded as symbols of the protective spirits. In addition, the abdomen of the woman in labour is wrapped round with the dried intestine of a bear. This expedient is also known to the Japanese (H. v. Siebold, p. 32).

12. SUPERNATURAL HELP IN LABOUR AMONG THE PEOPLES OF OCEANIA

On the mainland of Australia we come across a peculiar procedure for relief in difficult labour, which must be regarded as sympathetic magic, that is to say, by transferring pain to other persons. D. Collins (p. 363) records, for instance, that a woman ties a little band round the neck of the woman in childbirth, and with the end of it rubs her own lips till they bleed ; they believe that by doing this, the pain is taken away from the woman in labour. In addition, a second woman helper pours cold water on the patient's abdomen from time to time.

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Similar motives no doubt explain the fact that when, among the Sulka in New Britain, a husband who pities his wife in childbirth, to alleviate her pain pretends to be ill and lies down in the men's house and writhes as if with pain as often as the cries of his wife in her labour penetrate to him, the men come and act as if they wanted to alleviate his supposed pain; this goes on until the birth is over (Parkinson²).

On the other hand, however, as Parkinson 2 records in another passage, the poor woman's travail can be aggravated in a similar manner. He writes :

"The husband who wants to punish his wife in this way pretends to be ill and is not allowed to speak. From time to time he jerks his arms and legs, by which means he is supposed to cause the foctus to make similar movements and thus cause its mother pain. If he thinks he has caused his wife enough suffering or is afraid that she will die, he pretends to be well again, and the wife is delivered without further difficulty."

Pfeil writes of the natives of the Mandated Territory of New Guinea

that when the mother feels the day of her delivery approaching, she betakes herself to the sea shore and, burdened with a stone which she holds in her hands, she throws herself into the breakers. These are sometimes so strong that it is impossible to resist them and keep upright; the woman is ruthlessly rolled under them, but stands up again bravely to rush anew against the breakers. Of course, it is impossible to keep this game up for long; this, too, is not expected; one or two repetitions suffice. By doing this, women believe that they have assured an easy delivery for themselves and good health for the child.

In New Britain, according to Danks, a magical charm is always hung up in the house during a confinement in order to make the labour pains as slight as possible and to protect the child from evil spirits.

In the New Hebrides, people make use of ceremonies of exorcism in difficult labour. But since direct obstetric manipulations are connected with them, we shall revert to them later.

When labour is protracted in Samoa, the husband is blamed.

Kubary states that "people suppose that he ran after other women while his wife was pregnant; but if all the anger against the contrite sinner is unavailing, people begin to recall that the woman in childbirth was often unkind to her parentin-law; she was greedy with food or talked foolishly. All such sins are in the opinion of the people punished at childbirth."

G. Turner ¹ (p. 78) says that when a Samoan woman is in labour, her father or her husband is present, and prays to the house god Moso for a successful issue. At the same time he promises him gifts which consist of mats, a canoe or food.

The Maori in New Zealand, in protracted labour, use, along with scarification of the abdomen, certain exorcisms and spells. With them, also, the belief is prevalent that in protracted labour some guilt is weighing on the patient. She must have some neglect of duty on her conscience, whether that she has cursed the *ariki* (head of the family), disregarded a taboo or committed adultery. She is questioned about her fault, and if, as usually is the case, she knows of one, they gather herbs from the holy ground of her ancestors and, after these have been roasted over a fire, they are put on the woman's head and her witch priest (*tolunga*) strikes up songs and prayers during the whole time of parturition (*cf.* Parris).

Goldie states that first of all the husband's forefathers are called in turn by name from the oldest to the youngest. Then the priest says to the child : "Come out, the sin remains behind with me; come out !" Then he invokes the demigod Tiki with a song of exorcism. If the child is a boy, it will come out now; but if it w.-vol. III.

does not, and is a girl, then they must begin all over again, this time invoking the woman's ancestors.

On the little islands in the east of the Malay Archipelago difficult labour is by no means unknown. On the island of Buru, fear of this is made use of for general protection. That is to say, people in these islands have peculiar signs of prohibition, so-called *matakaus* which, set up with magical ceremonies, bring certain woes to the transgressor which are mostly symbolised by their form. K. Martin⁴ found in the village of Wabloi in Buru such a *matakau* hanging before the closed door of a house. This is shown in Fig. 802. "It consisted of the notched leaf stalk of a coco-palm and two roughly twisted chains of rotang; all three objects were fastened to a rope stretched horizontally over the door, the leaf stalk being between the chains." These chains threaten a woman who would push her way in here unlawfully, with a difficult confinement. The leaf stalk in the middle refers to a man who would then no longer be able to raise his arm.



FIG. 802.—Matakau. Buru. (After Martin.⁴)

However, they have also supernatural expedients for help in difficult labour on these islands.

On the Amboina Group, to make delivery easier, all the husband's articles of clothing are laid on the place where the woman in labour squats, so that the child may perceive the father's perspiration, and, enticed by this, is supposed to come out more quickly. In difficult labour on Ceram, all chests and baskets which are locked and tied fast are opened and untied, and the Patalima men stick a dried piece of pisang leaf in which tobacco is rolled up into the roof saying meanwhile :

"Come fathers, come grandparents, come mothers! All look down on your daughter who must be delivered; have pity on her and help her quickly."

They also beat in a terrible way on the *tiha* in order to drive away the evil spirits.

The women helping the woman in labour on the Luang and Sermata islands whimper to instil courage

All doors are opened, even that of the lying-in room; but, except the into her. husband, nobody has the right to enter. If the labour pains are long in coming, then the father has intercourse, forbidden before, with the woman in childbirth, and she must first wash her feet in water and give this to her daughter to drink. On the Watubela islands, if the manipulations of the woman helping at the confinement remain without result, then the husband takes some precious ornaments and other presents to the sobosobo and beseeches him to implore the help of the "grandfather-son" with the promise to offer up to the latter a meal consisting of a plate each of cooked rice, cooked djagong, cooked pisang, cooked katgang, sago, sirih-pinang, a roast fowl and a bamboo joint with tua, the juice of the kalapa tree. After the successful issue of the confinement, he brings the promised offerings, arranges them in the open air in front of the house, takes something from each dish and throws it on the ground, while he consumes the rest with the sobosobo in order to strengthen his connection with the "grandfather-son." Here, too, all chests and baskets are opened during confinement and the wife puts her husband's clothes under her knees.

The Aru islanders and the inhabitants of Eetar drive away by the noise of drum

beating the evil spirits which interfere with delivery and keep the child back. On the islands of Leti, Moa and Lakor, if labour is difficult and the kneading of the abdomen without result, then the "door is opened," *i.e.*, the auguries as shown by a young fowl are consulted by a man experienced in this art. For this purpose, he takes some *sirih-pinang* and rice and lays all these on a leaf. Then he prays :

"Oh Opulera, have pity and open the door so that the sail may be lowered and the stone set free."

Then he cuts off a piece of the fowl's comb and some flesh from the wings and puts this also on the leaf. The fowl is then cut up and the heart examined. If the veins run through inside without spots, that is a good sign, but if white specks are seen on them, then the test has to be made again, and, if necessary, repeated even a third time. If this third oracle is unfavourable, they believe that the woman must die, an occurrence, moreover, which in reality rarely takes place (see Riedel ¹).

13. CONFESSION AS AN EXPEDIENT IN DIFFICULT LABOUR

In Germany the midwife with the woman in labour and the women assisting, used formerly to kneel down in the lying-in room before they began their first duties and say aloud a certain prayer. Reinsberg Düringsfeld records that when a Slav in Istria feels that her delivery is near, she hastens to the church in order to confess, to receive communion and to hear a mass in honour of the Holy Virgin, to whose protection she commends herself. Then she goes home to be delivered. Among many peoples, however, the need to confess only comes upon the woman in labour in the course of parturition. If labour makes no progress and all kinds of helpful expedients have been tried without avail, it is believed that some secret sin is weighing on the patient's conscience and that delivery cannot take place because she has so far neglected to confess this sin. Usually in these cases it is a question of adultery, *i.e.*, of deceiving the husband, because the child falls to that man alone who has begotten it. Thus, the ancestors also would be deceived. But the unconfessed "sin" of the husband also might constitute an obstacle to delivery.

When a case of protracted labour occurred among the pre-Columbian inhabitants of Mexico, the woman in labour had to confess her sins, and especially whether she had committed adultery. If that had happened without having helped matters, she then confessed who the adulterer was and his trousers and coat were brought from his house and wrapped round the woman in her pain. However, this, too, was sometimes unavailing, and then the husband also had to confess, for his conscience also seems not always to have been clear (see Hack).

Likewise in Madagascar, according to some reports, people are convinced that the woman in childbirth must make an honest confession to her husband if she has had sexual intercourse with other men. If a woman dies in childbirth, according to the belief of the natives, it is certain that she had had intercourse with other men.

For Uganda, too, it is vouched for by Roscoe² that conjugal infidelity on the part of the wife is regarded as the cause of difficult labour, and she has to confess her guilt.

Among the Washamba (Usambara), according to Karasek and Eichhorn, protracted labour (*mschango ya gendo*) is regarded as proof that the woman has had intercourse with several men, although whether she can improve her position by confession is not stated.

In Samoa also, according to W. v. Bülow,² the woman in childbirth, if she is in

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great pain and the bearing down (*oono*) has been unavailing, confesses her sexual sins to her husband, and similarly he confesses to his wife; by this means the ban is lifted.

The Samoyedes also, according to B. v. Struve, have confession as a stimulant in protracted labour. The woman in labour then confesses to an old woman if she has been unfaithful to her husband, and how often this has occurred. For each time she has been unfaithful, the old woman ties a knot in a thin cord, meanwhile muttering mysterious incantations. At the same time, however, an old man receives the husband's confession on the same question, as well as on whether he has perhaps satisfied his desires on reindeer cows or bitches. For his misdemeanours, too, knots are tied. Then the two knotted cords are compared, and the difference cut off. This part cut off is laid on the abdomen of the woman in labour. If neither has concealed anything, delivery must now take place quickly. If this is not the case, however, it is assumed that one of the married couples has concealed something and the sufferings of the woman are regarded as expiation of the unconfessed sins.

Pallas reports the same circumstance :

"Indeed the worst of all the customs at a confinement, against which European beauties would protest, is that the Samoyede woman has to confess, in the presence of her husband and a woman helper, whether and with whom she has committed a little love sin, which duty they are said to do candidly for fear of having to suffer a difficult labour by keeping the least thing back. They have to fear no ill-consequences of their confession, but the husband merely goes to the man to whom the confession refers and gets a small indemnity. If the adulterer is a near relation, the woman does not tell his name and the husband then knows from whom he has to claim the debt."

The Achinese in Sumatra are also to be included here. Jacobs² records of them that

"the wife is made to confess whether she has not perhaps once been unfaithful to her husband, of which, according to the midwife's statement, the difficult delivery is the result. When, to the best of her belief and so far as her pains permit, she has faithfully confessed everything, the husband is called in so that he may step over his wife's body as proof that he forgives her. After this, he blows on her brow and then departs." This attempt at making delivery easier seems not to be infrequently used in Achin, for they have a special expression in their language for this stepping of the husband over the wife : it is called *mělangkah*.

Not exactly a *confession* but the giving of a kind of *absolution* is shown in a certain ancient custom of the White Russians (Prov. Smolensk), which comes into use in difficult labour when all other expedients have failed. When, that is to say, the prayers of the priest and the invocations of the saints have died away ineffectually they have the patient beg the bright light and the earth as well as all the members of the family for pardon (Paul Bartels ³).

14. CALLING AND ENTICING THE CHILD AS EXPEDIENTS IN DIFFICULT LABOUR

Some tribes believe that in these hours of travail the child is able to think, feel and deliberate, and they therefore attempt to make the child come out of the woman and through the genital passages by arousing fear, by encouraging words, and by offering exciting allurements—such as beautiful things, or by leading playfellows past, etc.

Schoolcraft published a report on the Dakota Indians in which it is said that in

difficult confinements the use of two or three pulverised joints of the rattlesnake are praised as very efficacious. When asked the reason, the medicine man said : "I suppose the child hears the rattle, and that it thinks the snake is coming and makes haste to get out of the way."

Thus here the instillation of fear and terror is used to spur the child to do its duty.

A somewhat similar procedure, as Landes records, is adopted by the Annamites :

"Dans un accouchement difficile, lorsque la femme est en grand péril, le père se prosterne en appelant l'enfant et le conjurant de naître."

It must be supposed that the intention of giving kindly encouragement to the child is at the root of the following custom which Modigliani² relates of the island of Engano :

"When the first expedients for helping in parturition are without result, they then proceed to an exorcism, which is carried out in the hut, and if it is not sufficient is repeated in the wood. They have the patient squat down on the ground with knees bent and, at the height of her upstretched arms, they set up a horizontal pole on the house or on a support; she has to hold on to this, or if, overcome by her pains, she lets go, they tie her hands fast to it. Then she has to wait for a long time, and, meanwhile, the husband and the old woman take a net in their hands, such as is used for catching birds, and another like that used for catching the wild boar, bananas and leaves and say :

"' We take nets of each kind so that they may be a help to thee and we do not stop thy son from finding the way.""

Polak says of Persia that there when the child's head is a long time in being born, the midwife lays pretty knick-knacks, sweets and underclothes in the mother's lap and then calls to the child in the womb : "Come then, come !" In Egypt also, Clot Bey reports that the midwives have a child hop and dance between the patient's legs in order to stir the fœtus to imitate it.

On the Amboina Group they try to entice the child out with old articles of clothing of the father, which smell of his perspiration.

In the Dutch East Indies, enticing the child out of the womb is known. In this case the husband has to place himself between the outspread legs of the woman in labour and then run away so that the child may want its father and try to follow him as fast as possible. If the father is absent, then a head-cloth is fastened on a pole in order to deceive the child with this doll. They try also to entice the child out by rattling money in a copper basin or by pushing money and a little pot of rice into the mother's genitals (van der Burg).

CHAPTER III

NATURAL MEANS OF CORRECTING PATHOLOGICAL LABOUR

1. VARIOUS METHODS

It cannot be denied that many of these methods of treatment have now proved themselves to be far from unsuitable, and this is true in particular of the mechanical methods of treatment. In these, massage, kneading and shaking the body, as well as binding and applying pressure to the abdomen, play a very prominent part. However, we shall also hear of many kinds of medicaments which are administered with more or less justification in cases of protracted labour. There seems to be no doubt that some of these have quite a definite effect on the muscular apparatus of the uterus. Others, on the other hand, may perhaps increase indirectly the action of the abdominal pressure and stimulate stronger contractions of the uterus by causing nausea or increasing peristaltic action. The same is no doubt true of the majority of the medicaments applied externally and especially of the fumigations ; but these may also be efficacious as nerve stimulants or as sternutaments.

In the previous chapter a very important groups of specifics for promoting the course of difficult labour has already been discussed in detail : these are specifics which affect the mind. That these, too, by engaging the attention firmly and thus causing an increase in the tension of the whole muscular system, can provide an impulse towards promoting labour has already been emphasised. These psychic specifics, however, also gave us a deep insight into the feelings and thoughts of the peoples concerned, and afforded us fresh evidence of how often similar processes of thought appear in different nations, and how long a superstition, once embraced by a nation, remains firmly fixed, although its cultural development has been in quite a different direction.

2. MEDICAMENTS AND DRUGS

In an earlier section we learned of a whole series of medicaments, of which some are applied externally, which are prescribed for the purpose of helping and hastening the process of labour. And we found this not only among such nations as had already made comparatively big advances in civilisation, but also among peoples still fairly low in the scale of evolution. It is therefore comprehensible that similar medical specifics should be used to help in cases in which the course of delivery suffers obstruction and delay. If we understand rightly the working of these specifics, we can see that they are exactly like those discussed earlier, and many a one used in one people in any circumstances and in every confinement is brought into use by another people only if the course of delivery suffers obstruction.

Considered from the standpoint of modern medicine, the specifics used internally can be divided into *dietetic* medicines for keeping up and increasing the strength of the patient; medicines for *soothing* and *relieving* pain; and specifics for *stimulating* the labour pains to greater activity.

The external specifics are mainly embrocations and fumigations.

We find the administration of medicines for relief in difficult labour in use in

Greece as early as Plato's time, supported also by incantations. The Hippocratic School esteemed sylphium very highly, but this was later quite forgotten; the size of a pea was taken usually in wine (F. G. Welcker,¹ III., 194). The Romans used pomegranates for the same purpose, and with them decoctions of fenugreek also played a great part.

With the Arabian physicians of the Middle Ages, the number of labourpromoting specifics grew. We cannot go further into these here. The profusion of medicines, however, increased amazingly in mediæval Europe. Of the medicaments praised by Trotula, besides fenugreek, may be mentioned here theriaca and artemisia taken in wine.

In Germany in the thirteenth century, people took internally hydromel, myrrh, fenugreek and the like with wine or beer, also henbane, adder's wort or castoreum with pepper water as well as *Cassia fistula* Linn. in wine; then, too, pills made with balsams, essential oils and pungent specifics (cinnamon, savin, rue, pepper, etc.) in great number.

In the domestic medicine chests of modern European nations also we find many a strange obstetric specific. Thus the modern Greeks, according to Damian Georg, take 2 oz. of almond oil to promote delivery in a difficult confinement.

In Bosnia and Herzegovina, besides the supernatural specifics already discussed, they have also medicines for the women whose labour has come to a standstill. Glück writes that the woman

"gets either water containing powder of burnt and cleansed hemp to drink, or a decoction of garden mint with honey; or, finally, a mixture of soap shavings and oil which is diluted and partly dissolved with a decoction of marshmallow root. Seven grains of ergot in black coffee are much praised, but very rarely given. Shredded meerschaum in water is also much used among the Mohammedans."

The Danes, in early times, used *Basilicum*, which Simon Paullus, in his *Icones Floræ Danicæ*, names *Herba parturientium*; further, lavender, white lilies, *Lithospermum* Linn., pennyroyal (a spoonful to be taken in the food), as well as amber oil or the dried liver of an eel were also much used, according to Thomas Bartholinus.¹

In England, pregnant women used to eat dried figs in the last weeks of pregnancy in order to guard against a difficult delivery (Linné).

A great number of medicines to be taken internally, as used in Russia, is enumerated for us by Pallas, Demič, Krebel and others.

According to Pallas, shredded *belugenstein* is a favourite home remedy for the promotion of difficult delivery with the Russians. It is a chalky concretion found in the cloaca of the sturgeon of the Caspian Sea. Likewise used and much more highly esteemed is the "Kabannoi Kamen," the "bladder stone of the wild boar."

Further, Artemisia vulgaris Linn. (Vladimir, etc.); hemp seed oil as emetics, infusions of Aconitum Napellus Auct. (Kiev), seed of Lithospermium off. (Perm: Tatar women), Secale cornutum or tinctures or infusions of cinnamon (Samara), as well as soapy water, or oil with castoreum, or with gunpowder, as drinks play a great part (cf. Ucke, p. 252).

In Esthonia, women in labour drink valerian tea, beer or even communion wine; in other parts of Russia also a decoction of a handful of *Artemisia absynthium* Linn. in two glasses of wine, of which the quarter of a wineglassful is used every half hour. In Little Russia, a decoction of *Chenopodium botrys* L. is used as a sedative in difficult labour. A very original custom is that recorded by Demič, that to promote delivery, the husband is in many places obliged to eat a mixture of mustard, pepper, horse-radish, salt, millet-gruel and sugar. The Letts, according to Alksnis, give women in labour, in order to accelerate a protracted delivery, an infusion of birch buds with alcohol, wine or beer to drink. Ergot is also said to be used sometimes.

An old German popular remedy, which is supposed to promote delivery, is wine in which vine leaves have been boiled (see *Apotheckfürd.gem. Mann.*, Bl. 4). Beckher mentions that a decoction of juniper berries in wine, mixed with honey, is said to hasten delivery. The same is said of an infusion of pennyroyal (Hengstmann). Another German popular specific, still in use in 1836, was for the woman to drink a cupful of her husband's urine; this specific was recommended by C. Kunrath as early as 1549 (see Suchier).

Many medicaments in popular use at the present day may be traced back to the directions of the mediæval text-books for midwives. We cannot pursue this in detail here. In Swabia, and also in many other parts of the country, sternutaments are still in use. The Swabian midwives among the lower classes give the woman in labour mother's milk to drink ; if this is done secretly, she will have an easy delivery (Buck, pp. 28, 42).

In the Palatinate, camomile and caraway tea are used to promote labour pains : and also enemas of these substances are administered. The patient also gets wine and coffee, especially the latter, "when the child appears in the world," *i.e.*, when the head shows (Pauli, p. 96). Shortly before delivery, the pregnant woman in the Rhine Palatinate drinks brandy to stupefy herself. In the Göttingen neighbourhood, a few cups of strong coffee or some wine or brandy are regarded as specifics for stimulating the labour pains : also the peasant women sometimes take a tablespoonful of crushed red cabbage seeds with coffee, or a glassful of lukewarm, dirty water in which eggs have been boiled hard (Osiander). In North-West Germany, in Oldenburg, etc., the country midwives also use brandy and coffee to hasten delivery (Goldschmidt, p. 93). In Saxon Transylvania, people try to strengthen the patient with wine or brandy, to which saffron is often added (Hillner, p. 14).

3. INTERNAL APPLICATIONS

Of many peoples besides those of Europe, we have records of the administration of medicines internally in order to try to continue an incomplete labour or to bring it to a conclusion.

It is not impossible that these vegetable substances actually have inherent healing properties. In a great many of them, the effect depends upon the stimulation of the activity of the labour pains by causing retching, as we have learned elsewhere.

Of the Fiji islands we are told by de Rienzi² (III., p. 309) that the priests who act as medicine men give the patients a decoction of a certain wood to drink during the labour pains. Also Samoan medicines include a specific "for women with whom delivery is difficult." This is *Vigna lutea* A. Gray, and young leaves of *Wedelia* Jacq. (Krämer). Probably it has to be taken internally. The Caribs, in a difficult labour, give the patient the expressed juice of the root of a particular reed : "when the women have drunk of this, they are immediately delivered" (Baumgarten, II., 857).

Among the Kiowa Indians in North America, according to Engelmann,² the midwife blows an emetic into the patient's mouth. Fig. 803 reproduces this scene from the drawing of a native.

In Venezuela, the pulverised spine of the electric eel (Gymnotus electricus) is

given as a specific for promoting delivery; and, we are told, always with a good result. In this case the mysterious electrical action, the seat of which is wrongly believed to be in the nerves of the spinal marrow, is brought into connection with the general nervous system (Carl Sachs).

There are in America popular vegetable specifics which are believed to set labour pains going. Thus, for example, in Guatemala, right at the beginning of her confinement, the patient is given decoctions of herbs to drink; if her strength diminishes, she is given brandy, and if delivery seems delayed the most varied remedies are given, such as oil with onions, paprika with garlic, big pieces of lime or mortar, wine or brandy, etc. (G. Bernouilli, p. 100). One North American specific is a decoction of the bark of the *Ulmus fulva* Michx. (slippery elm) (Osiander, p. 227).

When an Omaha Indian woman's labour lasts for two or three days, a medicine man is called in, who gives her a very bitter medicine, and leaves her as soon as she has taken it. There are only a few who know this medicine : it is called $Niaci^n ga$

 $maka^n =$ "man-bringing medicine." If the medicine man has given it two or three times in vain, he tells them to send for another. The other then gives the same medicine.

In confinements, the Abyssinians use a very common juicy plant, the endabollo (Kalanchoë glandul Hochst.), the fruit of which, mashed and eaten with honey, is said to cause contraction of the uterus (Courbon, p. 71). In Nubia, Sennaar and the Sudan, mâréb is used, and bits of the root of Andropogon circinnatus (Cymbopogon arabicum) are used, especially when the labour pains are slow in coming (R. Hartmann, p. 352). In Upper Egypt, people try to make delivery easier by hanging opium around or eating it (Klunzinger in Ausland, 1871, nr. 40). With feeble pains, crushed



FIG. 803.—A Kiowa Indian is delivered. The midwife blows an emetic into her mouth. From a Kiowa drawing. (After Engelmann.)

melochia leaves in oil are prescribed in Fezzan. Among the Swahili the woman in labour drinks a tea made from the roots of *muhungilo* so that delivery may take place easily (H. Krauss¹); here, besides the medical effect, some other action (unfortunately not explained by the reports) must be expected, for, in another pot, the leaves of the same plant are infused and the infusion then put down in the hut. Among the Masai, the woman in labour is given a mixture of liquid mutton fat and a decoction of *os-segi* root (*Cordia quarensis Gierka*: see Merker). In Tanganyika territory, in protracted labour, the patient is given a decoction of *Gira-heis* leaves to drink (Lübbert).

With the Washamba (Usambara), if delivery is protracted, the women present say that only *mavi ya ngodi* is of any use. A woman runs in haste to the patient's husband and he urinates into a banana leaf and this is given to his wife as a supposed medicine. Meanwhile, the other women have been pounding in the mortar in order to make the patient believe that medicine is really being prepared for her (see Karasek).

A very young Niam-Niam princess, the mother of two children, had, according to Mrs. Petherik, a very difficult labour about 1858 ; in this her attendants gave her

to understand that if she would drink her husband's blood, delivery would take place easily. The husband immediately opened a vein and the young wife sucked "greedily the life-fluid" (p. 697).

Kolben¹ related of the Hottentots that to bring about delivery when there is obstruction they give the patient a decoction of tobacco in sheep's and cow's milk to drink.

Among the ancient Chinese, women gathered the herb Feu-*i*, which, according to La Charme, is a plantain which is supposed to facilitate delivery (Plath). Modern Chinese, in abnormal and difficult labour, besides the *Ning-kuen-tshi-pao-tan*, with which they combat all women's diseases, use a decoction of a species of opium as a drink (see Schwarz⁴).

In the Chinese treatise which v. Martius has translated, we read :

"Question: Are there then no medicines which can be taken to make labour easier? Answer: No, each and every medicine, even the rarest and most ancient, is injurious: if anything unusual and extraordinary appears during labour, then sleep is the first and the best medicine."

However, a statement by J. D. du Halde (p. 578) proves how very much people there relied upon the effect of medicines. He even cites a medicine in use among them for improving a wrong position of the child. He writes :

"Pour les femmes, lorsqu'elles enfantent leur fruit de travers, ou que les pieds de l'enfant sortent les premiers : Prenez une drachme de *ginseng*, autant d'encens pulvérisé, du minéral appelé *tan-cha*, le poids d'une demie once. Broyez-le tout ensemble : puis détalez-le avec un blanc d'œuf et du jus du gingembre vert, environ une demi-cuiller, et donnez-le froid à la personne malade. La mère et l'enfant seront aussitôt soulagés ; le remède opère sur le champ."

In the province of Carajan to the west of West Yunnan, there are, as Marco Polo relates, big "snakes" [*i.e.*, alligators], the gall of which is given to women in labour to hasten delivery (p. 189).

The following medicines for promoting delivery were among those used in Japan :

A mixture containing Levisticum officinale Koch, and an infusion of Angelica L.; or an infusion of equal parts of Amygdalus persica tosta, Pæonia rubra, Pæonia montana, Pachyma cocos and Cinnamomum Bl.

Kangawa condemns certain of the medicines used in Japan for promoting delivery, such as *Levisticum off.* Koch, *Angelica L.*, or *Cinnamomum Bl.* He says,

"The time of delivery is determined by nature and we can do nothing to hasten it; the so-called specifics for hastening delivery are, therefore, based on error or delusion, and in only one sense at most can delivery be hastened—if by strengthening the mother we shorten the duration of labour" (see Miyake, p. 10).

The Goldi in Siberia prepare a drink from certain roots, and this is said to help women in labour to have a quick delivery.

The Parsees, according to A. du Perron (p. 703), use all kinds of drinks for this purpose.

The Batta woman (Sumatra), if the pains diminish, gets *lau pemulkau* to drink, *i.e.*, nothing but a cup of ordinary water in which fæces have been put (Römer).

In the Madras Presidency in India, pepper is used to promote delivery. For this purpose, it is burned over the fire in an earthen vessel, pulverised, hot water poured over it and drunk (Beierlein). The ancient Hindus had, likewise, medicines to be taken internally for making delivery easier. Schmidt ⁸ translates several such passages :

"A woman who drinks powder of $m\bar{a}tulúnga$ (lemon tree) and $madh\bar{u}ka$ (Bassia latifolia, also liquorice) with honey and melted butter is delivered without doubt easily and quickly. The woman who takes $gradh\bar{u}ma$ and drinks it with stale water is delivered easily and quickly; there is no doubt of that. The woman who drinks $\bar{a}g\bar{a}radh\bar{u}ma$ (?) with sour, mouldy rice is delivered very quickly."

In Aleppo in Syria, a brownish-red clay, *terêbat-hâlebîeh*, is eaten by women in labour to facilitate delivery; Ehrenberg found in this a slight chalk content and no organic admixtures of any kind (see Hartmann,³ II., 345). This recalls the lime which women in labour are given in Guatemala.

4. EXTERNAL APPLICATION

We find the confidence in the external effect of medicaments not less than in their internal use. Thus, the Greeks and Romans used medicated bougies or pessi which were inserted in the vagina and also in the os uteri. Serapion, who wrote a book on difficult labour, gives a formula for the preparation of *Sief* (palm-fibres ? Arab., Sif) from equal parts of myrrh, *Helleborus niger*, opopanax, fel tauri. He says :

". . . fiant sief longi, et supponat ipsum sibi mulier ; descendet enim tunc, sive vivus sit sive mortuus " (cap. 36, p. 65).

The word *Sief* is, in Arabic, *Sif*, and is, according to Polak, still heard in Persia frequently.

Also the ancient Arabs possessed a great store of medicines for external use. Thus, Ali ibn el-'Abbas recommends rubbing with oil, baths, the use of dittany, but also the use of swallows' nests, fumigations with mules' hoofs, etc. (267 v.). Rhazes and Abulcasis advised rubbing with oil, vaginal injections, vapour baths, sternutaments, etc.

An old Hindu author writes :

"The root of the black $bal\bar{a}$ (Sida cordifolia Linn.), together with the root stalks of the white girigarnī (Clitoria Ternatea Linn. or Alhagi Maurorum) ground and put into the vulva, brings about an easy confinement in a woman who has difficult labour "(Schmidt⁸).

Albertus Magnus mentions as specifics for easy labour which were in vogue in his time : henbane root, tied on the left hip, or the boiled amaranth on the right groin ; ground laurel leaves placed on the navel, while the legs are put in ash water ; and *Corydalis tuberosa* D.C. with wine and sweet oil smeared on the abdomen. Varignana (who died about 1302) recommends ætites, the liver of a fowl, and other odd specifics as means for promoting delivery. These strange prescriptions were repeated by the authors of the oldest German text-books for midwives (Rösslin, Rueff, etc.), which also prescribed sternutaments, fumigations with evil-smelling substances (Galbanum, castoreum, cow-wool, sulphur, opoponax, pigeons' or hawks' droppings, etc.).

In Bosnia and Herzegovina, fresh wormwood is placed on the abdomen of the patient when delivery is protracted (Glück).

Bancroft records of the Miwok Indians in Central California that, in difficult labour, they lay a poultice of hot ashes and damp earth on the patient's abdomen.

In England, it used to be customary to place ground laurel mixed with oil on

the navel of women in labour (see Denman, p. 280), or to put a suitably shaped piece of garlic into the anus (Osiander, p. 228).

In Upper Egypt, when labour pains are feeble, a little piece of opium is put in the patient's genitals. In some places, they plaster the abdomen of the woman in labour with the delicate membranes from hens' eggs (Demič).

Muralt, in Zurich, who was the first person in Switzerland, in the years 1671 and 1676, who performed autopsies on dead bodies, drew off the skin of a corpse and had it tanned. With a waning moon, when this was rubbed with ointment, he regarded it as a specially efficacious specific for promoting delivery in difficult labour, if it was put round the patient as an abdominal binder (see *Denkschr. d. med. chir. Gesell. d. Canton Zürich*, 1860, 9).

Among modern Greek women, according to Damian Georg, the belief is said to be prevalent that blood-letting at a vein in the big toes makes a difficult delivery easier.

Among the external expedients used to promote delivery, fumigations and steaming, rubbing with ointment, etc., play a great part among many peoples. The ancient Arabs (Rhazes, Abulcasis) used fumigations. If an Australian woman becomes faint during delivery, her fellow tribeswomen fumigate her over the *hangi*, a kind of stove (Hooker, p. 73).

Vapour baths, usually with aromatic substances, are used by Russian women, as well as by women in Cochin China, when delivery does not progress (cf. Mondière, pp. 41 ff.).

Medicated fumigations are customary also in Guatemala : there the patient is placed over a brazier in which incense and the like is burnt (Bernouilli). Fumigation of the abdomen takes place also in Galicia in all cases of difficult labour.

In Bosnia and Herzegovina, in a difficult labour, a stone is warmed, and, having had oil poured over it, is put near the genitals, and also a pot with warm water is placed in the same region (Glück).

The same was customary in Germany from early times. In Ulm, Helmont saw the dead embryo pass after fumigations with rotten grapes; and even now, according to Buck, people in Swabia still believe that the dead embryo can be expelled if the patient is fumigated from below with horse fat. In the Palatinate, according to F. Pauli, in convulsive labour pains, people sometimes put a pailful of hot water with wild thyme, camomile and onions under the obstetric chair, and also give enemas; now and again brandy is put on an earthenware plate, lighted, and the vapour from this allowed to rise into the genitals.

Warm baths and rubbing with warm oil are among the oldest specifics for helping delivery (Aëtius, etc.); in Tyrol, people are said to rub the abdomen with marmot fat (Osiander); also in Galicia, smearing the abdomen with a mixture of fat and brandy plays a great part. Among Indian tribes, *e.g.*, the Pawnee, a "doctor" blows the tobacco smoke which he draws from his pipe, with his mouth under the clothes or under the blanket of the woman in labour (Engelmann²). However, in this case, mystical ideas probably play a certain part.

In difficult labour, baths are used also in the Province of Pjensk in Russia, and there *Comarum palustre* Linn. is added to the bath (Demič).

Finally, we can mention a water treatment as, for example, among the Parsees, where all kinds of methods of washing are used to help in difficult labour (cf. A. du

Perron, p. 703). Among the Campa Indians in Peru, also, the women helpers give the patient hot water with which she washes herself in order to promote delivery.

Lübbert says of the women in the former colony of German South-West Africa:

"If the progress of delivery is delayed after the rupture of the membranes, the patient is put in a hot bath, or held in the contents of the stomach of a freshly killed ox whilst the still wet skin is used as a pack."

In Southern India, the midwife rubs the woman in labour with oil and washes her back, her hips and other extremities with warm water (Shortt).

At Doreh in New Guinea, the woman in childbirth is held by two women and a third keeps pouring cold water over her till the child is born (de Bruijnkops *).

5. MECHANICAL MEANS

The idea of improving and getting rid of an abnormal state of the body by mechanical action is a very obvious one, as is proved by the methods of massage practised among different peoples, and one that has been extraordinarily widely diffused. It is probable that this favoured popular remedy found admittance at an exceedingly early date into midwifery. For it will no doubt have been observed that, wherever the abdomen of the woman in labour was rubbed and kneaded by the helpers to alleviate the pains, the stimulation of the nerves and stronger contractions of the muscles of the uterus (and hence effective increase in the activity of the labour pains) were produced. Men must also easily have hit upon the idea that the child, which would not leave the womb of itself, might be forcibly pushed out of the uterus by a pressure from without.

The manner and method by which this pressure is used by different tribes is by no means uniform. The pressure may begin gently, but be gradually increased; it may, however, be exercised from the beginning with a certain violence. Further, the pressure may be regional, *i.e.*, confined to a circumscribed part of the body; but it may also be circular, going all round the body. Finally, it may be continuous, wandering over to other parts of the body, in which case it usually passes from the region of the waist to the abdomen.

But where an object is held back in its container, other ways of removing it may be tried; for instance, by shaking the container violently in order to throw out the object. Now we find this method also used by different peoples as an expedient in difficult labour. The shaking movements used on the patient in this case are either swinging in a sidewise direction, or from below upwards, whilst the woman in labour is in a horizontal position; or the swinging is done in such a way that the patient in a vertical position is raised upwards. The processes of thought at the basis of these methods are, of course, not quite the same. In the first cases the idea is no doubt to get the child into a better position by means of shaking movements. In the second case, on the other hand, it is hoped to throw the fœtus out of the womb by force.

If we consider these expedients, it is the stroking and pressing of the abdomen, the scientific replacement of the *vis a tergo*, which has been most widely diffused. These external manipulations were already recommended by the Greek, the Roman and Arab physicians. They were also known to the physicians of the sixteenth century.

* [No reference is given.]

Thus, Rodrigo de Castro recommends midwives to press the abdomen; and Jacob Rueff writes in his text-book for midwives :

"A skilful woman shall at this time stand behind the pregnant woman and put both her arms round her and press hard and dexterously and strongly, touching and stroking the child but not pressing on it or making it struggle, and she shall do this until the child is helped out of its trouble and position."

Johann van Hoorn seems to have developed the exterior manipulations to some extent methodically, for he says :

"Because in a few hours her efforts were of no avail, they tried to promote delivery by external aid. They put her on a comfortable lying-in bed, and pushed under her hips a hand-towel by which two persons could lift her up. When it became necessary and the pain was coming on, the midwife pushed the patient in the middle of the abdomen as she lay on her side with her flat hand, pushing again when the pain came, and so continued. Which manipulations I have often seen do a great deal to bring about delivery and be of much help."

Later, these methods were forgotten again until about 1812, when J. H. Wigand, in Hamburg, found that the position of the child could be improved by external pressure; however, at first, little attention was paid to his discovery.

Then, in the year 1867, Kristeller in Berlin introduced the expression of the child into the practice of midwifery in order to make the child emerge in the case of feeble labour pains. The methods in use in modern midwifery cannot be pursued further here.

6. MECHANICAL MEANS IN JAPAN

The efficacy of external manipulations has long been known to the Japanese, and by means of one of these, the *saitay*, they used even to try to perform version. If, in a normal position of the child, labour made no progress owing to the absence of labour pains due to faces collected in the rectum or some such obstruction, then Kangawa recommended a procedure which he designated as "sitting on the mat."

"The bystanders are ordered ceaselessly to rub the sacral region; the pain then gradually descends and the need to evacuate faces ensues. Now the (very wide Japanese) girdle is loosened and the patient is to place herself (Japanese squatting) so that the heels lie at each side of the buttocks (the upright trunk thus rests on the calves crossed under the rump). The physician sits in front of the patient, and causes her to bend forward clasping her arms round his neck and leaning on his shoulders. He wraps a towel round his right hand, pushes it between the patient's thighs, and supports the coccyx with the palm of his hand; now he has the patient sitting in this way, he puts his left arm round her body and, at each pain, he lifts his right hand, at the same time he raises her body a little with his left arm. After a few pains, he takes the towel off his right hand and inserts his first and second fingers into the vagina so that the fingers penetrate forwards and upwards in order to investigate the position of the child. One then feels the os uteri contracted inwards, and the child's head still covered with the membrane feels like a wet cloth. If the head is already out of the womb, the os uteri must already be dilated and the head still covered with the membranes is easy to feel. Before the rupture the fortal membranes are swollen; they are then ready to burst, and this causes violent pain in the loins and in the legs, as if they would break, then, during the stretching, the doctor must scratch with his finger. If the discharge of water is sufficient, the patient feels the pain much eased.

"The rupture of the membranes is the signal for delivery. The stronger the woman is, the more quickly does the birth proceed. The doctor should sit on a little bench holding the patient fast with both knees, so that the child has no room to turn. The examination with the right hand and grasping the body with the left is carried out as stated above.

"As soon as the child has left the uterus, the top of the head pushes against the mother's

perineum, the anus is dilated, the pain reaches its highest point, and the pulse moves from the radial artery to the finger tips. The woman sees fire in her eyes; suddenly, with a powerful twist, the head bursts out of the uterus. Tearing of the lower part of the vagina happens at the moment of this violent turn if the midwife has not pressed in the anal region; thus, it is her fault. Therefore, too, the support with the right hand is a very necessary part of the 'sitting on the mat,' but so is the clasping of the body with the left arm and lifting of the



FIG. 804.—" Sitting on the mat." Massage to ease delivery, Japan. Mus. f. Völkerk., Berlin. (From a Japanese woodcut.)

woman; and, finally, the physician should exert pressure on the præcordial region with his shoulder.

"Another method consists in the midwife supporting the patient's anal region from behind; in this method also, the physician sits in front of the patient, holds her body between his knees, and with the sides of his hands strokes several times from the back to the navel. If the child comes down towards the anus, the midwife is told to cross her fingers (as in prayer) and with them support the part from behind; a slight pressure is exerted towards the abdomen; if the pain is too strong, the pressure must be greater."

According to this, besides the most active support of the perineum and the stimulation of the labour pains by rubbing, a kind of expression of the child is used.

This "sitting on the mat" is without doubt represented, according to M. Bartels, in the woodcut which is to be found in a Japanese book on domestic hygiene. It is reproduced in Fig. 804.

7. PRESSURE AS A HELP IN DIFFICULT LABOUR

We have already pointed out what an important part pressure from without plays in difficult labour. It was also shown that it is by no means always used in the same way. We come across quite a number of variations, from light touching and gentle stroking with the fingers to firm clasping with the arms, and even pushing with fists and knees. Likewise, mention has frequently been made of special



FIG. 805.—A Mexican Indian is delivered. (After Engelmann.)

mechanical arrangements for the exertion of pressure. In the following statements a few noteworthy examples are to be given.

Chinese midwives, according to Hureau de Villeneuve (p. 34), practise Kong-fu, which consists in a soft tickling, stroking and pressing with the finger tips. The midwife does these manipulations simultaneously with the contractions of the uterus, and in doing so touches not only the abdomen but also the groins and the hypochondriac region. In consequence of these manipulations, sometimes regular, sometimes following each other unexpectedly, and helped by regular and measured respiration of the patient, women in labour are said to feel hardly any pain in delivery.

According to Häntzsche, the Persian midwives in the Province of Gilan employ stroking methods on the abdomen to expedite a difficult delivery; they also practise rubbing the sacral region in such cases.

Even the ancient Arabs (Rhazes) advised stroking the abdomen; and among

the Circassians, too, the midwives try to rid the patient of the child by stroking downwards on the abdomen.

Near Namatotte (New Guinea), Riedel¹ notes that the woman in labour is rubbed incessantly on the back and breast by the women helpers. On the Amboina Group, the loins and back of the woman in labour are massaged.

In Southern India, too, such massage of the woman in labour is more vigorous (see Shortt).

Thus, according to Hasskarl, the midwives in Java press the abdomen of women in labour. Among the non-Mohammadan women on Ceram, they try to bring about delivery in a case of difficult labour by pressing the abdomen. On Nias, the abdomen of the woman in labour is kneaded from above downwards to make delivery easier.

In Monterey in California, to hasten delivery, a strong man has to sit down

behind the patient. He clasps her abdomen with his hands and at each pain exerts strong pressure with the intention of increasing the action of the uterine contractions by external mechanical force. When the patient and the helper who does the pressing are tired, the former is put on her knees on the floor but without releasing her from the alleged help (King 2).

Engelmann,² from whose work Fig. 805 is taken, gives the following description of the procedure in use in Mexico :

" The woman in labour kneels on the covering B, which consists of a sheepskin covered with

a cotton material and a zarape. At one end, a cushion H is placed on which the woman lays her head when lying on her back after the delivery. The position of the woman is the kneeling one, in which she holds on to the rope or lassoo, which hangs from the beam W. Two women helpers perform the usual manipulations. The partera, the elder and more experienced of them, kneels in front of the patient; her duty is to treat the abdomen, and to press and rub it at the base; from time to time, to lay her hand on the genitals and to make the coccyx supple. The younger woman (tenadora) kneels behind the patient, presses her knee on the hips, and, by folding her hands over the stomach, exerts a circular pressure while the more expert partera kneads. In difficult cases, the tenadora undertakes more radical tasks. Then she lifts the patient in her arms, shakes her like a sack and lets her fall; on the way, she partly catches her up again, in doing which the patient's body, during the kneading, experiences a sudden pressure from the back and from all sides " (cf. Fenn).

In some Mexican families the patient is held upright with slightly bent knees and hips, with her feet wide apart, while she holds on to two hanging ropes. J. K. Carson, who told Engelmann² this, added that kneading is also used (Fig. 806).

According to Kersten, the midwives of Swahili, in East Africa, also perform kneading, as do too the Wakamba.

In Old Calabar, it appears that even in normal labour the abdomen of the sitting



FIG. 806.—Kneeling position with the arms raised and the hands clinging to a rope. Mexico. (After Engelmann.)

patient is pressed together from above downwards by the midwife squatting in front of her. This is done so that the child may find its way downwards (Hewan, p. 223).

When the pains have begun with a Kirghiz woman in the Semipalatinsk district, all the other women of the community gather round to help her. Shortly before delivery is to take place, a strap, which is firmly fastened to the wall, is put into the patient's hand for her to hold on to. Then she kneels down, two women support her, a third clasps her from behind, plants a knee in the loins and presses on her abdomen (cf. Globus, 1881, 39, 109).

The Kalmuck woman in labour crouches at the foot of the bed and holds fast to a pole hanging from the ceiling. A woman standing behind her puts both arms w.-vol. III.

round her abdomen and presses on it. Sometimes a strong man, who has been well entertained by the husband beforehand, does the same service. Then this man puts the patient on his knees (Krebel, p. 55).

According to Meyerson (p. 190), the Kalmuck woman of Astrakhan, as soon as her strength declines when in labour, sits between two boxes, whilst a strong man clasps her abdomen from behind and presses it together vigorously.

The Lapp helps his wife when in childbirth. In the last stage of labour, as soon as the head shows at the vulva the patient gets on her feet and supports herself with her armpits on an outstretched rope or a thin pole. The husband, standing behind her, supports her loins on his knee, clasps her abdomen with both hands, and presses it at the time of the pains (Drshewetzki).

Similarly on Niué or Savage Island, the midwife presses the patient's abdomen, according to Thomson.⁵

Now it would be a great mistake to assume that this pressure is always done with the care necessary. V. de Rochas writes of the natives of New Caledonia that they exert a violent pressure on the abdomen in difficult labour and even pound it with their fists. Also the woman in labour in parts of New Guinea is helped by the women of the village whose aid consists in kneading her over the breast with their fists.

The women, however, are not only treated with fists but even with the knees and feet. In Australia, according to Hooker (p. 70), a medicine man (tolunga) is accustomed to help the woman in labour. He presses against her breast with his knees and works the pressure downwards till the child is born. Whilst this is being done, the patient sits upright and the person assisting grasps her abdomen with the hands. According to Marston, on the other hand, two women help in difficult cases and they lie down with the patient between them. One places her knees on the patient's loins, whilst the other, lying in front, waits for a pain to come and then pushes the patient's abdomen with her knees.

Among Maori women, delivery in general, as we have heard, proceeds easily and smoothly. But if there is any delay, they try vigorous external remedies. A woman helper kneels behind the patient and clasps her from behind, or she kneels on one knee in front of her and uses the other for the massage; sometimes the helper puts her arms round the knees of an assistant in order with her to exert pressure on the uterus. The pressure is often very strong, and Dr. Thomson saw a young Maori woman who, as a result of it, had got extensive ulceration of the abdominal muscles (see Goldie).

Among the Nuforese, if delivery does not take place quickly enough, the women present knead the patient's abdomen and tread it with their feet; J. B. van Hasselt (p. 183) saw several cases of dangerous labour which, because of this, took a very unfavourable course. In this extreme need he was asked for advice.

Among the non-Mohammedans on Ceram, according to Capt. Schulze, the patient in these difficult cases is laid on her abdomen and they tread upon her back.

In the rare cases of difficult labour among the wives of the Aëta on the Philippines, an elderly woman of the tribe is brought in, who puts her left foot on the patient's abdomen, and pressing with it she brings the child into the world with her right hand (Schadenberg).

According to the description which Duffield Bell, from his own extensive experience (105 cases), gives of the course of childbirth in the Philippines, pressing and squeezing is performed in a peculiarly brutal manner. Four persons place themselves round the patient lying on the floor on her back, so that their feet are propped against her body, each holds a corner of a towel, bound round the patient's abdomen, which they pull tight at each pain. Thus the amniotic sac is soon burst; if a part of the child is visible, then a fifth person pulls at the presenting part. Further "help" is given by laying a plank, 6 to 8 ft. long and 1 ft. wide, on the patient's abdomen; on this a man or woman stands; this person rises periodically on his toes and then lets himself descend violently on his heels so that a soft yet stronger pressure acts in conjunction with the pains and the pull of the four persons holding the towel. These measures belong partly to the following section.

In Siam, the woman in labour is placed on her back, and at each side of her bed stands a woman helper, who presses the patient's abdomen alternately downwards and backwards. If this does not fulfil its purpose within from three to five hours, they then pass to the following method : One woman, leaning on her friends, gets up on the patient's abdomen and walks up and down on it, placing her feet so that she always stands somewhat higher than the fœtus. If this procedure also is of no avail, then, as a last resource, the patient is hung up by means of a binder, which is passed under her arms; to this several women cling, and this always leads to the end, *i.e.*, either the perineum is ruptured by the advancing head or the head is crushed, as Hutchinson found in the case of several natives.

Among the Annamites in Cochin China, in normal cases, the midwife leaves the whole work of the expulsion of the child to the uterus. But if delivery should be retarded, then she presses on the uterus with her feet as is always done in removing the placenta. Mondière (p. 44), in one such case, found the mother dead, the uterus torn and the child lying in the abdominal cavity. He was not allowed to open the abdomen to bring forth the fœtus which was probably still alive.

In Africa too, the custom exists of treading on the woman in labour among the Swahili and the Wakamba. According to J. H. Hildebrandt, this is performed by the woman helper standing on the chest of the patient, who lies on her back, and pressing on the abdomen with her toes. Among the Guinea negroes, according to Monrad (p. 47), the women helping and women relatives, by pushing and treading in the gastric region, try to shorten the act of delivery.

8. SEVERE PRESSURE ON THE ABDOMEN AS A HELP IN DIFFICULT LABOUR

It was, of course, not difficult to hit on the idea that the pressure on the abdomen of women in labour to promote retarded delivery, instead of being exerted by the hands and feet, could also be exerted by putting weights on it. We find the transition to this in West Africa among the negroes on the Senegal and among the inhabitants of Kabyle. Among the latter, when delivery is slow, then, as Leclerc records, a woman puts her head on the patient's body and thus compresses the abdomen so as to promote the expulsion of the child. Among the Senegal negroes, for the same purpose, the woman helping sits on the body of the woman in labour.

In Algeria, according to Bertherand (p. 544), a heavy plank of wood is placed on the umbilical region of the woman in labour and the women helping stand on it, in order to press out the child.

Among the Tatar women in Astrakhan, in retarded delivery, the midwife packs "heavy weights" on the umbilical region of the patient (Meyerson, p. 174).

The non-Mohammedan woman in Ceram has big stones and such things put on her abdomen, according to Capt. Schulze.

Malay midwives in the Philippines, according to Mallat, put on the abdomen of the woman in labour, warm bricks which they press with all their strength.

68 LACING AND SQUEEZING THE ABDOMEN AS A HELP IN DIFFICULT LABOUR

On the island of Engano, in retarded delivery, the women helpers put warmed stones on the patient's abdomen (see Modigliani²).

The Hindu woman is pushed and rolled round by the midwives—a kind of preliminary assistance—and, in retarded delivery, a "strong beam" is placed on the patient, on each end of which a man servant sits (Schmidt).

The Creek Indian women in North America put a heavy bolster on the abdomen of the woman in labour (Engelmann,² p. 98).

It must be recalled here that the Goldi in Siberia, as was mentioned above, are accustomed to put a carved wooden image of great weight on the abdomen of the woman in labour to promote delivery (cf. Fig. 801).

Sometimes the necessary pressure is applied with the help of a stick. Mallat says of the Negritos and others in the Philippines who have no friend helping when they are confined, that they are delivered standing, and during delivery they press the abdomen hard on a bamboo cane.

The Indian women in Alaska, in difficult delivery, assume the knee-elbow position, in which they lie with their abdomen on a stick, one end of which is held by a companion in order to aid her in pressing (Dall²).

Among the Winnebago and Chippewa Indians, the abdomen of the woman in childbirth, who kneels with her face bent downwards, is placed on a cross-beam or



FIG. 807.—Instrument used in massage during difficult labour in the Philippines. (After Witkowski.) rope and then she is slowly pushed over this beam by several helpers.

This recalls an expedient of the Esthonians, who, according to Holst (II., 114), pull the woman in childbirth over a couch made like steps.

Still another custom from the Philippines is worthy of special mention. In difficult labour, the patient's abdomen is massaged with a brick instrument which is shaped like a fish. The ethnographical museums of Paris, Munich and Berlin possess such instruments. One speci-

men from the Trocadero in Paris is reproduced in Fig. 807. As M. Bartels learned from Max Buchner, these instruments are sold in the pottery market in Manila. There he was informed that they are put into the patient's genitals to promote delivery. If this statement is true, they would have to be included among the expedients for the forcible widening of the genital passage.

9. LACING AND SQUEEZING THE ABDOMEN AS A HELP IN DIFFICULT LABOUR

We have already had many examples of the assistants at a confinement putting their arms round the patient's body so as to promote the expulsion of the child by means of a circular pressure. The arms, however, will gradually grow tired if the delivery is protracted, and hence it must seem simpler, in cases where the circular pressure on the abdomen is deemed necessary until the end of the delivery, to use from the beginning a girdle, strap, towel or some such binder round the abdomen. For this too, we have a few examples at our disposal and we have already heard of one of them among the Orang-Bělenda in Malacca.

So, too, among the Nez Percé and the Gros Ventre Indians in North America, a wide girdle is wound round the abdomen of the woman in labour and the helpers, standing at each side, pull hard on this and allow it to slip a little downwards at each pain (Engelmann²). Likewise, the Paiute apply a leather girdle above the SUSPENSION AND SHAKING OF THE MOTHER'S BODY AS A HELP IN DIFFICULT LABOUR 69

uterine fundus and three or four women slide it lower and lower according to the progress of the pains, so that the focus may not slip back.

In Monterey, in California, the woman in childbirth sits and holds fast to a rope, which hangs down to her from a cross-beam of the roof. A wide towel is wound round her abdomen, the ends of which are crossed at the back and given to the assistant women, who are instructed to tie the towel tightly when the swelling of the abdomen decreases during the pains, and to hold it fast until the next pain comes on in order to prevent the swelling of the abdomen from increasing again in the intervals between the pains (King, p. 891).

Among the natives of the Mexican border of the United States (see Fig. 806) the help given to the woman in labour by a woman acting as midwife and her assistant consists in compressing the abdomen by means of linen twisted together like a rope. At the same time, the abdomen is clasped with the arms and the uterus pressed together in this way (see *Med. Times and Gaz.*, 1861, 191).

In Guatemala, immediately the first pains set in, a narrow binder is put on as

tightly as possible above the uterus so that the child cannot slip upwards (see Bernouilli, p. 100).

R. W. Felkin states that he saw a special position in labour together with help given by a man at Kerrie, on the White Nile. It was employed when the patient had undergone long-continued labour pains without result (Fig. 808). Two wooden pegs were driven into the ground inside the door of the hut. The patient sat down between the door posts on an upturned basin while she planted her feet against the wooden pegs and held fast to the door posts with her hands. Then a wide *towel* was put round her abdomen and a short

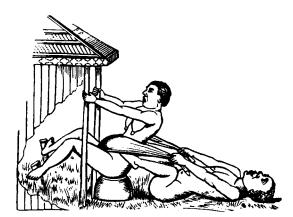


FIG. 808.—Difficult labour in Kerrie, White Nile. A man compresses the abdomen by pulling the two ends of a wide bandage. (After Felkin.)

distance behind her a man lay down, put his feet firmly against her pelvic bones and pulled at the towel with varying intensity. A woman friend sat between her legs to receive the child.

Also in Java, putting a binder round the woman in labour occurs. As Ploem told the botanist Kuntze, women in labour are often knelt upon and have towels, etc., tied round them to drive off the evil spirit which keeps the child back.

The Kirghiz wind a string round the abdomen and pull at it until delivery takes place.

From South Germany and from Aulendorf in Baden, to be precise, Birlinger ³ (II., 238) states that a deerskin girdle, half an inch wide, with a buckle for fastening, is put round the abdomen of the woman in childbirth to hasten delivery.

10. SUSPENSION AND SHAKING OF THE MOTHER'S BODY AS A HELP IN DIFFICULT LABOUR

Shaking the patient's body has been already mentioned in the general discussion of mechanical aids designed to hasten delivery. We now revert to these in greater 70 SUSPENSION AND SHAKING OF THE MOTHER'S BODY AS A HELP IN DIFFICULT LABOUR

detail. Certain manipulations which may be designated as "suspending women in labour" belong to the same order of ideas. Obviously it is supposed that, with the body of the woman hanging, the child will be compelled by the effect of the weight to sink downwards into the genital passage. Then, when this is happily achieved, it is hoped that the child will now pass further down with suitable help through the natural exit of the maternal body.

Thus in North America among the Coyoteros (Apache), according to Engelmann,² it is customary in almost all confinements to suspend the patient on straps which are drawn through under the arms. The helper then clasps her in her arms and presses her abdomen with considerable force in a downwards direction. In Fig. 809 one such confinement is portrayed according to the picture given by Engelmann.²

Likewise, among the Indian women on the borders of Mexico, a rope is sometimes passed under the patient's arms and then fastened to a cross-beam, so they



FIG. 809.—Difficult labour among the Coyoteros (Apache). (After Engelmann.)

are delivered in a hanging position (Engelmann 1).

Among the tent dwellers in Morocco, if delivery does not make progress in spite of the superstitious expedients employed, the patient is seized by the women helpers and, amid exorcism of the devil, a strong hand is put round her back and under her armpits and then she is pulled into the open air. By this means they wish to hasten the labour pains, and, if a part of the child appears, either the head or the feet, they try to take hold of such parts and by violent tearing and pulling to bring forth the child. This is rarely successful; generally the child is torn and this barbarous procedure nearly always results in the death of the mother (G. Rohlfs 4).

Algeria, in order to expedite delivery, they hang the patient up by the arms between two poles of the tent, compress the middle of her body and press the abdomen from above downwards.

Among the Masai, according to Merker, in case of need the woman in labour is lifted at the feet of several women till her body hangs perpendicularly and the top of her head touches the ground, whereupon the midwife massages the abdomen towards the umbilicus.

Also among the Tatars in Astrakhan the woman in childbirth is not seldom suspended by the arms and her abdomen is then tied round with towels. Meyerson (p. 174), who records this, says also that, if the midwife thinks the labour abnormal, she is said to twist her round on the ground or to suspend her by the feet. He has never been present at this procedure and has little belief in this report.

Dr. Grigoriev * met one day in a Russian village three midwives who were deliberating as to how a woman in labour could be helped who had been in agony for three days. They decided to make her hot in a baking oven and then to hang her up with her head downwards.

* [No reference is given.]

suspension and shaking of the mother's body as a help in difficult labour 71

Among the Russian peasantry, according to Holst, a woman in labour hangs on a transverse pole, which is fastened on ropes like a swing, and in this half-lying, half-sitting position, she tries, by jumping, to hasten delivery and, at the same time, to shake the child out. In so doing it happens, of course, only too often that the child falls out before the midwife can catch it, or that the umbilical cord is torn off or the uterus pulled outwards.

Also among the Esthonians the woman is held up and shaken and her abdomen compressed. Here we find then the transition to the shaking of the woman in labour (see Krebel).

We have a few other reports from Demič.

In the Vologda district they seize the woman in labour by the hands and feet and swing her; or they lay her on her back on a bench, lift her up with their hands, which they put under her pelvis and thighs, and shake her violently.

In North-East Russia they lead the woman in childbirth round the table ; the husband lies down on the floor and they make her jump over him ; or a strong man, taking the woman on his back, and holding her firmly by the hands, runs round the room with her and shakes her as much as he can ; or they put her on the floor, tie her feet together below the ankles and pull the head downwards and the feet upwards.

Shaking women in labour was a favourite method of hastening delivery in ancient Greece. A towel was put round the patient and she was then well shaken at least ten times; then they put her back to bed so that her head lay downwards, her feet upwards, and the woman helping, who now held the legs of the patient, who rested on her shoulders, shook her repeatedly to and fro in the bed (Hippocrates).

These manipulations were not liked by the obstetricians of ancient Rome. Soranus advised against these shakings; and also Paulus Ægineta rejected the advice of Hippocrates in this respect and advised carrying in a litter as a much gentler method.

Also in present-day India, according to Shortt, the woman who cannot be delivered has the lower part of her body rubbed with lamp oil and is then shaken.

In the West of America the woman in labour is sometimes shaken in a woollen blanket, which is held at the four corners by strong men.

The Indian women on the Mexican frontier sometimes grasp the patient by the loins and try to shake the child out (Engelmann 1).

In Niué this same questionable custom is said to have been prevalent. The women helping at the confinement filled the patient's uterus with salt water by means of a tube and then she shook her head downwards as violently as possible, by which procedure, as may easily be understood, not a few women are said to have died (Hood).

A similar procedure of the Washambaa (Usambara) seems more rational: the woman is stood on her head; a woman helper kneads the umbilical region; another pours a spoonful of warm butter into the vagina (Karasek). The hot injection, in conjunction with the rest of the procedure, may in this case really sometimes be of use.

M. Savonarola, who died in Padua in the year 1466, professed a special kind of shaking. The patient has to dance, now on one foot now on the other, in turns; she must cry out, but when the pain comes on she must stand or kneel, leaning on the neck of a strong woman; at the same time the midwife must press the abdomen and try to widen the genitals with her oiled hand.

We find tossing also in use as a means of promoting delivery. For this the

patient is put on a linen cloth, which is held by four strong men. In Italy this manipulation was suggested by Trotula, though only when the death of the child had already taken place. In this tossing the woman's head is supposed to be somewhat raised, now in one place, now in another, and the cloth has to be pulled hard at the opposite corners. Perhaps this, too, is the procedure prevalent in Swabia, according to Buck, where, when the child is in a transverse position, the mother is rolled over and over; a more exact description is wanting. In a district of the Saxon Erzgebirge, Leopold ¹ found that a cloth had been put under the sacral region of the patient, and after the pains came on she was raised and lowered alternately by two persons in order to make the working-up of the pains easier for her.

In Entre Rios, in the Argentine, the woman in labour is put on a poncho in order to be thoroughly shaken (Mantegazza,⁶ p. 125). Likewise the procedure from North America, previously quoted according to Engelmann,^{1, 2} should perhaps be included with this.

CHAPTER IV

BIRTH IN CASES OF ABNORMAL LABOUR

1. VIEWS OF THE CAUSES

THERE can be no doubt that the knowledge of abnormal presentations of the child developed very early; and, although the conception of them was still rather confused, yet many of the measures which the women of still very uncivilised peoples have to adopt during pregnancy, show clearly that, associated with them, is the intention of bringing about the proper position of the feetus in the uterus.

Steller reports a case from Kamchatka where a woman lay in labour for three days, the child finally coming into the world with a breech presentation. The magicians ascribed the cause of the unnatural position to the father, who, at the time when it was being born, was making a sledge and had bent the wood over his knees.

In the Bible a faulty presentation is recorded as early as the Book of Genesis (xxxviii. 27), "when a hand of one of Tamar's twins had prolapsed and the midwife tied a scarlet thread round it. The child drew his hand back and the other twin was born before him." Here we have the oldest recorded observation of spontaneous version.

The medical Talmudists appear also to have known the spontaneous version of a child in an abnormal presentation. The ancient Hindus distinguished four kinds — "wedge," "claw," "lemon," "trunk." These

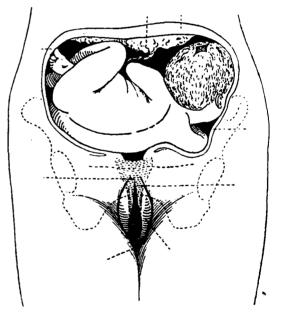


FIG. 810.—Absolute oblique presentation changing to a transverse presentation owing to uterine contractions. (After Schäffer.)

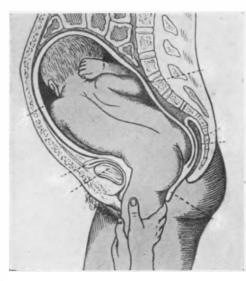
were transverse presentations, only the head presentation, and possibly also the foot presentation, were regarded by them as normal. Susruta (cf. Hessler, Comm., II., 65), on the other hand, laid down eight abnormal presentations according to the part of the child lying nearest to the os uteri. The Hindus imagined that such a position was only possible when vayu (wind), wandering about the womb, had disarranged the foctus.

Susruta considered that eight malpresentations were possible, and described them, according to Schmidt,⁹ as follows :

"1. The child reaches the os uteri with both legs (sakthi, really "thighs");

2. With only one, while the other is bent; 3. With bent legs and upper part of the body with the pelvic region in a transverse position; 4. It covers the os uteri with the breast, with the abdomen or the side or the back; 5. The head is inclined to one side, an arm stretched forward; 6. The head is down whilst both arms are thrust out; 7. The middle of the body is bent inwards whilst the hands, feet and head are thrust forward; 8. One leg reaches the vagina, the other is towards the anus."

Soranus recognised only the head presentation as the normal one. As abnormal presentations he lists the oblique or transverse presentation (cf. Fig. 810), the presentation of one or both arms, as well as the separation of the legs of the child. The foot presentation (Fig. 811) is, of course, less precarious; of the transverse presentations, the most favourable is that where the child's side presents; it permits of version on the head or on the feet. On the other hand, the doubled position



Fie. 811.-Foot presentation. (After Schäffer.)

is the worst, especially if the lumbar vertebræ present; whilst in the case of presentation of the abdomen, the intestines can be removed (evisceration) and then extraction can be performed.

The ancient Arabian doctors (Rhazes, Avicenna, Abulcases, etc.) in general relied almost entirely, with few deviations, on the teachings of their Greek and Roman predecessors. Apart from the head presentation, all the other presentations were unnatural to them (see E. C. v. Siebold, I., 241 ff.).

The German doctors also of the sixteenth century still had very vague ideas of the abnormal presentations. In their works they almost always repeat the same strange illustrations (cf. those from Rösslin, Figs. 721-724). One sees from them how little idea even the learned people of that time had of the actual circumstances. [As

late as 1775 Baudeloque distinguished, so it is said, ninety-four different positions.]

According to the treatise of a Chinese doctor, edited by v. Martius, the causes of a faulty presentation are to be found in the premature exertions of women in labour and in the wrong behaviour of the midwife who, by feeling and pressing the abdomen and the sacral region of the patient, disturbs and frightens the child. In such cases sometimes a foot or a hand appears first; or the child is planted transversely in the womb and remains thus fixed.

Japanese doctors knew as early as the last century the foot, breech and transverse presentations of the child, and, indeed, far better than the Chinese doctors. They also knew how to operate in such cases. They directed their attention to a possible faulty position of the child during pregnancy, and tried to take precautions against it by certain manipulations. The oft-mentioned Kangawa and his pupils assumed that the transverse presentation of the child might arise owing to the abdominal binder then so much in use during pregnancy in Japan, but might also be due to bendings of the pregnant woman and also to pressure as well, as also to excess of food and to psychic influences. In conclusion, we quote a memorandum from the eighteenth century which is worthy of consideration. This appears to show that the mode of living during pregnancy is not without influence on the greater or less frequency of abnormal presentations of the child.

"In some places," says Finke, "e.g., in Tecklenburg and in Osnabrück, where a great deal of linen is made, and where there is a loom in almost every house and where the weaving is done by women only, difficult delivery is often observed and version is not infrequently necessary. I found this to be the case at least ten times where also one forceps delivery occurred. I blame the pressure which the pregnant uterus undergoes from the loom—at least, I know no other cause. For here in Lingenschen, the reverse is the case, but here there is no weaving."

Similar reports are found also from many other manufacturing districts.

2. METHODS OF EXTERNAL MANIPULATION IN CASES OF ABNORMAL PRESENTATION

Since among many peoples the attempt is made, even during pregnancy, to get the child into the proper position by kneading and pressing the abdomen, so too, even when it has been proved during labour that the child is in a transverse position, hope is not given up of forcing it by means of external manipulations into a position more favourable for delivery, and, as it appears, these efforts are sometimes actually crowned with the desired success.

As in Damaland a pregnant woman rarely misses an opportunity for having herself massaged for some reason or other, so, as Büttner maintains, any faulty presentation of the fœtus is at once discovered, and the women engaged in midwifery seem usually to have the enviable gift of bringing about cephalic version by purely external manipulations. For this reason, even the wives of white men were not at all afraid of calling the native midwives to their aid. In Damaland, moreover, it is generally women of very high rank who act as midwives. The knowledge of massage-manipulations is transmitted from mother to daughter or to a younger woman relative. Sometimes a few men perform massage, though then no secret is made of the business.

Lübbert records of the natives of Tanganyika Territory that transverse presentations are well known. In these cases people try by external manipulations and changes in the position of the patient to present the head. In direct necessity the woman is put on a wagon and driven along the worst possible roads, on which she is exposed to intensive jolts. At the same time the uterus is controlled by the midwives, who try to improve the position of the child.

In cases of difficult labour among the Votiaks, it is said that a woman experienced in such matters tries to improve the position of the child through the abdominal walls (*cf.* Buch,² p. 68).

In Achin, when the midwife is summoned to a woman in labour, she first tries by palpation of the abdomen to determine whether the position of the child is correct. If she finds that it is lying wrongly then she tries, by external manipulations with oiled hands, to improve the position of the child. Great skill is shown in changing a transverse presentation into a favourable one (cf. Jacobs ²).

Similarly, in Nias, where massage in pregnancy in order to ease delivery is much in use, Schmidt⁹ reports, "The masseuse first palpates the abdomen of the patient in advanced pregnancy to find out the position of the head, a diagnosis which she knows well how to do. If she finds it in position she promises a favourable course ; in the reverse case she begins with her manipulations. First she rubs the patient's abdomen with oil and then, by manipulations from outside, she exerts pressure on the fœtus till the head inclines downwards and remains there.

Also among the Battak (Sumatra) transverse presentations are known and external version is used in an effort to correct them (see Roemer).

With primiparæ, and in difficult labour with normal and abnormal presentations of the child, the untrained midwives in Galicia endeavour to assist by repeated greasing with a mixture of brandy and fat. Actually, however, this is also a vigorous kneading of the abdomen.

On the island of Vate, in the New Hebrides, witch-priestesses assist women in labour if the delivery begins to be protracted. For this purpose the woman pours water into a dish and mixes in it the milk of a young coconut. Over it she performs magical ceremonies which are called *na koroen*. After the incantations are spoken over the water, she blows on it; this makes the water *koroen*. Also, the milk of the coconut becomes *korot*. Then both water and milk are ready for use. Part of it the patient has to drink; another part is used as follows. The witch doctor makes her hands *korot* with it and then rubs the *korot* water with the coconut milk over the patient's abdomen with the idea of making it softer and more pliable. Then she tries to raise and turn the child by gentle rubbing and pushing so that the feet turn upwards and the head downwards. With her hands she ascertains the position of the feet and head. The incantation which is uttered at the *Koro*-ceremony, according to the statement of the missionary Macdonald, runs somewhat as follows :

"Nature, Nature, expel it ! For whom shall it be expelled ? It shall be expelled for A (the name of the patient) ! The little child shall be expelled for B (the name of the husband) so that it may come upon the ground ! What kind of a *Koro* is this ? It is a good (or effective) *Koro* ! "

When all this has been done she repeats the blowing on the water and coconutmilk, and also makes *korot* her own hands with which she turned the child; she also blows on the patient's abdomen. The natives believe firmly in the power of this *koro* (Jamieson).

In Asia Minor they try to get the child into the proper position by putting the patient into a sheet which is lifted and swung about by four women.

Among the Chinese, when a wrong presentation of the child is diagnosed, the treatise translated by v. Martius prescribes :

"In this case the mother must be laid carefully on her back on a couch, and the protruding parts of the child carefully bent back. The mother, however, must be given time to renew her strength by a short sleep." This, however, must not be too deep. If the replacing of the prolapsed parts of the child is not successful, then the Chinese doctor orders that a skin of the *jurura* fruit be given to the patient and she is then to be placed with the abdomen very high till the child appears of itself. But if the patient will not lie down, he says, "Then I myself know no other method of procedure."

3. INVERTING THE MOTHER AS A HELP IN CASES OF ABNORMAL PRESENTATION

Among the various efforts to make delivery possible where there is a faulty presentation of the child, that of inverting the patient is still to be mentioned. The Italian, Antonio C. Cermisione (+1441), even in his time, in cases of false presentation of the child, advised that the midwife take the patient's legs over her shoulders so that the popliteal spaces rest on the shoulders; with the patient in this position the midwife is then to shake her gently.

Among the ancient Greek physicians, when their expedients for improving a faulty presentation of the child did not fulfil their purpose, the patient was bound fast to the bed which was then lifted up either at the head or the foot and shaken vigorously to get a better presentation of the child.

In Algeria, in similar circumstances, the patient is lifted up by the legs or rolled to and fro on the ground.

In Persia also a similar procedure is known, but associated with it is also a sanguinary interference. Stern ² records this according to information given to him by Dr. Beck :

"If delivery is difficult, the *kabli*, midwife, ventures on an incredible atrocity! The patient is placed on her head, and whilst two women pull the miserable creature's legs as far apart as possible, the *kabli* cuts unmercifully into the perineum with an ordinary and often rusty pair of scissors or even with a kitchen knife until the opening is big enough for the child to be pulled out. If the patient bleeds to death meanwhile, no one bothers much, for they have no great regard for women in childbirth. The matter is more unpleasant for the midwife, on the other hand, if an arm or a leg of the child is severed during the barbarous operation."

4. INTERNAL MANIPULATIONS AS A HELP IN CASES OF ABNORMAL PRESENTATION

The conviction was early arrived at that the external manipulations discussed in the foregoing section are very often not sufficient to bring about a normal presentation of the child. And so gradually the helping hand of the person assisting, which began by pushing back the prolapsed parts of the child into the uterus or by actually entering the patient's genitals, gradually came to pushing the child into the right position and turning it from an abnormal into the normal presentation. In this way delivery was finally made possible in spite of everything.

It is then, as A. H. Israels ¹ (pp. 143–147) assumes, highly probable that even the Talmudists were acquainted with the version of a child found in a faulty position. He gives as his reference the passage in the *Kiddushin* tractate, where Rabbi Eliezer says :

"Porrexit dominus manum suam in intestina servæ suæ et cœcavit fœtum, qui est in utero ejus ; liber est. Qua re ? quia rex dixit : et corrupit, donec intendant corrumpere."

Pinoff appears to think that it is doubtful whether version is in question here ; he is of the opinion that it is not impossible that an abortion is in question.

The ancient Hindu physicians also understood version in cases of transverse presentation, and they performed both the cephalic or podalic variety according to circumstances. In breech delivery they turned down both legs and extracted the child by them. In single foot delivery they brought down the tucked-up foot so as then to carry out the extraction of the child by both legs.

Likewise the ancient Greek physicians in breech and transverse presentations, as well as in presentation of the extremities, tried to perform cephalic version.

We learn from the information given by Miyake, that Japanese doctors have a very precise knowledge of version. Kangawa gives the most exhaustive rules for the manipulations necessary in this. The extraction of the child with a hook was also known. As this, however, left a mark on the neck of the fœtus it could not be done with princes. Therefore, the grandfather and father of this Kangawa, as well as he himself, constructed special instruments for turning the child in the uterus and then extracting it. These were ingenious arrangements for putting a fish-bone fillet, a silk cloth or a thread fillet (cf. Figs. 737 and 738) round the fœtus and then removing it from the uterus by means of appropriate manipulations. All these operations have to be done, as far as possible, under cover for the sake of the patient's modesty. The physician sits on the mat at the foot of the quilted bed on which the patient lies in the dorsal position with legs apart, with the lower part of her body concealed to her toes by a covering. Now the physician stretches out his legs between the legs of the patient in such a way that the soles of his feet are supported against her buttocks so that he can keep the legs of the patient apart with his own and do all the manipulations under the covering.

Kangawa continues :

"Usually laymen, especially the woman's parents, object to the use of instruments because, as these are not commonly used, they do not know them and are afraid of them. Hence, when the doctor wants to use any instruments, he puts them, before he enters the lying-in room, into his garment, the wide sleeves of which, accessible as they are also from the inside, are used as pockets; thus he warms them and can take them out and use them unperceived under the covering; also, after delivery has taken place, he has to keep secret the fact of having used the instruments."

Engelmann² gives a reproduction of a Japanese woodcut which shows the woman in labour leaning back with legs apart and knees drawn up, from whom the obstetrician, squatting beside her, is trying to extract the fœtus with a complicated instrument whilst an old midwife is feeling the patient's pulse.

Many still very uncivilised peoples, however, seem to be by no means unacquainted with the manipulations for the version of the child within the uterus. Thus, for example, the Kalmucks are said to have known for a long time how to perform version in difficult labour.

The woman helpers among modern Greeks, in cases of abnormal presentation of the child, resort to shepherds for help. Also among the Lesghians, in the village of Jagubly in the Caucasus, shepherds are not infrequently called in in cases of difficult labour. According to N. v. Seydlitz,² they are very skilful in delivering sheep and, for this purpose, they even use special instruments, shaped like forceps.

Emin Pasha³ (p. 393) found in Unyoro territory in Africa men who were able to put back the arms in prolapse and to carry out version.

According to Brehm's statement by word of mouth, the woman helpers in Massaua (East Africa), when they find a faulty presentation, insert the hand and turn the foctus round. It is said also of the midwives in Algeria that some of them know how to perform version even after the discharge of the amniotic liquor.

5. THE DESTRUCTION AND DISMEMBERMENT OF THE CHILD

We have already seen that by rough and inexpert pulling at the prolapsed parts these are not seldom torn off the child's trunk. Such unpleasant occurrences, naturally, are unintentional. However, in obstetrics, it is sometimes necessary in rare and specially bad cases to kill and mutilate the child in the uterus deliberately so that, in the end, it is delivered in pieces. This takes place usually only in cases where there is a want of proper proportion between the size of the body of the child (especially of the head) and the maternal passages, so that the passage of the child through them is a physical impossibility.

In India, if version were not successful, they used to proceed as Susruta prescribes, and dismember the foctus. If the head presented, then they perforated the skull, removed the brain and then extracted the child by means of a hook; if the shoulders presented, however, then dismemberment or embryotomy was performed. For opening the skull, Sušruta used special instruments, the *mantalagra* (curved knife) and the *angulisastra* (finger knife, perhaps a ring-knife like that mentioned by Tertullian (*De Anima*, 26)). For dismemberment, the spear-shaped *sanku* was used. According to Sušruta, only a doctor with a thorough knowledge of anatomy should undertake these instrumental operations, which may so easily injure the mother. There followed then a careful dietetic and medical after-treatment of the patient, whose health was supervised by the physician for four months.

The ancient Greek physicians also practised embryotomy, but only if the child had already died. In a case of prolapse of the extremities of a dead child, these were cut off and version on the head attempted.

If this did not succeed they proceeded to dismember the child. For this the instruments used were the $\mu \check{a} \chi a i \rho \iota \rho \nu$ (curved knife (cf. Milne, p. 27), perhaps similar to the mantalagra of the Hindus), the $\pi i \epsilon \sigma \tau \rho \rho \nu$ (a cranioclast) and the $\epsilon \lambda \kappa \nu \tau \tau \eta \rho$ (a hook for extracting the child (Milne, p. 153).)

Soranus also prescribed that prolapsed extremities should be severed even when the child still lived, if the life of the mother were in danger. Embryotomy followed this amputation, and as tractor he used a pointed hook which was called $\epsilon \mu \beta \rho \nu o \nu \lambda \kappa \delta s$ (Lat. *uncus*). The various soft parts of the child were perforated, for which certain rules were given (see Milne, 152 ff.). This operation was followed by an attentive after-treatment, as was stated by the midwife Aspasia, even before Soranus, and by Aëtius. Likewise, the operative procedure in a hydrocephalic foetus is described in detail by Soranus.

The Jews, after the birth of Christ, might, according to Tertullian (cf. Milne, p. 157), kill the child when the head was not yet visible and the life of the mother was in danger. In their view, so long as the child was still entirely in the uterus, any delay in delivery was caused only by the child itself; for they believed that it also had to co-operate in delivery; this being the case, the child threatened the life of its mother and so it was sacrificed to save the mother. However, if the head of the child, as its greatest part, was born, then the physicians of the Talmud no longer blamed it for the delay in labour, for they saw that the obstruction lay in the mother and that in this case the child must not be sacrificed. In dismemberment they cut off the presenting extremities and then tried to eviscerate the child.

According to Krebel and Klemm, the healers of the Soongar dismember a child which cannot be delivered with the knife.

Schoolcraft records a case among the Dakota Indians in which the hand of the child had prolapsed. After twenty hours the child was presumed to be dead and, to save the life of the mother, the arm was cut off and the child extracted in pieces. This operation was performed by women who knew nothing about the business, but death had already taken place, so that there was nothing to be destroyed in the child.

Also from East Africa we have an example of operative interference of this description. Baumstark records of the Warangi in the Masai Steppe that, in difficult labour, the women, in case of need, cut off the arm of the child in the womb at the shoulder with an ordinary arrow and then draw it out of the mother. Of the natives in former German South-West Africa, Lübbert reports all sorts of attempts at making delivery possible in difficult cases, of which we have already learnt. Finally he says : "If delivery is not possible, then they dismember the child."

If, in spite of every expedient being employed, a child in Achin cannot be born, then a bidan dalam is called in, *i.e.*, one of the few midwives existing in Achin, who also extend their operations to the interior of the genitals. She also examines carefully beforehand what kind of presentation it is, and when she has satisfied herself that the bidam (i.e., the ordinary midwife first called in) has already tried all practicable methods of help without success, then she tries to kill the child in the womb. For this purpose she keeps on putting wet, cold coverings on the abdomen and kneads and rubs it vigorously. Then if the child is dead she inserts her oiled hand into the vagina, grasps the presenting part of the child and tries to draw the whole child out of the uterus. If, however, she does not succeed in doing so, she proceeds to embryotomy. For this the hand is again oiled and, armed with a small knife, is again introduced into the vagina, and now the midwife cuts off, bit by bit, the attainable parts of the child. Owing to this crude treatment, as may readily be understood, the patient often dies. If, however, owing to the application of the wet cloths the labour pains are in some cases strongly revived and the child quickly expelled, then, naturally, the reputation of this upper midwife is considerably enhanced (Jacobs²).

"The Batta," says Roemer, "knows the puncture of the membranes; he is said even to practise perforation of the skull $(n \in lusu)$, by which means he removes the brain, so that the child's head may diminish. It is maintained that there are guru (witch doctors) who even perform embryotomy (*ikeret*) on the dead foctus."

CHAPTER V

CÆSAREAN SECTION*

1. THE NATURE OF THE OPERATION

IT might have been supposed that the idea would not have been far to seek that, when the mother dies during labour from overstrain or exhaustion or some such reason, death need not always have simultaneously overtaken the still unborn child; and that, if an effort were made to extract it promptly from its organic prison, its tender life might still be preserved. However, among very many peoples this idea did not arise. Even to-day in Palestine people seek to remove the child only by a key held at the mouth of the dead woman (Tobler). In Japan, Cæsarean section used never to be permitted among the common people (v. Siebold), and similarly in Persia, although Polak once performed it on a quite exceptional occasion. Among present-day Mohammedans the post-mortem practice of Cæsarean section is forbidden by Sidi Khelif, whose authority has full weight for every good Muslim. Indeed, this law goes even further, for it ordains that if a Cæsarean section should be performed by a disobedient doctor and the child thus be born alive, the new-born babe must be killed at once, for it can be no creature of God, but of the devil, for "life cannot be born from death" (see Rique). The Koran expressly forbids the opening of the corpse; the body is not to be opened even if the dead person should have swallowed the most valuable pearls which did not belong to him." However, even here civilisation is gradually penetrating, and already limitations of this strict law are permitted. For F. G. Oppenheim (p. 109) states: " Only in the case where a pregnant woman dies and the child gives signs of life of itself is it permitted that Cæsarean section be performed."

There is scarcely any doubt, however, that in a few nations post-mortem Cæsarean section was practised at a very remote period. Rosenbaum² is even of opinion that the origin of this operation must be sought as early as the ancient Egyptians. Although he was unable to produce direct evidence for this opinion, yet it argues in favour of his view that the possible presence of a still living and moving child can scarcely have escaped the Egyptian embalmers whose normal business it was to open the body of the corpse (granted, of course, that the opening of the corpse was customary so soon after death).

Whether we are justified in assuming that the Greeks also performed Cæsarean section on the dead is difficult to decide. That the matter was not unknown to them, however, is proved by the ancient myth of the birth of Dionysos, who was cut from the body of Semele, who was killed by lightning, and transferred to the body of Zeus, who then gave birth to him with the help of Athene and Eileithvia. Similarly Lichas, according to Virgil (X., 315), is said to have been cut out of the mother's body.

According to Susruta, the Hindu physicians undertook Cæsarean section as soon as they perceived externally movements of the child in the abdomen of the woman in labour who had just died.

> * See F. S. Newell, Cesarean Section. New York and London, 1921. 81

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In Rome the legendary Numa Pompilius had made a so-called "Lex regia," which runs :

Negat lex regia, mulierem, que pregnas mortua sit humari, antequam partus ei excidatur ; qui contra fecerit, spem animantis cum gravida peremisse videtur (see Bruns, p. 10).

Whether this law was carried into effect we cannot prove. In any case, it is established that the maker of the law must have been quite convinced of the possibility of saving the still living child from the dead body of a woman in advanced pregnancy.

Later, Cæsarean section seems to have fallen into oblivion in Imperial Rome, and perhaps the supposition of Schwarz² is correct, that it first came into practice again with the spread of Christianity and the introduction of the sacrament of baptism which gave the life of the child greater value and gave it entry into the kingdom of Heaven. Pope Benedict XIV., in the first half of last century, made another rule in which the object of the operation and the precautions to be taken in performing it were stated in detail (see *Opera*, *De Synodo Dioecesana*, *Lib*. XI., *cap.* 7, XIII., Vol. XI., p. 418).

That the Church, however, was at times opposed to this procedure is shown by a document of the Icelandic Bishop, Jon Sigurdson, of the year 1345, cited by Grön : "Nobody shall be in any doubt that when a woman dies with the child she shall be buried in the churchyard like other people and the child shall not be cut or taken out of her."

Such cases must, therefore, have often occurred. Schönberg (p. 282) quotes (in Grön, p. 322) one such case from the same period (1360) in Denmark. "A Danish woman of the clan Porse and married to the bailiff Bo Johnsen died in childbirth. At the bidding of the husband, the child was afterwards cut out of the womb still alive."

The earliest information about Cæsarean section in the Middle Ages is said, according to Heyne (in Grön, 1908, p. 321), to come from the tenth century; of Bishop Gebhard II. of Constance (\pm 995 (/6), and, likewise, of Burchard I., Abbé of St. Gall (elected 959), it is related that they owe their lives to this operation; yet it is a question of post-mortem Cæsarean section ("Gebhardus ex defunctæ matris utero excisus").

The Rabbis of the Talmud likewise knew that the foctus does not always die simultaneously with the mother. They cite an example where it had been observed that the child moved three times in the abdomen of the dead mother. However, they regarded such a foctus as not capable of inheriting, for his life and movements were like those of the amputated (and, at the same time, still moving) tail of a lizard. A pregnant woman under sentence of death was executed without regard to her child. But if the pregnant woman was already in labour on the parturition chair, then the child was killed beforehand, and she herself was then put to death, for it was assumed that the child, if it remained alive, might still be born after the death of the mother, and such an occurrence was considered more disgraceful than killing the fully-developed child in the womb of the condemned mother. If a woman was overtaken by death on the parturition chair during labour, then (according to the Rabbis Nachmann and Schemuël) Cæsarean section was performed; this operation was performed even on a Sabbath in spite of the danger of desecrating it by so doing. In this respect they broke the Sabbath, even when the life or death of the mother was doubtful, for they did not believe that they should wait till the holy day was over in order to save the child's life. In this case they fetched a knife from a public place (A. H. Israels, p. 152).

In the Midrash Wayyiqrā Rabba, children born by means of Cæsarean section are also mentioned. It says :

"For it was taught that at a birth which took place by operation from the side, the prescribed days of uncleanness and cleanness do not weigh heavily and one is not obliged to offer a sacrifice for this. R. Simeon, however, regards such a birth as a normally born child "(Wünsche³).

Bernardus de Gordonio (1285) and Gui de Chauliac (1363), both in Montpellier, teach that Cæsarean section should be performed on a dead pregnant woman; they believed that the fœtus could continue to live for some time after the death of the mother, and, therefore, tried to keep her mouth and uterus open so that the air might penetrate to the child.

This peculiar opinion prevails even now among the common people in Frankenwald. There, when a woman in advanced pregnancy dies, her mouth is kept open with a prop so that the air can get to the child and it may not suffocate until the doctor comes and give his assistance (Flügel).

This view was opposed by Viardel as early as the seventeenth century. He himself had, in the case of one woman, "cut a living child out of the abdomen." In this operation he considers it necessary that great care should be exercised, so that at the moment the mother dies the body may be opened, for otherwise the child loses its life for want of breath, and the object will not be attained, *i.e.*, to have it baptised; for to believe that the child gets breath through the mouth, as some people imagine, and, therefore, order that a stick be put in the mother's mouth after death, is nonsense, because the child in the mother does not get air except through the umbilical arteries, and its lungs have not yet any function of their own.

Cæsarean section after the death of the mother also plays its part in the German epic. We have to thank Albin Schulz ² for a description of the court life at the time of the Minnesingers. In this he quotes an epic, *Tristant*, which is by Eilhard von Oberge. The passage which interests us describes the confinement of Blancheflûr when she was carrying Tristant under her heart. The labour was such a difficult one that Blancheflûr dies. The poet describes this as follows:

"Then it brought her such great woe That death must come upon her; The pains of childbirth overcame her, Then cut they from the mother , A son from out her womb."

Delivery by Cæsarean section on the mother who is just breathing her last breath has been portrayed, in a somewhat fantastic manner it is true, in an early printed book of the fifteenth century. We see a copy of this picture in Fig. 812.

The work, preserved in the Municipal Library in Frankfurt-am-Main, is placed by Kelchner, who edited a facsimile impression of it, in the period 1473-1476.

The mother of the Anti-Christ had had sexual intercourse with her own father and the product of this incestuous love was the child whose birth the picture depicts. In a low room the woman in childbirth is lying on a couch with the head end raised. She is dressed in a wide, long-sleeved garment which covers her from head to foot. She has shoes on her feet. Over the abdomen, the garment gapes apart so that one sees the patient's bare belly with a big longitudinal incision in it. From this the Anti-Christ is being lifted by a person standing behind the couch; only his legs are still in the womb. Whether the person grasping the child is a man or woman cannot be recognised. At the foot of the couch stands on his hind legs a devil represented as a horned pig; he seems to have conducted the operation. Another devil is taking possession of the soul in the form of a child just issuing from the mouth of the woman in childbed. An angel seems to be trying to fly into the room through the window.

Niebuhr ² found a recollection of the Cæsarean section of ancient India among the Hindus. They performed it when the woman in childbirth had died, because the law prescribes that children less than 18 months old were buried; the mothers, on the other hand, were, as usual, cremated.

Schmidt ⁹ records : "In Bombay the corpse of a woman deceased during pregnancy is bathed, covered with flowers and ornaments, and brought to the cremation place. Here the husband sprinkles her body with water by means of a whisk of sacred darbha-grass and recites holy passages. Then he cuts her right side open with a sharp knife and takes out the child. Should it be alive it is taken



FIG. 812.—A Cæsarean section on a woman who has just died. From a woodcut of the fifteenth century. (After Kelchner.)

home and cared for ; if it is dead they bury it there and then. The opening in the side is filled with melted butter and milk, covered with cotton threads and then the usual process of the act of cremation is carried out."

In Malabar also the child must be cut out of the body of the dead mother so that it may be buried beside her.

Emin Pasha³ reports from Unyoro territory that here also the body of the woman who has died in childbirth has to be opened with the knife in order to remove the child from it, no matter whether it be alive or dead. Neglect of this rule is severely punished by the chief, as it is of evil omen for the village. Goats, cattle and even wives are taken from the guilty as punishment.

At this point we must allude to a horrible form of Cæsarean section, as, according to Krauss,⁵ it is said to be performed with criminal intent. He says :

"In Bosnia, thieves and house breakers are accustomed to slaughter a pregnant woman, preferably in the seventh month of pregnancy, to rip her open and to cut into long narrow

strips the child from the womb and to dry these pieces thoroughly. Then, if they want to rob a house at night, they light one of the pieces of dried flesh as a candle, and, it is believed, clear the house undisturbed, for all the occupants of the house sleep like tops, as if dead, and nobody can awake before the robbers have left."

This horrible superstition was still in force in the year 1889. That it formerly existed in Germany is proved by a passage quoted by Birlinger from the manuscript of the Augsburger Malefizbüchlein. There it states :

In the year 1568, a man cut open the abdomen of a pregnant woman, and hewed off the arm of the fœtus in order to practise magic with it.

Buleney, a criminal executed in Kleckgau in the year 1586, had confessed :

That he and his two comrades had by them the hand of a child cut out of its mother's womb and that they had set light to the fifth finger in order to see whether anybody in the house into which they had broken was awake. For as many people in the house awake as fingers which did not burn. They had kept the hand as a trustworthy and infallible means of making locks open of themselves (Birlinger).

These ideas, especially the belief in the efficacy of the hand of the unborn child as a thieves' candle, still exist in the German folk song, as is shown by the song of the miller's wife who was sold (Schläger; Wisser) :

> "When in the wood the miller came Towards him three murderers came And bid him a good morning. 'Good morning, good morning, dear miller mine, Hast thou not a pregnant wifekin ? For her we'll pay thee well.' The miller thought in his own mind : 'Thou hast a wife who is with child, Her canst thou easily sell.'"

The first offers three hundred, the second six hundred thaler; yet this is not enough for the miller. Only when the third offers nine hundred does he agree to the proposal and sends his wife to the wood on some pretext where the murderers pounce on her:

> " 'Good morning, good morning, wifekin, Are you the miller's wifekin ? For you we have paid well.' The first he drew her mantel off, The second did the knife pull out, The third he did the cutting."

This folksong, given by Wisser in a version used in the East of Holstein, has, as Wisser informs us, also penetrated as far as Sweden and Denmark, hence the underlying superstitious idea must be known there likewise.

In the rendering given by Schläger intended for an action song for children, of course, much, especially the end, has been changed; the brother who has been called to the wife's help shoots the three villains; and the crime does not take place; no mention also is made of the woman's condition.

2. DELIVERY OF THE LIVING CHILD BY SECTION FROM THE LIVING MOTHER

It was certainly no slight determination which, in early times, led to the delivery of the child from the body of the dead mother by section. How much more astonishing was the courage which sprang up in the heart of peoples unused to surgery when they decided to lay hands on the living mother! Once the practice of Cæsarean section on the dead had been accomplished, the idea could take root that a daring operation performed by making a sharp incision penetrating the abdominal wall and the wall of the uterus of the moribund mother might rid her of the child and bring the otherwise impossible delivery to an end by a bloody and unnatural path.

This daring deed the ancient Rabbis seem to have resolved upon. Mannsfeld (p. 15) has pointed out a passage of the Mishnah where the *Joze Dofan* is in question. This, according to Mannsfeld, signifies the *section of the walls* which has been performed on the living patient. A. H. Israels ¹ (in opposition to Fulda and E. C. v. Siebold) concurred in this view ; according to him *Joze Dofan* is undoubtedly " a child delivered through the mother's side," and he tries to show that according to the commentaries of the Mishnah the Jews of antiquity had two methods of performing Cæsarean section. Although the Talmudists give no facts, yet, according to Israëls, it is not to be concluded from this that they were not acquainted with such facts.

Without considering any earlier discussions, Reich 2 reverted to this passage of the Talmud. He says that in

" a Joze Dofan, i.e., in a delivery through the side, no rules for purification or non-purification applied to the woman, and, moreover, she had not to make a sacrifice."

This statement was explained by two commentators : Raschi (c. 1029-1097 A.D.) says :

"By Sam were her bowels opened, the child drawn forth and the woman healed."

As regards the meaning of the "Sam," there has been great controversy as to whether this word, which really means a "spirituous substance," is to be understood as an instrument, medicament or caustic.

Then Maimonides (c. 1135–1204 A.D.) at another place says :

"The loins of the women, if labour was difficult, were slit so that the child came out thence."

A third passage of the Mishnah runs :

"The Joze Dofan and the child which comes after it (*i.e.*, which is born later) are neither of them first born either as regards inheritance or the priesthood."

Of this Maimonides remarks :

"This is only possible when, after the side of a woman pregnant with twins has been slit and one child extracted, the woman was afterwards delivered of the second and then died; however, some maintain that a later birth is meant here for which I know no explanation, and it is very surprising to me."

Later, Rawitzki¹ drew attention to a passage in which Rabbi J. Levi understood by *Joze Dofan* a new-born child which was "born through the anus." By this Rawitzki considers himself justified in assuming that there is no suggestion at all of Cæsarean section in *Joze*, but that by this are meant births in which the child was delivered through a tear in the upper part of the vagina or through a central tear of the perineum extending to the anus. Cases of this kind have already been discussed. Other authorities, such as Kotelmann and Israels,² however, reject this view and adhere to the opinion that *Joze Dofan* refers to Cæsarean section on the living. Other authors have mentioned passages of the Talmud in which the subject

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is pregnant animals, in which the young were brought forth by opening the flank. By these it is proved that the Jews performed on animals an operation similar to Cæsarean section.

Julius Fürst, in Leipzig, wrote the following report on this question to Ploss :

"Flank delivery or Cæsarean section? For the first it is to be observed that the Mishnah (150 B.C.) speaks not of an abdominal or uterine section, but of a flank or side delivery. The chief passages about abdominal delivery in human beings and animals are to be found in Niddah at the beginning of Chapter IV., and Becherot, Chapter VIII., where Joze Dofan or an abdominal delivery in human beings or animals is discussed. Because in the Bible at a birth Peter Rechem, i.e., opening of the uterus, is always mentioned; the question was raised in the second century B.C. whether a birth which took place not through the womb (rechem), but through the flank is to be regarded, as far as purification, primogeniture, sacrifice and the like are concerned, as legal birth in the Biblical sense. That the Mishnah regarded flank delivery not only as possible but also as actually having taken place, that also one of twins can be so born, and that animals were slaughtered to bring forth the living young, can be seen from the lengthy discussion. The Talmud in elucidation of the Mishnah quotes known facts for many abnormalities in delivery mentioned in the Mishnah. Thus, for example, that in twin births, the second child was not born until 33 days (once three months after the first), and it seems only accidental that no facts are quoted for flank delivery. But as to how this flank delivery was effected there is nothing in the Mishnah or in the Talmud, and what the later commentators (Reschi, Mannsfeld, Bertinoro, etc.) say of this has no value, since they merely express their own subjective opinion."

It is natural that the ancient Hebrews, who were, in scientific knowledge, quite dependent on the surrounding civilised nations, might not have known such an operation. So the philologists may agree about *Joze Dofan*. In any case, J. Fischer, in his very up-to-date *Geschichte der Gynäkologie*, has nothing to say concerning it.

The ancient Norse Sagas record a Cæsarean section on the living. In the Volsunga Saga it runs :

Now it is to be related that the queen (the consort of King Neri) soon felt that she was with child; however, a long time passed and she could not deliver the child. Now the illness of the queen continued in this way so that she could not deliver the child and for six winters long she had this suffering. Then she knew that she would not live long and now she commanded that the child should be cut out of her. And it happened as she commanded. The child was a boy and great of growth from his birth, as was to be expected. And they say that the boy kissed his mother before she died. Now this boy was given a name and was called Volsung (see Edzardi).

This narrative comes long after Roman times, so might certainly have a germ of fact, for when Cæsarean section was first performed in Europe on the living has not been established with certainty. Falcucci (born 1412) is said to have recorded one such operation (Sermones sept de cirurgia : Tract. 3, c. 46), but v. Siebold has shown that this record cannot be proved. Also about the year 1500, the sow-gelder Jacob-Nuffer is said to have saved his wife and child by the operation. However, it is now generally assumed that in this case it was not a question of Cæsarean section in the ordinary sense, but of the opening of the abdominal cavity in the case of extra-uterine pregnancy.

Cæsarean section is mentioned, however, in a common law of the year 1389 from Ybach in Switzerland :

"A child born in wedlock thus cut from its mother is the heir of its parents if it survives and has human form. But if it is not believed that the child lived or had human form this must be proved by two informants, male or female, who state it upon oath" (see Fassbind).

88 DELIVERY OF THE LIVING CHILD BY SECTION FROM THE LIVING MOTHER

Although a case of Cæsarean section having been performed at that time in Ybach is not yet known, the existence of this law proves that the legislators not only knew Cæsarean section but also that they supposed that if this operation did take place it would be successful. And that it is not a question of cutting out the child after the death of the mother we can see from the scope of the law, that the child can also be the mother's heir if it survives her. The first instigation to the performance of Cæsarean section on the living was given by Ambroise Paré (1510– 1590), although certainly he opposed it, and the subject was very much discussed in French literature at that time. In particular it was the anatomist, Charles Estienne (Carolus Stephanus), who, 1539–1545, discussed Cæsarean section (lateral section on the left) very thoroughly. The first actual Cæsarean section was performed in Italy in 1540 by C. Bainus, and has been described by Donatus (see Vol. II., p. 658).



FIG. 813.—Cæsarean section on the living. Towards 1650. (After Scultetus.)

The child died, it is true, but the mother gave birth later to four more children in the normal manner. The records of Mercurio of his journeys in France in 1571–1572 are specially valuable. In these he says that this operation was as well known in France as blood letting for headache in Italy. In Toulouse, *e.g.*, he saw two women who were delivered by Cæsarean section.

We do not intend to discuss in detail here how this operation was first advocated by François Rousset about 1580, and how it found favour from then onwards (see E. C. v. Siebold, II., 91 ff.). The first well authenticated German operation of Cæsarean section was performed by the surgeon Trautmann on the 21st April, 1610, at Wittenburg, and described by Daniel Sennert² (Lib. II., Pt. I, cap. 10, p. 329; cf. Wachs²).

In Tölz also, in the year 1673, according to Höfler, a child was cut dead from the mother, Katherina Hohenleitner.

In several works of the seventeenth century there are illustrations of Cæsarean

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section on the living mother, of which two from Scipione Mercurio and one from Scultetus are reproduced here.

"That of Scultetus (Fig. 813) shows the woman lying clothed in bed; her abdomen only is exposed. Two assistants hold her arms, a third has a tray with bandaging material; similar things also lie on a stool. The operator is standing at the right side of the bed and, as it appears, is making a longitudinal incision with a razor in the abdomen to the left of the umbilicus. So



FIG. 814.—Position for Cæsarean section. 1621. (After S. Mercurio.)

far, however, he has only made a superficial incision through the cutaneous covering. No female helpers are present " (M. Bartels).

Figs. 814 and 815 are taken from Scipione Mercurio. If the patient is brave, then she is supposed to sit on the edge of the bed as in Fig. 814.

"Four unflinching youths or maidens are supposed to help the operator; three of them hold the patient by the upper part of the body and the arms. This is done from the sides and from behind. The fourth assistant is supposed to kneel on the floor between the patient's legs and he has to hold her fast there. The line of incision (on the right of the umbilicus, corresponding to the outer edge of the *rectus abdominis* muscle) the surgeon is said to sketch with a good ink so that the knife may not be deflected ; also he is said to draw from three to five cross-lines in order to mark the places where he is to put the stitches."

If the patient is already weak, however, then she is to be put in the position shown in Fig. 815.



FIG. 815.—Position for Cæsarean section when the patient is weak. 1621. (After S. Mercurio.)

The patient is put to bed with cushions under her so that she is in a half-sitting position. This position is also good for those who are afraid of blood. For the performance of the operation and the necessary preparation of the patient, detailed rules are given.

Scipione Mercurio, however, advises that the state of the patient's strength be first examined with the greatest care to see whether she is able to stand such interference. If he thinks she is no longer fit for it, then it is better for him to abandon the operation and withdraw with polite excuses. For if the woman were to die during the operation, then all the blame would certainly be laid on the surgeon and not on the difficult labour.

In the patient in Fig. 814 the lines of incision can be seen; in Fig. 815 the uterus is already opened and the operator is in the act of taking out the child.

The following cases may be mentioned as specially odd.

In the year 1880 the *Wiener med. Wochenschrift* (Nr. 13), on the basis of a report of Dr. V. Gjorgjevic from Belgrade, which was said to have been officially discussed by the police, wrote :

"Not far from the Serbian frontier in Prischtina, a woman day labourer, in spite of having been in painful labour for three days, could not be delivered; in despair, she seized her husband's razor, performed Cæsarean section on herself and had the wound stitched by a woman neighbour.

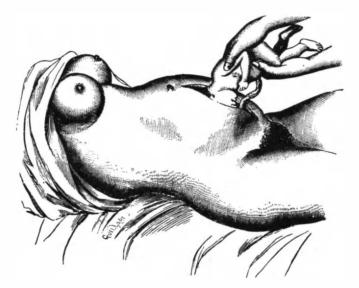


FIG. 816.—Cæsarean section. (After Witkowsky.)

After a few months, when the reporter was discussing the case, both mother and child were in perfect health."

A very similar case is recorded by O. v. Guggenberg. The case in question was that of a woman of 37 at Biela, near Bodenbach, who performed Cæsarean section on herself.

"At the end of her eighth pregnancy, the labour pains set in at the proper time, but ceased again after 24 hours. Then followed convulsive attacks, great pain and a colossal swelling of the abdomen whilst the movements of the child disappeared. The woman thought that she must die. Then she seized a razor and made a longitudinal cut through the abdominal wall and the wall of the uterus. Then she drew the dead child out through the wound, severed the umbilical cord and, finally, lifted out the placenta. O. v. Guggenberg, who was then called in, stitched the wound and put on a bandage ; the woman recovered after a short illness."

In conclusion, the following case, which occurred in France and which I take from Granier, may be mentioned :

"A peasant woman of 23 was in the ninth month of pregnancy, and because of this had become the laughing stock of the country. She therefore cut open her abdomen with a kitchen knife from the umbilicus to the iliac region. Through the wound, she had the body of the child extracted, which weighed 1 kg. less than a full-time child. Moreover, it died in this operation." Of the fate of the mother, we are not told.

Harris has found three other cases in literature. In only one of them did the patient die as the result of the operative interference. However, reports are often made of serious injuries caused to the child in the womb by the knife.

The enormous advances in operative surgery in the last decade due to asepsis have also been to the benefit of Cæsarean section. In particular it was the Italian Porro who taught how to cut out the child, the birth of which was impossible in the normal way, from the uterus, and at the same time to remove the uterus with the ovaries and the rest of its appendages almost without danger so that the life of the mother cannot again be endangered by another pregnancy.

Fig. 816 (after Witkowski) shows a French method. For further accounts, including one of the most extraordinary on record, see Gould and Pyle, pp. 128 ff.

3. CÆSAREAN SECTION AMONG PRIMITIVE PEOPLES

The attempt to deliver by Cæsarean section a patient who is almost moribund, and in this way possibly to preserve the lives of both mother and child, is not



FIG. 817.—Knife used by the natives of Kahura (Central Africa) for Cæsarean section. (After Felkin.)

confined exclusively to civilised nations. We find that a few fairly primitive nations have hit on the same ideas.

A case parallel with that described by v. Guggenberg in the previous section was reported by Moseley from the West Indies.

A slave who could not be delivered, performed Cæsarean section on herself with an inferior knife. The operation was successful, and when the slave had again completed a pregnancy she wanted to repeat the operation.

Much discussed also was the case of a Chippewa Indian who performed Cæsarean section on his wife, saved both mother and child, and brought both in his sledge to

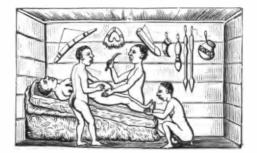


FIG. 818.—Cæsarean section in Uganda. (After Felkin.)

his village on the Soult. Schoolcraft often saw the man and wife there, although evidence is lacking as to whether it was an actual Cæsarean section.

We have less questionable information, however, from Uganda, in Central Africa, through Felkin, who records that Cæsarean section is performed by special operators and sometimes with success. The knife which was used for this in the year 1878 at Kahura had the form of a convex bistouri (Fig. 817). Felkin¹ himself was present at one such case of which he made a sketch (Fig. 818). He states that the

woman, a 20-year-old primipara, lay on a somewhat sloping bed, the head of which stood against the wall of the hut. She had been put in a state of intoxication with banana wine. She was quite naked with the thorax tied to the bed, whilst another band of tree bark held her legs down firmly and a man held her ankles fast. Another man, standing at her right side, held down the abdomen. The operator at the left side held the knife in his right hand and murmured an incantation. Then he washed his hands and also the abdomen of the patient with banana wine and then with water.

Then, after he had uttered a shrill cry, which was answered by a crowd assembled outside the hut, he suddenly made an incision in the median line, beginning a little above the pubic symphysis, to just under the umbilicus. The wall of the abdomen, as well as that of the uterus, was severed by the incision, and the amniotic liquor gushed out ; the bleeding parts of the abdomen being cauterised by an assistant by means of a red-hot iron. The operator then finished the incision in the uterine wall as quickly as possible ; his assistant held the abdominal walls aside with both hands, and as soon as the uterine wall was severed, he

pulled it apart with two fingers. Now the child was quickly extracted and handed to an assistant, and then the umbilical cord was cut.

The operator then put away the knife, rubbed the uterus, which was contracting, with both hands and pressed it once or twice. Next, he put his right hand through the incision into the uterine cavity and dilated the uterine cervix with two or three fingers from the inside outwards. Then he cleansed the uterus of clots of blood, and the placenta which had meanwhile become detached was removed by him through the abdominal wound. The red-hot iron was again used to arrest the bleeding, but was used sparingly. The assistant tried, without success, to prevent the prolapse of the intestines through the wound. Meanwhile, the chief doctor had continued his pressure on the uterus till it contracted strongly; no stitches were put in the uterine wound. The assistant who had held the abdominal walls apart now let them go and a porous grass mat was placed on the wound. The bands with which the patient was bound were unfastened; she was turned to the edge of the bed and then held up in the arms of

the assistant so that the discharge from the abdominal cavity could flow on to the floor. Then she was again put in the first position, and after the grass mat which was on the wound had been taken away, the edges of the wound, *i.e.*, of the abdominal wound, were put together and joined by means of seven well polished iron nails which resembled acupressure needles. These had firm threads of bark material wound round them (Fig. 819). Finally, over the wound, as a thick plaster, they put a paste made of chewing two different roots and spitting the pulp into a dish, then they covered the whole with a warmed banana leaf and finished the operation by putting on a firm bandage of *mbugubast*. While the needle was being used, the patient did not utter a cry, and an hour after the operation, she felt quite well."

The patient's temperature did not rise remarkably in the next few days (on the second night it was 101), but the pulse rose to 108. Two hours after the operation, the child was put to the breast. On the third morning, the wound was dressed and a few needles were removed, the rest on the fifth and sixth days. The wound discharged a little pus which was removed by means of a spongy pulp. On the eleventh day, the wound was healed.

We saw in the previous section that Cæsarean section was mentioned also in the Greek myths, but only after the death of the mother. According to legend, Buddha too is supposed to have been delivered through the left side or through the armpits of his mother. The sacred saga of the Mandæans, however, has also Cæsarean section on the living.



FIG. 819. — Abdominal stitches in a Uganda woman on whom Cæsarean section has been practised. (After Felkin.)

"The consort of King Sál was pregnant, but could not be delivered because the child was too big; she was near to death. Then Simurg appeared to Sál and counselled him to give his wife a medicine consisting of henbane from which she fell into a deathly sleep and was without sensation. When this happened, her abdomen was cut open and the big, strong son, who received the name of Rustem, was taken out. Then the cut was sewn up again; and Simurg laid her wings over it and soon the wound was healed. Something was held before the mother's nose and the smell of this awakened her " (H. Petermann).

Likewise, in the sagas of the Maori in New Zealand, a similar thing is mentioned (cf. Goldie). The god Tura discovered a dwarfish, elfish folk and took a wife from among them; when she was to bear him a son she fell into great anxiety, for, as she said, it was the custom with them to cut the child out of the mother's abdomen, which resulted in the death of the mother. The husband, therefore, sent away the native helpers and let his wife be delivered in the natural way.

In the sagas of the Jabim (Mandated Territory of New Guinea), a similar thing happens in the saga of the Women's Land. There, according to Bamler, it says that "when the women were in labour, the abdomen was cut open, the child taken out and reared; but the mother was buried." Just as in the Maori saga, to which it is probably related, the immigrants to the land prevent these old methods being applied and teach natural processes.

Interesting as these myths are, it would be rash to conclude from them that these operations were practised on the women of their tribe in a similar manner; among the Maori certainly this is so far unknown.

CHAPTER VI

THE PHYSIOLOGY AND THE PATHOLOGY OF THE PUERPERIUM

1. THE PHYSIOLOGICAL SIGNIFICANCE OF THE PUERPERIUM

ONE cannot speak logically of "child-bed" among those peoples where the women resume their usual occupation immediately after their delivery, that is to say where, as is the rule with civilised nations, they do not spend a prescribed number of days in bed. In the medical and the physiological sense, however, the puerperal period, or *puerperium*, to give the professional expression, signifies a quite definite period in the life of woman, regardless of whether she is nursed during it or not. This puerperal period begins at the moment when not only the child but also the placenta have left the mother's body, and, anatomically, it is characterised by the involution of the organs of generation.

The fact that the uterus, in which for nine months the child developed, grew and reached maturity, must have undergone very considerable changes in its anatomical structure as well as in its shape and size, even those who are not medical men will easily understand. Now the puerperal period is reckoned up to the time when all the parts of the organs of generation which have been changed by pregnancy and delivery have returned to their normal condition. To this end the uterus must contract firmly and diminish very considerably ; the uterine cavity must get a new lining of mucous membrane ; and the part within where the placenta was situated must become cicatrised and healed. In this process is discharged a blood-coloured fluid secretion which later assumes a mucous character. This is the *lochia*, or the lochial discharge which makes its way through the genitals. This continues until the process of involution just described has been concluded.

The os uteri also, which, as the reader will remember, has had to be so widely dilated during labour that the whole vaginal portion of the uterus was obliterated, must, like the uterus, be restored to its former shape. The vagina and the vulva also have undergone very considerable changes during pregnancy and labour. Owing to the pressure of the child on the great blood vessels of the abdomen, the circulation of the blood in these parts was obstructed, swelling and loosening took place and the vaginal diameter was increased. These parts have to contract and to regain firmness and rigidity, to become considerably narrower and smaller and to regain a well regulated blood circulation. All this must be accomplished before the puerperal period, in the physiological sense, can be regarded as concluded.

Since, among the women of our race at least, this takes a few weeks (probably with other women also, although so far there have been no investigations), and since with us the newly-delivered woman is accustomed to spend the first part of this period in bed, the popular name *child-bed* is used for this, and for the woman the designation *lying-in woman*, or puerpera, has arisen.

2. THE DANGERS OF THE PUERPERIUM

The involutional changes described in the foregoing section which take place in the body of the young mother are so considerable and so radical that, in all civilised nations, she is rightly regarded as in need of as careful treatment as if she were a sick person. Among many still very uncivilised peoples, however, we find a similar view. The earliest part of the puerperal period demands very special care and attention on the part of the lying-in woman and those about her, for this is the period which, owing to some inattention or injudicious procedure, often brings with it the greatest risks to the health and even to the life of the patient.

First of all there is the uterine hæmorrhage which may set in shortly after delivery. Syncope or even death may result from it. Even if the patient survives the great loss of blood she has often to contend for a long time with chronic sickliness due to anæmia. The source of post-partum hæmorrhage is usually to be sought at the placental site. Here the blood vessels of the mother are in open communication with those of the placenta, and when the latter is separated they open freely into the uterine cavity. Normally, the uterus contracts firmly almost immediately after the separation of the placenta, the result of which is the compression of all the arteries and veins, and thus the flow of blood through them is prevented. If these contractions do not set in normally, the vessels remain open and then the dangerous hæmorrhage results.

A further danger which also arises from irregular or partial contraction of the uterus is that certain parts of the uterus are relaxed and thus inversion of the uterus is caused. For this reason we find among many peoples the custom of pressing and kneading the uterus immediately after delivery to bring it into its proper position.

Over-dilatation of the os uteri and the vagina may cause a prolapse of the uterus, and therefore we see that these parts also need careful consideration. But by this dilatation, also, air and morbid matter may penetrate into the genitals, whereby the terrible danger of embolism or puerperal fever may be caused. However, it seems as if the uncivilised peoples possess a high degree of immunity from these dangerous diseases (see Max Bartels¹¹; Külz).

Very painful and harassing for the patient, though not dangerous, are the socalled after-pains. For these, too, popular medicine has effective advice. We shall have to go into all these things thoroughly in the following sections.

3. HÆMORRHAGE DURING THE PUERPERIUM

The primary dangers of child-bed are so striking in their manifestations that it is not surprising to find widespread knowledge of them even among the lower classes. Hæmorrhage shortly after delivery is one of the most dangerous accidents connected with parturition. Vullers (p. 249) records that the ancient Hindu physicians employed various remedies for it.

They pulverised a bit of earth from the innermost chamber of the storehouse; they also made a powder of *Rubia munjista* Roxb., *Grislea tomentosa* Roxb., the blossoms of double jasmine, the resin of *Shorea robusta* Gært. f., etc.; this they made the patient lick up with honey. A powder made from the bark of *Ficus indica* Linn. or coral had to be drunk with milk. The powder of *Nymphæa cærulea* Savigny (3), or of *Seirpus Kysoor* grass, of *Trapa bispinosa* Roxb. and *Radix nymphææ* they gave with boiled milk or with a decoction of the leaves of *Ficus glomerata* Roxb. (2), and fresh *Arum campanulatum* Roxb. Also rice flour soaked with sugar and honey was given with *Ficus indica*. At the same time, a towel was put into the vagina.

Quintus Sammonicus Serenus, who died in Rome about 212 A.D., cupped the breasts in post-partum hæmorrhage.

A Russian doctor in Hakodate writes of the Japanese that they plug the vagina with cotton-wool (with linen, according to v. Siebold) in bad cases of post-partum hæmorrhage; after this they bind tightly the patient's thighs close below the hips and give her a decoction of *Rosa rugosa* Thunb. to drink.

In the case of the Hindu woman, if post-partum hæmorrhage sets in, she has to stand against the wall and then the midwife presses with all her force against the patient's abdomen with her head or knees (see Schmidt⁹).

According to Tobler, in Palestine, post-partum hæmorrhage occurs very often and is of such violence that it not infrequently leads to death. The Consul, Rosen, wrote to Ploss that for the prevention of such accidents the midwives put a wide binder tightly round the abdomen, and then make the patient sit upright in bed for two hours after delivery.

In Germany popular medicine has a great variety of cures for uterine hæmorrhage in childbed. Thus in Swabia they give a lying-in woman who gets a uterine hæmorrhage a few spoonfuls of the blood she is losing (Buck, p. 44). In Upper Austria they give her three drops of her blood in warm chicken soup to drink (Pachinger²). In the Rhine Palatinate an axe or hatchet is put under the bed "so that the heart's blood may not flow away"; often an old woman passes her hand over the patient's bare abdomen whilst naming three of the highest names and reciting the saying:

"Waste blood, go away, heart's blood to thy place" (see Landes-und Volksk. d. bayr. Rheinpfalz, 1867, 346.

In Upper Austria, according to Pachinger,² it is said to be customary to allow the placenta to stand under the patient's bed for 24 hours in order to prevent a bad hæmorrhage from setting in.

In the Frankenwald, and also in various other parts of Germany, it is a fairly common popular custom to bind the arms and legs at the elbows and knees with the intention of preventing a hæmorrhage. One often hears of a too meagre loss of blood in parturition as the cause of later illness (Flügel, p. 48).

The belief in the curative power of certain stones has in some parts of Germany been preserved from ancient times, and from the Middle Ages until the present day. We have already come across the eagle stone, but the blood stone also is such another. It has only to be enclosed tightly in the affected woman's hand (of course with due invocation of God and the Saints) and the bleeding is at once stopped. As a preventive also the woman in labour in Upper Bavaria, as Höfler records, must hold a blood stone in her hand to guard against "the overflow of the blood of the heart." The blood stone as a pendant with the same prayers had likewise the same effect.

A German folklore collection in Berlin has such a blood stone presented by Herr von Chlingensperg-Berg from Kirchberg, near Reichenhall. "This stone was for a long time in the possession of a 'peasant doctor ' in St. Zeno near Reichenhall. It is flat and heart-shaped and is enclosed in a silver setting of the same form. It is reproduced in Fig. 820, almost in the actual size in such a way that one side and the edge are completely covered, whilst the other side is exposed (cf. Fig. 821).

The stone is flat, opaque and reddish-yellow in colour, interspersed with irregularly distributed blood red spots. A round hole, which is pierced through it presumably for the purpose of hanging, when it was still unfinished, appears uniformly $w_{-\rm vot.~III}$. grey. The stone has been found to be an artificial mixture, or a paste, such as is used by goldsmiths for settings.

In bad cases of uterine hæmorrhage in Styria, too, the patient is given a blood stone to hold, but this is a red iron ore. In Upper Austria and Salzburg a ring, cut from red cornelian (a so-called "blood ring"), is put on the ring finger of the left hand. In Styria, however, still other methods are used. The woman in childbed must, for example, take a parsley root in her hand, or the uterine blood is caught, dried over a red fire, powdered and given to the patient to take. Also ground chamois horn, as well as a decoction of shepherd's purse, are regarded as styptics.

In Upper Austria and in Salzburg one prescription is to make a ducat red hot and then cool it in water several times. Into this water some gold is grated and this given to the woman to drink (Pachinger ²). A roasted nutmeg put on the woman's navel is also of assistance.

In many cases a hempen thread is put round the left little finger and the right big toe; the abdomen is rubbed with warm brandy and on the stomach is placed a little bag of cellar earth; then the patient is forbidden to raise her arms above her head because this is regarded as the main trouble in the activity of the after pains.



Fig. 820.—Silver case containing a "blood-stone." Formerly in the possession of a peasant "doctor" in St. Zeno, near Reichenhall. (Photo: M. Bartels.)



FIG. \$21.—"Blood-stone" in silver mount formerly in the possession of a peasant "doctor" in St. Zeno, near Reichenhall. (Photo: M. Bartels.)

Blessings and exorcisms are also in Styria supposed to stop post-partum hæmorrhage. One such exorcism runs :

"I [so and so] give thee [so and so] aid. What God has spoken is ever true : Thy blood shall stanch completely : Thy blood will certainly be stanched, As Jesus Christ died on the Holy Cross So surely shall thy blood be stopped. It is done, it is done, it is done !"

After this, three Pater Nosters and Ave Marias and the Creed are to be said (see Fossel).

Midwives in Galicia try to combat these hæmorrhages by means of cold compresses which they apply to the abdomen (see F. Weber 4).

The Letts, according to Alksnis, have no remedy for such hæmorrhages; at most they have recourse to exorcisms, *e.g.*,

"The sons of God made a cupboard They put in golden rafters; I will close the copper gates— Not a drop more blood will flow."

After this, "Amen" is said nine times.

4. PRIMITIVE METHODS OF PREVENTION OF POST-PARTUM HÆMORRHAGE

Savage peoples also have various methods of preventing or stopping postpartum hæmorrhage. The midwives of the Annamites used a special kind of massage for this purpose. Mondière (p. 42) states :

"En première lieu, la patiente couchée sur le dos, la sage-femme appuie assez légèrement un pied sur la poitrine, puis elle descend peu à peu, et quand elle est rendue à la hauteur du nombril, elle monte alors sur le ventre de la femme avec les deux pieds, se suspend de nouveau à la poutrelle par les deux mains et piétine le ventre de l'accouchée à peu près comme un vigneron foule sa vendage. Ces pressions énergiques, dirigées de haut en bas, pendant lesquelles les deux pieds se maintiennent rapprochés et s'avancent lentement sans cesser de se toucher, font contracter l'utérus et le vident du sang et des débris qu'il pourrait contenir. Ce peut être une bonne chose, mais les manoeuvres sont d'une violence excessive. Puis, l'accouchée s'étend sur le ventre et la même massage est pratiquée avec les pieds depuis les épaules jusqu'au niveau des vertèbres lombaires, où le foulage avec les deux pieds se renouvèle."

In Achin post partum hæmorrhage seems to be not exactly rare. Jacobs ² states that the midwife attempts to stanch bad hæmorrhages by internal and external remedies known to her. If these are of no avail, and the patient's life is in danger, then methods of exorcism are resorted to because there must always be an evil spirit involved in this. They never resort to plugging the vagina. Some midwives knead the uterus vigorously not only to cause it to contract, but also to press out the blood which, being superfluous, must be got rid of and, by this method, they usually bring about stronger contractions of the uterus.

In the Philippines, according to Mallat, the Malayan midwives put the *biguis* on the patient's uterus, a plug of cotton-wool, which is kept in position by strong compression. If hæmorrhage occurs in spite of this the midwives pull the patients by the hair with all their strength.

Likewise in the little island groups in the Moluccan Sea one comes across provision for possible uterine hæmorrhage. The effect in this case is said to be brought about chiefly by warmth, the aim of which is to make the blood coagulate. For this purpose the women in childbirth lie in such a way that the genitals are turned directly towards the fire. On the islands of Luang and Sermata the patient lies with her buttocks so close to the fire that not infrequently burns occur. On the Babar Islands, too, the lying-in women get so near the fire that their pubic hair is singed. With many of these islands fumigations are used on similar grounds. To these we shall revert in a later section.

The inhabitants of the islands of Tenimber and Timor Laut try to prevent uterine hæmorrhage by drinking the juice of aroan leaves. Similarly, on the Kei Islands a decoction of papaw is drunk.

On Keisar and the Aru Islands the desire is to make the blood flow in order, as they believe, to get rid of the impure substances more quickly. To this end the woman in childbed eats nothing but rice boiled in kalapa milk; many also use daily expressed papaw juice. The Keisar islanders, for the same reason, take after delivery a bath in water in which finely chewed leaves of *Vitex pubescens* Vahl. have been mixed, and after it some arak is drunk with the pungent *uruh*, the fruit of a species of pepper (Riedel ¹).

The native midwives on the Fiji Islands are also experienced in uterine hæmorrhages in childbed. They informed Blyth that if a uterine hæmorrhage sets in after labour, as sometimes happens, the clots are removed from the vagina and the os uteri, and the patient immediately taken to a river, where she has to bathe and wash her external parts. If the patient is too weak to be taken to a stream, the procedure is carried out in the house. The application of cold water is carried out after delivery, in many cases at intervals of four days, and it always has the effect of arresting the hæmorrhage. The midwife knew of no case where such a hæmorrhage caused death; and the more blood is lost the better it is supposed to be.

Pallas, in discussing the Ostiaks, states that, when their wives are confined on a march at a place where they cannot stop owing to lack of food, they give them a good portion of boiled fish glue, which is said to arrest the discharge of blood very quickly. However, Pallas does not vouch for the truth of this tale.

Among the Santee, according to Engelmann,¹ the woman in childbed tries to avoid a hæmorrhage by douching herself. To do this she fills her mouth with water and blows it with all her force against her abdomen till the hæmorrhage stops.

According to Hille hæmorrhages after delivery are very rare among the negress slaves in Surinam; and if they do occur they are usually quite insignificant.

Among the Swahili, according to H. Krauss,² the vulva of the delivered woman is rinsed with very hot water for six days, which is certainly a very sensible procedure if one assumes (which is not expressly said) that the purpose is to check hæmorrhage.

5. PROLAPSE OF THE UTERUS IN THE PUERPERIUM

The rough manipulations to which women in labour in many peoples are exposed do not always pass harmlessly; in not so very few cases delivery is followed by a prolapse or even an inversion of the uterus. Thus MacGregor (p. 66) has frequently observed prolapse of the uterus in the Canary Islands, especially among the women of higher rank.

Likewise in Turkey, as Oppenheim (p. 47) records, prolapse of the uterus and the vagina in consequence of difficult and hasty delivery is by no means rare.

The Wolof negresses are said also to suffer frequently from *prolapsus uteri*, whilst its occurrence is rare among the European women living in the same locality (see J. M. Hildebrandt, p. 395).

Among the country population in Russia, according to Krebel (p. 8), prolapse or inversion of the uterus during labour is often caused by the midwives. The violence of their procedure when they, as it were, shake the child out of the patient, is to blame for this, or their violent tug at the umbilical cord to drag out the placenta. If the uterus is pulled forward in this way, the poor woman is taken to the bathhouse and laid on a board, which is placed on the steps of the steam bench in such a way that the feet are higher than the head. Then the board with the unfortunate woman on it is raised and lowered quickly several times so that her body is shaken in the same direction. They believe that in this way they can shake the uterus into the abdomen again, somewhat like a cushion into its cover.

At the time, when the pseudo-Hippocratic writings were published, prolapse of the uterus, due to the stupid procedure of the obstetricians, seems to have occurred not infrequently in ancient Greece. For in one of these writings, "De exsectione fœtus," prolapse of the uterus, which happened even during labour, is discussed. Also the dismemberment of the child in the womb seems to have been stated as an incidental cause of prolapse of the uterus. Soranus, for instance, in his work discusses very thoroughly the "prolapse of the womb after embryotomy." Even before him the attention of many obstetricians was directed to this subject, for we learn from him the opinions and methods of Herophilus, Diocles and others, of which he disapproves for the most part. He himself, when there was hæmorrhage in the case of prolapse, had cold compressions made and then attempted replacement (cf. Pinoff, II., 243).

Kangawa declares that among the Japanese prolapse during parturition is always the result of some careless procedure. He attributes this, as he says, to the fact that the patient had been made to press and bear down before the fœtus was in its proper position, so that the symphysis does not open as it certainly must have done if the uterus has rotated; the child is still then covered by the uterus, and when it descends it presses the *os uteri* down with it. But even if the child is already born prolapse of the uterus may still arise if, in furthering the expulsion of the after-birth, the patient is instigated to useless bearing down.

The replacement of the uterus was done by Kangawa as follows :

"The patient is made to assume the dorsal position ; then the physician squats at her right putting his left foot on the floor with his leg supported against the patient's right hip. Then she has to put both her arms round the physician's neck, by which means she is raised a little from the floor ; now he pushes his right hand between her thighs and, whilst supporting her from behind with his left hand, he takes hold of the prolapsed part with his right, and places it on the palm of his hand. Finally, he raises himself a little, thus raising the patient also ; in this way the patient's head bends back, the loins are stretched, the abdomen tense ; this moment the physician uses to push back the uterus." Kangawa's precedure in prolapse of the intestine was, "where the patient has already had a prolapsus ani and this has occurred after labour, causing great pain, the woman is to be placed against the wall or beam so that nose, sternum and toes touch it similarly. If she cannot stand close, somebcdy has to support her. The physician now goes behind her, kneads the buttocks with both hands, puts his hand over the prolapsed part and gradually pushes the rectum in ; this takes place quickly and successfully " (see Miyake).

Besides this prolapse of the uterus, injuries elsewhere may occur owing to the rough manipulations undertaken with women in labour. Oppenheim (p. 47) reports from Turkey that there lacerations of the vagina and of the perineum are often observed. Of Monterey, in California, we learn through King that the poor women lie there completely exhausted after delivery, and that inflammations and suppurations usually follow the long-continued rough treatment of the soft parts. No doubt similar observations might be brought forward from other parts of the world.

6. AFTER-PAINS IN THE PUERPERIUM

The contractions already mentioned above, which the muscular apparatus of the uterus has to carry out after the expulsion of the child and the placenta in order to contract and diminish the uterus as quickly as possible, are felt by the patient as pains like those of labour and are called *after-pains*. For these there are all kinds of popular remedies.

Among these remedies we have, first of all, rue, in the form of freshly expressed juice, or as a tea, tansy, rum, French brandy with sugar or with gunpowder, or brick dust. Or a powder is procured from a quack which usually consists of brick dust and of bones of unborn hares, moles and young animals born blind, *e.g.*, mice; or the chemist is approached for a cure like coral powder, hartshorn, etc., and in many chemists' shops, where such powders are made up, they consist of the most wonderful mixtures; many contain gold, also mistletoe, which to the old Celts and Teutons was sacred, and peony. Also all remedies "for the wind," *i.e.*, carminatives, are given, *e.g.*, caraway oil, aniseed, vermouth or fennel-seed.

In Styria painful after-pains are combated by rubbing the abdomen with Glegor brandy, Melissa balm or Hoffmann's drops, after which the abdomen is tightly bound with towels. They also give the newly delivered woman a glass of bilberry mixture with warm water to drink. To prevent after-pains the women in labour in Franconia are thrice given three drops of their own blood discharged in labour in a spoonful of water. In Swabia also the woman in childbed who gets a uterine hæmorrhage has to take for it a few spoonfuls of the blood she is losing (Buck, p. 44). Further, for this purpose they put the still warm placenta, or eggs baked in lard, on the abdomen. This specific Schmitt also recommended.

In the Palatinate, as F. Pauli records, warmed coverings are applied for violent after-pains; they also use camomile internally and in poultices, rub in poppy-seed oil or oil of henbane, and occasionally give poppy-seed oil to drink. In the country the midwives bind the abdomen of the newly delivered woman besides.

In Georgia they try to combat the after-pains by frightening the patient.

In Russia, according to Demič, in the Voronezh, saffron is used as a specific for the after-pains; in Tomsk, *Veronica Beccabunga* Linn. (4). Carrots are used in Kiev, and also the powder of *Alchemilla vulgaris* Linn. is taken in water "so that the womb may not get weak."

Among the Esthonians it is believed that it has an alleviating effect on the after-pains if the patient is given internally a few drops of the blood which dropped from the umbilical cord when it was being ligatured.

Vámbéry records of the Turks of Central Asia, and especially of the Kara-Kirghiz, that they throw a quantity of fat into the fire immediately after the birth of the child "so that the evil spirit may free the mother from the after-pains," and, in case they should go on in spite of this, all kinds of other remedies are tried which we have already mentioned elsewhere.

Among some gipsy tribes in Transylvania, when the after-pains set in, the patient is fumigated with rotten willow wood, for which purpose the wood is kindled and the smoke conducted under the patient's blanket. At the same time the women occupied with this recite the following verses :

" Quick and quicker flies the smoke And the moon flies too ! Now the two have met So thou shalt get well ; When the smoke is past, Be thou free from pain, Be thou free from pain ! " (v. Wlislocki²)

The Ainu on Sakhalin devote special attention to the puerperal period. Thus, for example, Pilsudski states that massage is still continued after delivery. In order to alleviate the pain it is supposed to be advisable to put a piece of the dried womb of a bear or a tooth of an iron saw in the chips with which the rubbing is done.

The natives of Ushirombo in East Africa, a district south of the Emin Pasha Gulf, as Kersting records, make the woman for three days after delivery drink the grated root of a big tree (*musekira*) boiled in water. This is in order to remove the after-pains and expel the remains of blood from the uterus.

A remarkable view as to the causes of the after-pains prevailed in North Germany at the beginning of the eighteenth century. Kornmann gives the following report of this :

By these pains, which are called after-pains, it occurs to me what wonderful nonsense the old women imagine and tell people as to how these pains arise. For they say that the womb is seeking the child, therefore runs and burrows hither and thither in the abdomen. Now many a one believes this very easily when she feels the wind go hither and thither in her bowels. They

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add to the tale by saying that the womb presses and squeezes it in its mouth and from this come the pains in the belly, in the back and the fear in the heart; they suggest all kinds of absurd things for it, as that the womb should be soothed, comforted and tamed.

Here we again come across the belief in the animal nature of the womb, which has already been discussed.

7. PUERPERAL FEVER

The most important of all the dangers to which the lying-in woman is exposed is incontestably puerperal fever. It is a blood poisoning which is caused by the penetration of pathogenic micrococci into the blood stream of the newly delivered woman. With the help of asepsis carried out most scrupulously, civilised nations have been able to reduce to a very small percentage this scourge of the human race, so terrible in former times, and which claimed more victims than cholera. Among the uncivilised nations there seems to be a higher degree of immunity from all septic diseases, to which, besides all accidental affections of wounds, puerperal fever also belongs. That this immunity is not absolute we shall learn in a later section. There we shall see that in many savage peoples quite definitely established measures have developed for dealing with those unfortunate women who have died in childbed. Among savages the idea that in puerperal fever there is an entry of demons arises to some extent from the blood. Hence M. Bartels was perhaps right when he said that we may have to regard it as a recognition of the danger of infection to lying-in women when we learn through Pardo de Tanera that on Luzon the midwives put their foot on the outer genitals of the patient immediately after the child is born in order to prevent the entry of "air" into the inner genitals.

The natives of Ceram state the reason for the patient being turned towards the fire after delivery is that in this way puerperal fever may be prevented (Riedel¹).

About the women in the Fiji Islands we learn through Blyth that accidental childbed affections do not occur among them. The only unexpected circumstance of any importance to which they are subjected is the cessation of the lochia about one or two days after delivery. This gives rise to a fit of shivering, followed by fever, headache, thirst and symptoms similar to those in European women from the same cause, whilst this causes a sensation as if, to use the expression of the native midwives, an orange were rolling about in the stomach. This sensation is probably caused by the lochia retained in the uterus. The treatment, which is introduced at once, consists in the midwife first lighting one or two fires near the bed of the lying-in woman; and further, in applying hot banana leaves to the patient till the lochial discharge appears again.

Of the lying-in women in South Tunisia, Narbeshuber states that "the puerperium proceeds normally almost always; puerperal fever is very rare. The reason for this is, no doubt, that every pregnant woman, as soon as she feels labour approaching, washes her whole body thoroughly in a warm bath; and that the otherwise quite untrained midwife cleanses her hands properly before giving her assistance."

For protection in childbed among the Gilyaks, on the Lower Amur, a talisman is hung up, which is reproduced in Fig. 822 from a photograph.

Among the Ainu in Japan, if high fever sets in, the woman is given a decoction of the *kiné* root two or three times daily (v. Siebold).

Of the Parsee women Schmidt ⁹ says :

"Puerperal fever, encouraged by enclosure in unhealthy rooms, is one of the main causes of mortality among Parsee women. In addition, there is the little care taken by the midwives who, by their want of cleanliness, contribute most of all to the transmission of this terrible endemic plague. On the other hand, the garments of the lying-in women help to spread infections; instead of being destroyed they are given to the *bhangis* or *halalcores*, who sell them again without making sure whether they may not have come from a woman who has died of an infectious fever; they thus become the most active disseminators of the infection."

The Talmudists had the idea that the pain and suffering of a pious person could preserve other people (and thus also lying-in women) from death. This is shown by a passage of the Talmud, but also from the Midrash Běrēshith Rabba ; there we read :

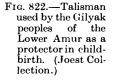
> "Our Rabbi suffered for 13 years from toothache; during this period no lying-in woman died in the land of Israel and no woman had a miscarriage in the land of Israel. At the end of the thirteenth year our Rabbi was angry with Rabbi Chija the Great; then came Elijah of blessed memory to our Rabbi in the form of Rabbi Chija; laid his hand on his tooth and it was at once healed. Next day Rabbi Chija came to him and asked him : Rabbi, how is your tooth? He answered : Since thou hast laid thy hand on it yesterday, I have been healed. Then said Rabbi Chija : Woe betide you, ye lying-in women and pregnant women in the land of Israel ! I have not laid my hand upon thy tooth. Now our Rabbi knew that it had been Elijah and from that moment he did honour to Rabbi Chija " (see Wünsche ¹).

> Thus we see that Rabbi Chija is quite convinced that now, after the miraculous healing of the Rabbi, the protective effect for lying-in women is destroyed.

> In conclusion, we give the record of Schneegans of a peculiar conception of puerperal fever among the Sicilians :

"We see, moreover, the ancient mythological traditions appear among the people in concrete fashion. Close to Messina, there is a church crowned with a cupola; it is called La Grotta; here, in heathen times, a temple of Diana is said to have stood or a shrine of the Nymphs or Sirens. The seafarers of this coast place naturally know nothing of Odysseus; who and what the Sirens were they have long forgotten and yet, when they go fishing and when the weather-tanned seafarers have returned, one sometimes hears them say meditatively to their wives: 'The siren has been singing again !' And when 'the Siren has sung,'this means something very special; an epidemic is coming which is particularly dangerous to women who are pregnant, for lying-in women and new-born babies die in this year. The belief in the song of the Siren is not only widespread among the fisherfolk: it penetrates to the town, and if it

is said one morning, 'the Siren has sung,' then one can be certain that a number of women who reckon themselves among those menaced will leave Messina for a little town in a higher situation, where, as they believe, the curse of the Siren's song cannot reach them. What the fisherfolk really understand by the singing of the Siren I have not been able to discover; the answer is simply 'we have heard it.' The Siren also does not sing in stormy weather, so that one could assume that it was a particular whistling of the wind or the noise of turbulent waves—no, this strange singing generally sounds in quite calm weather and no power of heaven or earth could argue the fisherfolk out of their having heard it. That this superstition is a survival of ancient Greek times nobody is likely to deny; whence else could the idea of a Siren's song come to the fisherfolk but from the traditions of Greek mythology ? Nevertheless, it is strange that just



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these very inferior 'half or quarter gods' should have remained through the centuries in the talk of the people whilst Zeus, Poseidon and even Aphrodite have long disappeared from it."

Probably in this case a very interesting survival much older then Hellenism in Sicily is involved. It is quite certain that the Sirens, like so many other halfanimal, half-human gods, belong to a civilisation which prevailed in the islands of the Mediterranean centuries before the Greek. Of this the images on gems are evidence. Of their nature, unfortunately, we know little. Probably it is connected with the once-prevalent view of the demonic activity of the Sirens. The ancient Greek mythologists, who doubtless took them from an earlier religion, have conceived them as the playmates of Persephone, the goddess of death. Moreover, it must be borne in mind that the archæologists have interpreted the Sirens as, among other things, personifications of death lamentations. In Attica images of the Sirens were used to adorn graves (see Schrader ²).

8. PUERPERAL INSANITY

The reader probably knows that sometimes an unfortunate woman is afflicted with a mental derangement in the puerperal period. We reckon these diseases among the so-called sexual crises, phenomena which usually emanate from one of the great divisions of sexual development (puberty, climacteric, menstruation, puerperium, etc.) and extend over the life of the individual afflicted for a short time and then generally disappear. These are not nervous disturbances (perhaps due to hereditary taint as M. Bartels believed), but to toxic and internal secretory derangements. To the derangements of puberty belong the so-called storm and stress period, melancholy, epilepsy, stuttering, masturbation, youthful exaltation, etc. The mental derangements of the puerperal period especially deserve to be mentioned. These include all kinds of mental disturbances, often maniacal in type. In this the mother's fits of rage may be directed towards her own new-born child. Disturbances may even go hand in hand with lactation, and are often classed among the psychoses of exhaustion.

The mental disturbances of the puerperal state do not in themselves form an exclusive group of psychoses; they appear sometimes as mania, sometimes as melancholic depression or even in the form of a stupor. Also in the course of the disease one form may pass into another. They commence, according to various authorities, between the fifth and tenth days after labour.

The course and prognosis of the disease depend on the previous state of the affected brain. R. v. Krafft-Ebing² reckons that two-thirds of the cases are cured, but a period of six to eight months is required for this. The gynæcologist Dietrich Wilhelm Busch as late as the year 1843 regarded these puerperal psychoses as a form of puerperal fever.

What makes us go more thoroughly into the pathological conditions are reports of puerperal psychoses in a primitive tribe, the Achinese in Sumatra. Corresponding to the animism developed to a high degree in this tribe, mental disturbances among lying-in women in this case take the form of demonomania, or the state of being possessed by demons.

According to the records of Jacobs² there was a tale of a spiritual being which tried to get into the bodi ϵ s of women in labour through the big toes. By the same path this female demon now tries to take possession of the lying-in woman, and

the same methods as in the case of the woman in labour are used in trying to protect the lying-in woman from it.

Among the very excitable women of Achin, according to Jacobs,² the outbreak of insanity in the puerperal period is not uncommon, and the confused and crazy talk of the patient is imagined by the people about her to be the talking of an evilbringing spirit which has got into the woman. There are various spirits believed by the Achinese to be able to do this. One is the already mentioned Těngkoe Rabiah Tandjoeng, which, in spite of all precautionary measures, sometimes succeeds in escaping the attention of the woman's attendants. A second spirit which causes similar harm is the Boereng Hamina. She was a girl from a family of high rank, who was descended from the grandson of the Prophet. She became pregnant by a young man of low origin, and she promised her parents that, to atone for the disgrace to the family, she would take her life. First a feast was to be prepared as if she wcre to be married, and during the preparations for this she drowned her father by capsizing the boat. Now her spirit flies about in the air in order to take possession of lying-in women.

Finally, a whole group of demons of this kind come into consideration: these are the wandering souls of women who have died in pregnancy or childbed, when these unfortunate creatures have not had proper burial. Detailed information of the manner of burial of these women who have died during pregnancy or in childbed will be given in a later chapter.

Now if insanity breaks out in a puerpera in Achin, the attendants of the patient try before everything to ascertain what species of the demons in question has taken possession of her. It seems important for them to know this for the treatment of the patient depends on it. However, it is not difficult to ascertain. For if they ask the patient about it the demon itself answers through her; or they are able to recognise what demon it is by what it says through her.

If, for example, the pregnant woman asks for a certain dish in which a boiled egg, the outer flower-buds of a plantain tree (*djantoeng*) and the leaves of the *Moringa polygona* Gaertn. (*daoen kelor*) are the main ingredients, then she is possessed by the spirit of Si Rabiah Tandjoeng.

Now it seems very remarkable that the patient's attendants have no fixed measures for dealing with these spirits. On the contrary, they try hard to fulfil the patient's desires as quickly as possible in order thus to satisfy the demon and drive it away from the woman. They are, however, seldom successful in this, and very soon the patient begins again to do perverse things and ask for impossible ones. Besides this, however, they try to persuade the demon to set the woman free again. In the case of Si Rabiah Tandjoeng pilgrimages to her grave are considered particularly efficacious ; and the great number of these pilgrimages shows, on the one hand, how often this demon attacks lying-in women ; on the other hand, however, that in the end it is not inexorable, and lets its booty go again after offerings have been made to it. This latter fact also indicates clearly that these puerperal psychoses are finally cured. We shall, as we said above, learn in a later chapter about the protection from the *Sĕsoewé*, the spirit of women who have died during pregnancy.

CHAPTER VII

THE THERAPY OF THE PUERPERIUM

1. RESTORATION OF THE GENITALS TO THEIR NORMAL POSITION

THE extraordinary increase in size which the uterus undergoes in pregnancy and the sudden change of form caused by delivery might very easily lead to the idea that something special must now take place to get the displaced, bruised and swollen genitals back into their proper position and shape.

Susruta teaches that the uterus has descended during parturition; in order to push it back into place the finger is to be bound with hair and the *collum uteri* wiped, or the uterus replaced with the oiled hand, the nails of which are well cut. For the same purpose the hands and feet of the lying-in woman were smeared with the powdered coco-nut root and her head sprinkled with the milk sap of a Euphorbia.

In Palestine also the idea prevails that after a confinement the genitals must be put into place again. For this purpose Tobler records that the midwife accompanies the lying-in woman on her first visit to the public bath; then the patient is laid on the floor and the midwife then inserts into the vagina a solid body, the structure of which is her secret, and in order to get this up as far as possible she presses her foot against the genitals of the patient, whose feet she pulls hard towards herself.

On the Amboina Group, immediately after delivery the uterus, as they say, is "put in its place." By doing this they think uterine prolapse is prevented. Also on the islands of Luang and Sermata the "uterus is put in its proper place," and then the patient is rubbed for 10 days with finely chewed *kalapa*. A similar massage is used for the same reason on the Aru Islands and on the islands of Leti, Moa and Lakor (Riedel ¹).

Among the Galelareese and Tobelorese of the Dutch East Indies the lying-in woman must be pressed for ten successive days with warm stones, which are wrapped in a towel with *kalapa* nut. This is done to press out the so-called white blood (Riedel).

According to Jacobs² the Achinese also have a similar custom.

On the third day after delivery a flint as big as a fist is warmed at the fire; the midwife with both hands presses the uterus upwards, puts a few *nawas* leaves, the warm stone and then a soft little cushion on it, and now the abdomen from the breasts to the hips is tightly bound with a binder, a hand's breadth wide and several metres long, so that the uterus is pressed upwards. In the morning of the seventh day the binder is removed and the woman is now left free. On the tenth day she is bathed; on the eleventh day, in the morning, her abdomen is rubbed with a mixture of kitchen soot, *kalapa* oil and white of egg, and then again bound up, but without the stone and the cushion. This binding is left for three days. At the same time, on the eleventh day from seven till nine, on the twelfth day from seven till ten, and on the thirteenth day from seven till eleven o'clock, the patient's legs are tied together with a wide band, which is pulled tight by three women. After the thirteenth day no more binding is done.

Alksnis reports of the Letts as follows :

"Not infrequently, if any abnormality presents itself in the course of the lying-in, the old midwives declare ' that the uterus is blown out with wind,' ' that it has gone up to the heart,' ' that it is not in its place,' that it has risen,' etc., and they offer to remedy this condition ' by replacing and joining together the internal organs displaced by parturition.' For this various manipulations, which are not unlike 'stroking,' and represent certain manipulations of the massage of the abdomen, are used : those are often done in the bath house. Dr. Blau writes that in this treatment the injured genitals are also handled, and that consequently internal interference in the genital tract also takes place which leads only too often to puerperal fever."

A number of measures are taken against relaxation of the vagina. Susruta had injections of a very complicated medicament made. This was compounded by mixing a liqueur with pepper, white mustard, costus, coco-nut, euphorbia juice and yeast; this had to stand for a time, and before being used oil with white mustard was added.

On the Amboina Group, in order to cleanse the vagina, or, as they express it, "to contract" it, they use a decoction of certain leaves (*Chavica betle, Sygyzium jambolanum* and *Psidium guajava*). The Tenimber and Timor Laut islanders have their genitals washed after delivery with a lukewarm extract of *Vitex pubescens* Vahl. On Eetar the juice of the boiled leaves of *Chavica betle* is used for this washing (Riedel¹).

To contract the vagina after delivery the Somali in East Africa smear halfslaked lime; and the Swahili women sometimes use lemon juice in the vagina (Hildebrandt²). Among the Loango negroes the lying-in woman cleanses and rubs her genitals with bunches of the leaves of *Ricinus communis* with water until all discharge has ceased (Pechuel-Loesche).

Lübbert records a remarkable method of the women of Tanganyika Territory for the replacement of the genitals in childbed.

The lying-in woman has before everything to take care that the emptiness formed in her abdomen is filled. This is done at once by a goat being killed and the young mother fed with as much meat as her stomach will hold. The result is good, for the idea of overloading is foreign to the stomach of a Hottentot or Bergdama woman.

Here may be added what Narbeshuber says of the women of South Tunisia. He says :

"The lying-in begins with the patient being laid on her right side, in which position she has to remain for several hours, and the midwife massages the left hip and the buttocks, which procedure is supposed to help the contraction of the uterus."

A number of other measures which have similar ends in view (particularly the fumigations and binding of the abdomen) will be discussed in a later section.

We shall append here only the custom reported by Pachinger² from Upper Austria and Salzburg of putting a frog in a closed vessel under the bed of the lying-in woman to prevent the abdomen from remaining swollen.

2. FUMIGATIONS DURING THE PUERPERIUM

Among a number of peoples we come across the peculiar custom of exposing the newly delivered woman to a regular fumigation. The idea at the root of this custom is made clear to us by the natives of the Amboina Group, who state directly that their intention in doing this is to arrest the hæmorrhage from the uterus and to soothe the parts of the vulva which have been pressed and bruised during parturition. The patient remains in the position which she assumed for delivery, kneeling with her legs apart; and then an earthen jar filled with vinegar is placed under her

genitals and into this are put three hot stones, which produce considerable vapour. On the island of Engano a big fire is lighted immediately after delivery, and the patient crouches beside it so that she may recover more quickly (Modigliani²). On the Tenimber and Timor Laut islands the lying-in woman places herself with legs wide apart over a fire-pan, for which the husband must bring the firewood in order thus to make the smoke go towards her genitals. On the islands of Romang, Dama, Teun, Nila and Serua the patient is put on a raised couch under which the husband must keep up a fire so that the lochia may cease (Riedel ¹). In Laos a bright fire is kept up, not under, but near the lying-in woman, and this for a period of from 3 to 13 days (Schmidt⁹). In Tahiti, according to Wilson and Moerenhout, the recently delivered woman along with her child are put into a vapour bath as hot as possible, and immediately after into a cold bath. According to Anderson's statement this vapour bath is intended to protect the woman from troublesome afterpains. Among the Tobelorese the lying-in women sit for a few hours daily with their genitals uncovered over a stone jar containing water, into which, in order to produce a kind of steam bath, red-hot stones are thrown (Riedel).

At Doreh in New Guinea the lying-in woman and her child are bathed immediately after delivery and are then put beside a hot fire and as near to it as even the mother can bear.

The midwives lay between the thighs of Chinese puerperæ hot bricks, with which they produce aromatic vapours (Hureau de Villeneuve). After the Annamite woman in Cochin China is delivered she is wrapped by the midwife in a linen cloth dipped in water of the temperature of the surrounding air.

She has to lie on her back; from her clothes and from the mat is cut off every bit that has become stained or soaked with blood; the charcoal stove is set going and this is placed on or under the hurdle, which serves as a bed for the patient, and on this bed and in the same hut the woman has to lie uninterruptedly for from 20 to 30 days without washing herself, unless perhaps the external genitals. These hot stoves under the bed often cause burns on the patient's buttocks, but, according to Mondière (p. 43), the warmth which they engender dries the lochial discharge to such a degree that perhaps puerperal diseases develop less frequently.

A more detailed description of the Siamese procedure, recorded by Marco Polo, by which the lying-in woman is exposed for 30 days to a real purgatory is given by S. R. House.

On the floor of the lying-in chamber a fireplace is brought in or is improvised from a shallow box, or from a simple casing from thick boards or trunks of the banana tree, rectangular, and about 3 ft. long by 4 ft. wide, the inside being filled 6 in. high with earth. On this some pieces of wood of the thickness of the wrist are placed for the fire. Along one side of this rectangle, and close to it at the same height as the fire, is placed a 6-ft. to 7-ft. board, and on this a rough mattress. On this or even on the bare board the unfortunate woman, quite naked apart from a narrow strip of cloth round her hips, comes to lie; nothing else protects her from the fire at which a duck could be roasted (Fig. 823). Then she exposes herself as if to a self-turning roasting oven, both front and back, to this extreme heat. Thus lying-in women, not only in Siam, but also almost among all the tribes of Indo China and Bangkok, spend a whole month, and they are allowed only hot water to quench their thirst. Cambodian women bring it even to a higher pitch, for they put the couch, or the bench of bamboo poles on which they lie, not *along* the fire, but actually *over* it, so that they get the full effect of smoke and heat.

The Mohammedan Malays observe this custom in the same way as do the Buddhist Siamese; hence it appears that with both it is an ancient tradition.

Schlagintweit³ records that in Burma the lying-in woman, immediately after

the birth of the child, is brought into a perspiration by warming-pans and warm coverings and by being rubbed with tumeric and then with hot stones. Under her couch a coal pan is lighted on which strong-smelling herbs are thrown. According to another record, she has to lie on her side at the fire for from five to ten successive days, with her body quite uncovered; and she is so close to the fire that it raises an eruption on her skin. Schlagintweit³ states further that the patient is exposed to a vapour bath as early as the seventh day. A big jar with boiling water is placed under a seat on which the woman, wrapped in mats and towels, has to sit for a full hour. On the eighth day she goes about her usual business.

In Achin, in the lying-in room, a couch of split bamboo is made up for the patient, and in this she is placed after delivery. Shortly before this a rectangular trough, made of logs as thick as an arm of *Metroxylon Sagu* Rottb., is put down, which is to serve as fireplace. It is filled with bits of plantain branches and coco-nut

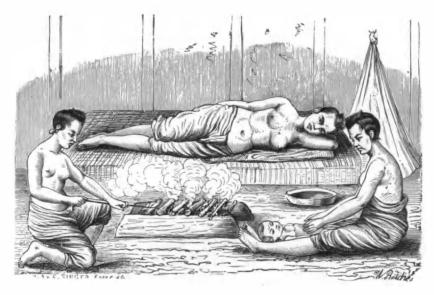


FIG. 823.—A lying-in scene in Siam. (After a photograph by H. Ploss.)

shells. The necessary fuel has to be in the room for at least ten days, for in this period nothing must be brought in because an evil demon might have clung to it. Every evening a fire is now lit here on which the nurse sprinkles a mixture of salt, pepper, bits of horn, sulphur and saltpetre to drive the demons away. The puerpera lies with her body towards the fire so that the smoke goes over her abdomen. The fire is kept burning during the day as well, but nothing is sprinkled on it. It is amazing, says Jacobs,² how the poor women can endure being in this room. A young lying-in woman of his acquaintance about 15 years of age fainted three times, an occurrence which was, of course, looked upon as due to an evil spirit. The attendant lies flat on the ground near the fire at night, so as to be less troubled by the smoke.

Likewise the Rocouyenne Indian on the Yari River in South America must take a vapour bath immediately after delivery. For this purpose she lies down in a hammock under which red-hot stones are piled. Over these cold water is poured and thus plenty of vapour is produced (cf. Fig. 824).

According to Rieds, the Indian woman of Los Angeles, in California, has also to undergo fumigation immediately after delivery. This undertaking has the significance of a ceremony of purification for mother and child. The procedure is as follows.

A hole is dug in the middle of the floor of the hut and in this a fire is lighted in which stones are made red hot. When the wood is burnt to ashes, branches of wild fern are thrown on it and the whole covered with earth so that only a little chimney-like opening is kept. Over this, closely wrapped in a mat, the mother has to place herself with her child in her arms. Then water is poured through the opening and thus enormous clouds of steam arise. Owing to the heat, the patient is at first obliged to hop and jump and then follows an abundant perspiration. When no more steam arises, the woman lies down with the child on the heap of earth till the procedure is repeated, as happens morning and evening for three days.

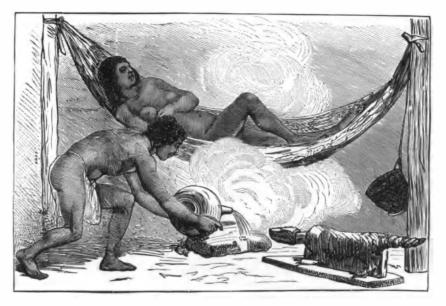


FIG. 824.—Lying-in Rocouyenne Indian woman undergoing the steam bath. (After Crevaux.)

Among the Coroado in South America, according to v. Spix and v. Martius, the lying-in woman with her child are fumigated with tobacco by a priest. We must not forget in this connection that a ceremonial smoking of tobacco in honour of the gods is often present in ritual actions.

Of lying-in women in Abyssinia, Dr. H. Blanc, who was a prisoner of King Theodor in Magdala, records that immediately after delivery, they lie down on a wooden couch, under which aromatic herbs are piled and set on fire. Thick smoke then envelops the unhappy patient, who is held down on her couch by three strong men and prevented from escaping (Bechtinger ², p. 153).

In Algeria, the lying-in woman's genitals are fumigated with cow-dung, which is thrown on glowing coals.

The Bogo, also in North-East Africa, fumigate the lying-in woman for reasons of ritual.

In Senaar, according to R. Hartmann, fumigation of the genitals of the lying-in

woman lasts for several days. For this is used the Acacia ferruginea Roxb., which is believed to have a strengthening effect on the genitals.

Among the Somali, according to Paulitschke :

"The lying-in woman is wrapped up in many blankets and mats, constantly fumigated with smoking wood and incense, and washed and treated with a touching tenderness. Meanwhile, she gets up from childbed after five or six days and tries to do her usual work again, yet she avoids the company of men, carrying the new-born child in a mass of cotton wool on her back."

Among the Samoyedes, too, the woman is fumigated, but not till the end of the



FIG. 825.—Fumigating a German lying-in woman. (After Rueff.)

puerperal period. With them as with the Bogo and Coroado, the idea of purification, *i.e.*, from demonic influences, is at the root of this procedure.

The fumigation of lying-in women and the lying-in hut has the same purpose among the Hindus. However, among the ancient Hindus, the puerpera was fumigated for therapeutic reasons; for this purpose were used *Echites antidysenterica*, *Cucurbita Lagenaria* Linn., snakeskins, etc.

In early times in Germany also, fumigation of the lying-in woman (and also of the menstruating woman) was much in use. Over a brazier a funnel was placed, or the apparatus was so constructed that the funnel was part of the coal pan. This apparatus was placed under a chair in which the patient had to sit. She was enveloped in blankets so that only her head was visible. Fig. 825 shows one such woman from an illustration taken from Rueff.

3. BATHING AND WASHING

We have already learnt that the idea of cleansing is connected with the fumigation of newly delivered women. The quickest and simplest cleansing in the same sense—for to be sure spirits arise from the blood and lochia—is, unquestionably, the bath. And the fact that the women of many half-civilised nations actually take a cleansing bath in the nearest water available immediately after delivery we have already learnt in an earlier section.

The cleansing of the lying-in woman among the tribes of East Africa, the Akamba and their neighbours the Akikuyu, etc., is usually done merely by washing with warm water.

Among the Loango negresses, the young mother takes numerous baths at a place near the hut, screened from the curious. For this purpose she sits down in a hollow in the ground which is lined with mats and then has cold and warm water alternately poured, with the hollow hands, on her abdomen, which is afterwards pressed and kneaded as well (Pechuel-Loesche,¹ p. 30).

Blyth says of the Fiji Islanders :

The woman in childbed bathes in the house on the day following delivery, as well as on the second and third days, but on the fourth and the following day she goes to the river to bathe.

Of the Samoan lying-in woman, Krämer says :

"After a few hours, she usually gets up in order to take a bath in the sea along with her new-born child."

Krämer, likewise, reports that the Gilbert Islander is accustomed to take a bath in the sea soon after delivery.

In Achin, according to Jacobs,² the lying-in woman is bathed on certain prescribed days. These are the tenth, the twentieth and the forty-third days with which the puerperium is ended. The midwife attends to the bathing, and after the patient has been washed with ordinary water which, however, is lukewarm and has been boiled, she is also washed with scented water into which the juice of *Citrus limetta* Risso. has been squeezed.

The lying-in woman among the Igorrots, in Luzon, must, according to Meyer, bathe several times daily with her child for the first 10 days. (The statement of Montano, which we mentioned in earlier chapters, that the Negrito rushes into the sea with new-born child immediately after delivery, has recently been positively denied by Reed.)

Also among the Badaga in the Nilgiri Hills, the lying-in woman bathes twice a day but only for two or three days. Among the Naya-Kurumba, in the same hill country, after half a day the mother and child are washed with warm water (Jagor).

In East Turkestan, according to Schlagintweit, the lying-in woman does not take a bath until the fourteenth day; then she also puts on new clothes and is allowed to receive visitors.

Among the Omaha Indians, the lying-in woman is washed in summer with cool, in winter with lukewarm, water, and has to bathe twice a day.

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Hyades was able to observe a lying-in woman among the Fuegians at Cape Horn. He records it as follows :—

"Le jour même de l'accouchment, la mère est allée seule prendre d'heure en heure quatre bains de mer, le premier quatre heures après sa délivrance. Nous avons assisté, à cinq heures du soir, au dernier de ses bains qui a duré un quart d'heure et s'est passé comme suit. La mer est haute à ce moment : sur la plage, la nouvelle accouchée se déshabille rapidement (son costume consistait en un vieux gilet de chasse, par-dessus une vieille chemise) en tournant le dos à la lame : elle entre à reculons la mer, de manière à avoir de l'eau jusque sous les seins. Elle se lave alors avec les deux mains, tout le corps et spécialement le cou, les aisselles, la poitrine et les



FIG. 826.—Apparatus made of horn and used by the medicine men of the Orang Bělenda (Malacca) for painting the patterns on the *chit-norts*. (After H. V. Stevens.)

parties génitales. Cela fait, elle se lève et vient s'accroupir, toujours sur ses talons et tournant le dos à la lame, un plus près du bord de la plage, de manière à avoir de l'eau jusqu'au genoux. Elle reste une minute dans cette position et ne se lave plus que les parties génitales et moins qu'auparavant. Elle se lève encore pour aller s'accroupir dans la même position, tout au bord de la plage, n'ayant de l'eau que jusqu'aux chevilles au moment de l'arrivée de la vague : il en résulte une espèce de douche vaginale. L'accouchée reste dans cette position plusieurs minutes sans se laver. Elle nous dit alors que c'est son quatrième et dernier bain de la journée, que les bains précedents étaient identiques à celui-ci et que les jours suivants elle en prends deux par jour ; elle ajoute que toutes les femme fuégiennes en font autant après leur accouchement.

"La température de l'air était alors $+2.7^{\circ}$, celle de l'eau $+4.7^{\circ}$, le vent était vif : N.-N.-O. 5 m. par seconde. Le pouls de l'accouchée au sortir de son bain était à 84. Quelques minutes avant son bain, elle était allée, comme d'habitude, puiser de l'eau a 100 m. de sa hutte, avec deux autres femmes qui d'ailleurs ne s'occupaient pas d'elle."

On the eleventh day she took her last bath, and on the thirteenth day she spent the whole day fishing.

Also the wives of the Orang Lâut in Malacca, wash in the sea, as Stevens reports, as early as half an hour after delivery and, after a few days, go about their usual work.

4. WASHINGS AND SWEAT BATHS IN THE PUERPERIUM

Still more common than the custom of bathing, we find that of the lying-in woman having to undergo certain washings in water with which, not infrequently, medicinal substances are mixed.

Thus, the Campa Indian (Peru) washes immediately after delivery with an infusion of *huitoch*, an astringent fruit; this is the *genipa* apple (Rubiaceæ), which is, no doubt, supposed to prevent hæmorrhage (Grandidier).

Among the Mexican Indians, according to Diego García de Palacio (1576) on the twelfth day after delivery, the midwife took the lying-in woman to the river in order to bathe her, and consecrated the water with cocoa and oil so that it should not harm her.

Among the Nayars in India, a maid-servant attends to the daily washing with warm water. She first anoints the patient's body with castor oil and kneads it. The oil is used pure or mixed with herbs; a doctor or astrologer prescribes the species and dose to be used (Jagor). As Stevens recorded, lying-in women among the Orang Bělenda, in Malacca, are also washed. For this so-called "*chit-norts*" are necessary for the washing of menstruating women, as we saw in Figs. 433-435. These "*chit-norts*" are long vessels of bamboo which are decorated with magic patterns, but for each kind of *chit-nort*, according to the function for which they are used, special magic patterns are necessary, the orthodox model for which is in the keeping of the chief. The painting of the magic pattern on such a *chit-nort* is one of the duties of the medicine men. For this they use peculiar little instruments made of horn, which have teeth and grow narrower towards the handle, and might be compared in shape with a kind of comb-cleaner. Fig. 826 shows them.

Now, first of all, the Orang Bělenda midwife requires a specially patterned

chit-nort from which to fill the other chit-norts with the liquid used for the washing (Fig. 827). When the patient is successfully delivered, the midwife takes the chit-nort (Fig. 828, A and B) and does the first cleansing with it. When this is done, the midwife uses the chit-nort (Fig. 829, A and B) in order now to wash the patient with a warm infusion of mirian. To wash the new-born child, the midwife again uses a chit-nort with still another pattern. This is shown in Fig. 830, A and B. From the tenth day, the patient is allowed to wash herself with cold water. But for this too, she has again to use a chit-nort with a special magic pattern (Fig. 831, A and B), and this chit-nort also may be filled with the necessary water only from the above-mentioned chit-nort of the midwife (Fig. 827).

Lying-in women among the Parsees wash themselves with the urine of cows, which is regarded as cleansing; the same medicament is used among the Hottentots in this connection. Urine, as everybody knows, is often (and to a certain extent rightly) used as a disinfectant.

The lying-in woman among the inhabitants of Doreh Bay, as well as the newborn child, are washed daily with cold water (see van Hasselt) 2

If the lying-in woman in Samoa is not able to take her bath in the sea, she and the new-born child are washed at home with cold water (Krämer).

Among the Kirghiz of the district of Semipalatinsk, the lying-in woman rises from her bed after three days, if her strength permits, and even goes in winter into the bath house; in summer she washes herself there with an unfusion of heather (see *Globus*, 1881, 40, p. 70).

In strong contrast with this is the custom in Jerusalem, for there the lying-in woman must not wash at all in the first eight days; later, it is permitted, but she has to use warm water for it. On the tenth day, according to information from the Arabian dragoman, Daud el Kurdie, to the Consul Rosen, she is taken to the bath, and there after her washing first her back and then the rest of her body she is rubbed vigorously with a powder of aromatic substances, such as cinnamon, nutmeg, etc.

The fact that with the fumigations already described in this volume, a copious perspiration of the patient is unavoidable in most cases, and is not infrequently directly intended, we have already seen. We find this excessive perspiration in Archangel and in other parts of Russia. Here the patient goes at once with the

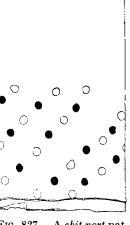
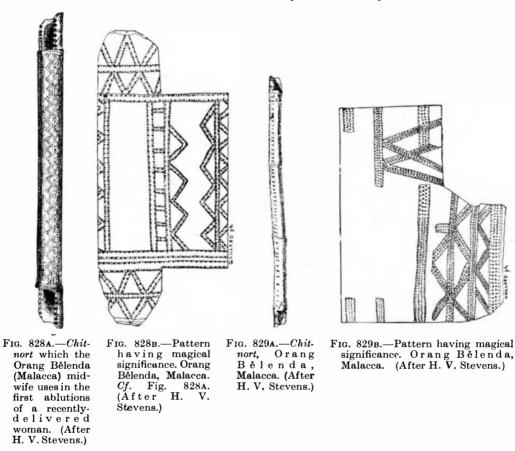


FIG. 827.—A chit-nort pattern. (After H. V. Stevens.)

child to the bath-house in order to perspire. This is continued for from four to six hours and repeated for three successive days (see *Archiv. f. Anthrop.*, 1879, p. 309). In Astrakhan too, according to Meyerson, the lying-in woman immediately repairs with her child to the bath-house. "Here both are whipped and rubbed, then they are both put in a feather bed."

In Japan it was a general custom for the lying-in woman usually to have a warm bath with an admixture of salt, on the sixth day after delivery, and then to induce a



copious perspiration by putting on warm coverings. Kangawa opposed this custom last century :—

"One then sees," he says in his book San-ron, "that the healthy lying-in woman is suddenly affected by mania, delirium, fever, exanthema and the like; she is then generally incurable and is carried off by the slightest illness. In the treatment of parturition, I have not been very strict with regard to other prescriptions, but in the case of the bath I must be so because I apprehend so much harm from it. After eight days all dirt should be wiped off with a towel dipped in water, and to be precise, firstly the still-covered lower part of the body and then the upper part by itself. Thus, the body is cleansed, and the effect is like that of a complete bath, but in this way no 'thieves' wind' can creep in " (see Miyake).

New-born babies in Japan are immediately bathed by the midwife in a wooden tub, and the midwife, as the Japan'ese woodcut reproduced in Fig. 832 shows, puts her feet into the water at the same time. In a picture which we are to come across later, we find the same situation. We must, therefore, recognise this as a special Japanese custom. Bartels seems in error here, for our European pictures of lying-in rooms, according to von Reitzenstein, almost all show the same custom. The purpose of this may be to control the temperature of the bath, just as country midwives feel with their bare elbows whether the temperature of the bath water is right.

Among the German rural population, sweating in childbed is still very common. But, if it is to be successful, it must be done properly and thoroughly. Flügel

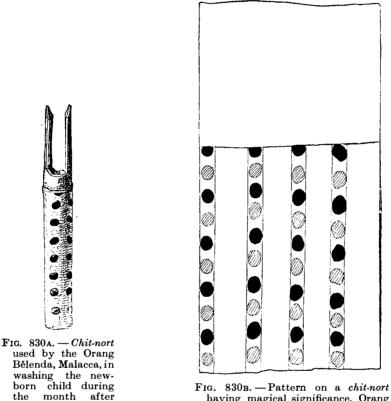


FIG. 830B. — Pattern on a chit-nort having magical significance. Orang Bělenda, Malacca. (After H. V. Stevens.)

reports from the Frankenwald, and Goldschmidt from North-Western Germany, that in the process of outbreak of miliary eruption, the so-called "sudaminal rash of the puerperium" is not infrequent. In the Bavarian Upper Palatinate it is said that in the big canopy beds used there many lying-in women perish (Wolfsteiner). They have to perspire constantly in the first days of the puerperal period, and to effect this, they are weighed down with heavy feather beds and given quantities of tea to drink. Owing to this, miliary vesicles frequently arise which, in sensible conduct, are otherwise of very rare occurrence. Now, if these vesicles are discovered by a careful neighbour, the coverings are added to again, tea hotter, and more generous in quantity is given, so that the rash may come out and, in this way not only the rash, but often also the life of the patient is driven out for ever.

birth. (After H. V.

Stevens.)

5. BINDING THE ABDOMEN IN THE PUERPERIUM

Many peoples, especially those in which massage plays a prominent part in every emergency, think it absolutely necessary that in the puerperal period too, the patient should be duly stroked and kneaded. But as this procedure naturally cannot be kept up day and night yet, on the other hand, it is considered desirable that constant pressure should be exerted on the abdomen (which now, after delivery, is relaxed and often swollen with intestinal gas), so we find, in many peoples, the custom of tying up the patient's abdomen with tightly applied binders.

The mildest form of this method of treatment we find in Eastern Turkestan. Here, immediately after delivery, the inner side of a sheepskin, just taken off the

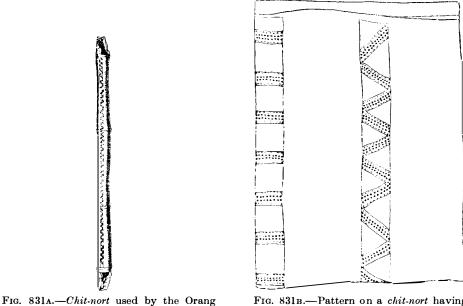


FIG. 831A.—*Uhit-nort* used by the Orang Bělenda in Malacca in washing a lying-in woman. (After H. V. Stevens.)

FIG. 831B.—Pattern on a chit-nort having magical significance. Cf. Fig. 831A. (After H. V. Stevens.)

sheep and rubbed with astringent vegetable juices, is laid on the patient's abdomen in order to cause contraction and to make it slim again (Schlagintweit⁴). This brings to mind a procedure which Witkowski quotes from Jacques Duval :

"Quelques-unes appliquent l'arrière-faix sur le ventre, soudain qu'il a étè tiré. Mais il est meilleur et de trop plus certain d'avoir un mouton noir, qui sera escorché tout vif, en la chambre de la malade, pour de la peau toute chaude, parsemée de poudre de roses et de myrtiles lui envelopper les reins et le bas ventre. Et sous les extrémités de ladite peau sera étendue la peau d'un lièvre, qui par semblable sera tirée du dit animal vivant, lequel sera à l'instant égorgé, et le sang reçu dans sa peau pour d'icelle tout chaude et sanglante couvrir tout le ventre inférieur. A raison que ce sang tout chaud, qui est réputé grossier et mélancolique, d'une grande vertu de conforter la matrice et parties adjacentes, qui mesmes oste les rides du ventre."

Witkowski then relates from Dionis that in the first confinement of the Dauphine Anna Maria Victoria of Bavaria, in the year 1682, her physician in ordinary, Clément, wanted to envelop her abdomen with the freshly drawn-off skin of a black wether. " Il fallait que l'opération du boucher se fit dans une chambre voisine de celle de l'accouchée or, il arriva que la mouton sanglant suivit son bourreau jusqu'auprès du lit de la Dauphine. L'effroi que produisit ce spectacle fit, qu'on renonça à cette pratique aux autres couches de la Dauphine."

Among the Kirghiz of the district of Semipalatinsk, when delivery is ended, the patient's abdomen is wrapped in bandages (see *Globus*, 1881, 39, 109).

After the delivery of the Malay lying-in woman on the island of Luzon (Philippines), a thick bundle of charpic is fastened on her abdomen with a thick band (Pardo de Tavera). Likewise, the Igorrot woman, according to Dr. Hans Meyer, has to wear an abdominal binder for three weeks after delivery.

In the south of India, as Shortt records, after delivery, a piece of the patient's dress is tied like a binder round her pelvis and abdomen.

In the Dutch East Indies, binding the abdomen is not done till the lying-in woman leaves her bed for the first time a few days after delivery. Van der Burg (p. 366) states that for this purpose a long narrow cloth is used, one end of which is tied to a post, while the woman wraps it round her by turning herself in it from the other end.

A woman of Sumatra, whom Schwarz² (p. 114) delivered in Fulda, is said to have shown him how to do this wrapping round :

On the first day of the puerperium she had her abdomen tightly bandaged by the midwife, and on the second day applied an abdominal binder herself as follows : She fixed one end of a piece of flannel about $_{1^{7}0}$ yd. wide and 7 yd. long between the door and the jamb in such a way that she closed the door and the other end went to the opposite corner of the room. This she applied smoothly to her abdomen and held it firm under her breast and over one trochanter. Then she moved, turning like a top, towards the door of the room, by which means she wrapped ever more flannel round her abdomen till she came to the door, opened it and fastened the end of the binder on herself. On the fourth day the



FIG. 832.—Bathing the new-born child. Mus. f. Völkerk., Berlin. (From a Japanese woodcut.)

midwife had to stroke her gently several times from the lumbar region to the inguinal region, and the region of the uterus, to set in motion and to evacuate the stagnant blood.

That the Achinese in Sumatra also are accustomed to bind the abdomen of the lying-in woman has already been recorded above.

Of the women in Java, Stratz⁴ says :

Pregnancy striæ occur less often and are less disfiguring than in most European women. This no doubt is partly due to the fact that in Java immediately after delivery the abdomen is bound very tightly.

On the Amboina group, immediately after the uterus is in its right place and when delivery is finished, the lower abdomen is tightly bound (see Riedel ⁹).

With lying-in women among the Orang-Bělenda, in Malacca, according to

Stevens, the abdomen is sometimes bound with a bark binder or with a loin cloth This, however, is not always done. Likewise, among the Orang-Lâut, the lying-in woman binds her abdomen with a sarong for a month.

In Japan, according to Kangawa, the abdomen in the umbilical region is always bound after delivery for 100 days with the intention of preventing congestions from the uterus towards the head.

Hewan (p. 223) says that in Old Calabar, immediately after delivery, a towel is wound tightly round the abdomen above the contracted uterus.

The Masai lying-in woman, according to Merker, has a leather abdominal binder 20 cm. wide applied.

Likewise, the abdomen of the Omaha Indian woman is bound with a binder immediately after delivery. Among the Chiriguano Indians, in South America, the puerpera is laid with her face to the ground and her abdomen tied fast with a rope.

Sonnini writes from modern Greece that a wide linen binder is fastened fairly tightly round the abdomen of the lying-in woman, reaching from her breast to her loins; by this means, the women are supposed to keep the abdomen a good shape.

In Galicia, a twisted rope of coarse linen is put round the abdomen below the body of the uterus (cf. Wiener med. Presse, 1867, p. 979).

v. Hovorka reports from Dalmatia :

"When the delivery is duly over, the abdomen must first be put in order. For this purpose, the abdomen is gently rubbed with hands dipped in oil and then a wide binder is put on; over the symphysis pubis a rolled-up towel is also placed in order the better to compress the relaxed uterus."

The Hamburg doctor, Rodrigo de Castro, records at the beginning of the seventeenth century that Portuguese women put a binder round the abdomen immediately after delivery; this custom may have come to Germany through him, for he was a Portuguese. The binding is still in use in many parts of Germany; Pauli reports it from the Palatinate; Hildebrandt from East Prussia; and it is also done in Brandenburg.

All over the British Isles, in the middle of the nineteenth century and later, the application of the binder was customary; even in the lying-in institutions, *e.g.*, in Dublin, it is applied immediately after delivery and changed daily. This contrivance consists of a very wide piece of cloth (generally linen) which is put round the abdomen and fastened very tightly; in the front is sewn on a second piece of cloth like an apron, which lies before the genitals and between the thighs to absorb the lochial discharge. Also in Germany, thanks to the regulations of midwives and doctors, this method is beginning to be adopted more and more.

In Paris, it is a common custom to cover the abdomen after delivery with a folded napkin and to draw it together and support it with a towel put on at the back and fastened in front (Osiander, p. 231).

In Styria, heavy linen towels are put on the patient's abdomen to prevent the development of a pendulous belly. Also many midwives there are accustomed to put the "lying-in woman's sacral region right"; for this purpose, they exert a continuous pressure on this part. This last custom is reported by Fossel from the Sulmtal.

CHAPTER VIII

THE MANAGEMENT OF THE MOTHER IN THE PUERPERAL STATE

1. STANDING AND SITTING DURING THE PUERPERIUM

AMONG many peoples, we have come across the custom of the mother being set on her feet immediately after delivery, and, not infrequently, even walking about. This is not always an indication of laziness and inadequate nursing in the puerperium; sometimes it is done with the deliberate intention of promoting and hastening the discharge of the lochia by means of the upright position.

On the Pacific coasts, some Indian tribes make the lying-in woman stay upright most of the day; she wanders about the camp, sometimes resting; in doing this, she uses a stick; she walks slowly, and often bends her body forwards, supporting the abdomen above the uterus against the top of the stick as she does so. The purpose of this procedure, which goes on for three or four days, is to bring about an easier discharge of lochia. In these cases secondary hæmorrhages are said not to have been observed.

We find sitting in the puerperal period more common than this standing and walking. Van der Burg (p. 368) says of the lying-in woman in the Dutch East Indies, that first she is washed with and has poured over her lukewarm water, then she rests for a few hours in a half-sitting position. While resting, she is not permitted to sleep and they prevent her doing so by constantly pulling her hair. She does not stand for a few days.

The Abyssinian woman, according to Dr. H. Blanc, is delivered in the kneeelbow position; afterwards, however, she is taken to a couch where she must remain in the sitting position.

Also among the Mincopi in the Andamans, as Man (p. 86) records, the lying-in woman spends the first three days in a sitting position on a small couch supported by all manner of objects. Jagor found an Andaman woman on the first day after delivery sitting on the ground; the upper part of her body was supported against a bamboo stand driven in the ground; she was suckling her child and her abdomen was covered with a leaf of the fan palm (*Licuala peltata* Roxb.).

The Heidelberg MS. of the "Sachsenspiegel," which was written in the twelfth century, shows in an illustration that at this period in Germany also, sitting in the puerperal period was customary (cf. also Figs. 833 and 834).

A Chinese doctor, quoted by von Martius (p. 54), recommends in his treatise that "no lying-in woman should lie down immediately after delivery, but she must sit upright in bed. In order that this sitting upright should not be too hard for the mother, because she is tired out with her labour, sufficient pillows and cushions must be put at her back. Also she must on no account stretch her feet out full length, but one must see to it that she bends her knees upwards. In this position, the lying-in woman must keep quite still and her eyes closed. But she must beware of falling sound asleep because, otherwise, a dangerous congestion of the blood may easily take place which might cause serious faintness." All noise must be avoided so as not to startle the patient ; she must be protected from harsh air and from draughts, but as fresh air must be provided, the room is to be perfumed four times a day with strong vinegar.

In Japan, the lying-in woman has to remain on the so-called "lying-in chair." This is composed of five boards; one board forms the back support, two are at the sides, one at the front, and the fifth forms the underpart. All of them move in grooves so that they can be changed. After the placenta is removed a straw mat is put on the chair, the latter is covered with a mattress (*futon*, a kind of quilt), and then the patient has to stand up and walk to the chair in order to sit on it. Here she remains for seven days in a sitting position. She must not bend her head forwards, and it is said that she is not allowed to sleep.

Kangawa tried to contend against this bad custom, the origin of which he



FIG. 833.—The lying-in room. (From a Northern Tyrolean painting in Innsbruck. (After Kossmann-Weiss.)

does not know; he believes, however, that it was not adopted in Japan until comparatively recently, for in old books he found the memorandum that the woman usually got up and walked about as early as the third day after delivery. After this week of sitting up the patient has to spend 14 days more lying down (see Miyake, p. 13; and cf. A. E. v. Siebold's Jour. f. Geburtsh., 1826, VI., 3, 687, and Petersb. med. Ztsch., 1862, 3, 1, 2).

The Ainu woman also, according to Scheube,⁴ has to spend the first week after delivery sitting up "so that the blood may not flow down from the head and cause giddiness and serious maladies." This custom may have been introduced here by the Japanese. After this, the patient has to stay 14 days more in the house and she may only do light work.

A Japanese woodcut (Fig. 835), reproduced by Mitford in his Tales of Old Japan,

shows how the Japanese lying-in woman adopted this sitting position. The picture belongs to a tale of a fox's wedding, and accordingly the figures represented in the lying-in room are not human but foxes. However, there can be no doubt that the picture actually represents the conduct prevailing in the lying-in room in Japan. A kneeling vixen is handing some refreshment to the lying-in woman sitting in the chair covered with big blankets. Another, sitting on a stool, is bathing a young arrival into the world in a tub, near which the water-can is standing. A third vixen, also kneeling, is handing the towel to the one bathing the child. Three little foxes,



FIG. 834—The lying-in room. Miniature after Furtmayer in a Missal of 1481. (From a MS. (Cod. lat., 1571) in the Bayr. Landesbibl., Munich.)

already wrapped up, are lying beside each other on a mat. The father, kneeling, looks on at these doings; with his left forefoot he is holding the coal pan, and with the right his pipe.

Another representation of a Japanese lying-in room (Fig. 836) is to be found in a Japanese work which treats of the wedding ceremonies. Here, too, we see the lying-in woman raised up high and sitting in bed supported by cushions at her back and covered with a big quilt. The new-born child is being bathed in a big tub by a woman who has put her bare feet into the water. Near the bath kneels another woman who is holding a sheet ready to dry the child. A third woman, also kneeling, who is partly hidden by the wall screen, seems to be active as an assistant during labour.

2. THE RECUMBENT POSITION DURING THE PUERPERIUM

Unquestionably the recumbent position in the puerperal period is far more widespread than the sitting position. We have already heard of it among many peoples in the section dealing with fumigations, where the patient, after delivery, has to stay for a greater or less number of days lying with her abdomen turned towards the fire.

The horizontal position in the puerperal period is the usual one among civilised nations, as need hardly be mentioned. Where it is observed, however, it is not



FIG. 835.—A Japanese lying-in room where those present are represented as foxes. From a Japanese woodcut. (After Mitford.)

always done in the same way, and we find various differences even among the same people according as the poorer or richer classes in society are in question. Even in the civilised nations in Europe we see the women in the better classes being nursed for six weeks, but those of the poor and working classes return to their usual occupations again soon after delivery.

Naturally there are such differences also among the less-civilised peoples. In the Orient a considerable difference in this respect between town and country is noticeable, as Eram (p. 32) in particular has shown.

We shall have to revert later to the childbed of the civilised nations of Europe. Here we are to discuss further some extra-European peoples. According to Engelmann 2 (p. 61) the Indian woman of North America is laid on a couch on the floor of the hut immediately after delivery, duly wrapped in sheets, or in a blanket. In cold weather the bed is put near the fire so as to protect the



patient from cold and fever. Thus she must remain for four or five days; then she goes back to her usual work.

The Madi negress, immediately after the expulsion of the placenta, is brought

beside the fire lighted in the hut and laid down on a bed which is made of grass and covered with skins (Felkin ¹).

Among the Georgians also the patient is laid on a bed of straw after delivery, while the priest consecrates the house with holy water (cf. Eichwald).

Likewise among the Kirghiz of the Semipalatinsk district the lying-in woman is put on a couch just after delivery, and she rests on this half lying down and surrounded by cushions; if she specially desires it, she is allowed to lie down.

According to Jacobs ² the lying-in woman in Achin spends her lying-in period on a couch prepared beforehand. She is wrapped in a sarong reaching from hip to knee as soon as the midwife has cleansed her with lukewarm water; apart from this she is quite naked. She lies on the bamboo slats of the bed with her buttocks bare. Under the buttocks is pushed a hard leaf sheath of the *aru* tree in which are warm ashes mixed with salt. The object of this is to absorb the lochial discharge and render it harmless. This receptacle is renewed daily. On this bed the lying-in woman remains for the 43 days prescribed, but towards the end of this period she may sit up if she wishes. This long period of rest generally sees the perineal tears, which often arise during labour, completely healed, although sometimes they are also treated by being moistened with astringent remedies.

3. FOOD AND DRINK DURING THE PUERPERIUM

Among many European nations a special diet for childbed has long been perfected according to circumstances.

In France the newly delivered woman is given a cup of bouillon, some water with a little red wine in it, or sugar water with a teaspoon of orange-flower water. Also water with maiden hair and marshmallow syrup, a tisane of lime flowers, couchgrass and liquorice, or a decoction of red barley are in use.

In England the lying-in woman gets weak tea with milk, toast, lightly boiled eggs, etc.

Italian women, according to Karusio, in the province of Bari are not allowed to eat fish for 40 days when they are lying in.

The drink for the lying-in women in Galicia consists of brandy, honey and fat; or an infusion of various spices which are supposed to have the property of restoring the bowels to their normal condition.

In Germany the lying-in woman is often given camomile tea, fennel tea, elderflower tea, oatmeal groats, milk with water or warm beer. In a miniature of Furtmayer we see mother and child being fed (Fig. 837). Likewise Fig. 838, where a drink is being given from a cup.

At the end of the seventeenth century we are told by Eckarth that as soon as the patient is lifted from the delivery chair into the lying-in bed she gets

"A warm soup or brew of pounded fowl, veal or beef with a few herbs—mace, galanga, zedoary, and cloves, or, where these ingredients were lacking, a thin beer soup with nine kinds of so-called spices added."

In grocers' and apothecaries' shops there used to be sold very commonly in Germany a compounded spice powder which was called "Childbed Powder." The Government of Lucerne in the year 1418 issued a prescription according to which retailers were to prepare this powder : ginger, cinnamon, cloves, pepper, mace, grains of paradise, nutmeg, sugar and saffron; it was not to contain any other substance, and the retailers had to swear annually that they sold only powder prepared according to prescription. Then, in the year 1483, a new order as to the quantities of the individual substances was issued (see Meyer-Ahrens,⁴ p. 85).

In Swabia aloes in aperient quantities is much used for lying-in women (according to Buck, p. 32).

"It is only a few decades ago since medical men in Germany let lying-in women have a somewhat stronger diet, whilst, earlier, they were fed on thin childbed soup. However it was different about the year 1600, at least in Tyrol, as Hippolitus Guarinonius, in his *Greueln der Verwüstung menschlichen Geschlechts*, tells of a lying-in woman, a native of Züllerstall, who married a well-to-do peasant of Schwatz, and her midwife gave her not a little to eat 12 times



FIG. 837.—Lying-in room, after Furtmayer, c. 1481. (From a MS. (Cod. lat., 15, 708) in the Bayr. Landesbibl., Munich.)

in the day and night. But the patient was very melancholy and spent most of the time sighing and weeping and nobody could find out what was the matter with her. However, after two weeks, two friends from Züllerstall came to visit her and found that in those 14 days she had not been fed in the Züllerstall fashion. They asked the midwife if the patient had not had enough to eat, and were told that she had never eaten so much and so frequently. The patient herself broke into the discussion and told her friends that it was all lies, that she had not eaten more than 12 times between day and night, and that was the cause of her sighing and constant weeping. The three women were like to kill the midwife for this and ordered her that henceforward she was to give the patient food not less than 24 times."

We also learn in what way this peculiar childbed diet was arranged. It was a formidable array consisting of bread, wine, eggs, fish, flesh, fowl and many other viands.

FOOD AND DRINK DURING THE PUERPERIUM

In many parts of Germany the lower classes still believe that it is necessary to restore the strength of the lying-in woman by means of abundant food. In the Frankenwald the puerpera often drinks a great deal of beer or considerable quantities of wine. There, and in Swabia and in many parts of South Germany, they indulge in unnatural gluttony with the so-called "Godfather's Soup," whilst godparents, relatives and friends bring tasty dishes throughout the whole course of the puerperium. At the end of the century before last, L. Finke (II., 428) complains of the diet of lying-in women in Westphalia. Whilst as long as pregnancy lasts they make no change in their diet and thus cause digestive troubles, from the moment of



FIG. 838.—A sixteenth-century lying in room. (Germanic Mus., Nuremberg.)

delivery they must eat several times a day beer soups cooked with pumpernickel, eggs, butter and sugar, in order to make milk; but they cannot digest this and, in consequence, all kinds of troubles arise.

On the other hand, the common custom in Styria is to give the patient little food in the first four days of the puerperium, and even meat soups must not be seasoned with spices. The fifth day, however, brings the usual chicken soup (Fossel). But the child's godmother in Styria has to send the mother some refreshment. Rosegger¹ says that "a few days after the birth, a messenger comes from the godmother carrying on his head a big basketful of the 'gift bread,' little loaves of spiced wheat bread."

In the rural districts of the Palatinate, according to Pauli, lying-in women are tortured by constant drinking of camomile or elder tea or wine soups. In the towns, however, they are wiser : the lying-in woman is allowed to have chicken and veal broth and thick soups of barley, rice and oatmeal. Also she is given mullein tea with milk, and later some wine and water in order to keep up her strength.

Among many peoples at a not very advanced stage of civilisation the lying-in woman is regarded as so changed in her conditions of life that very special food and attention is considered absolutely necessary for her.

Among the Mincopi in the Andaman Islands the patient is given warm water to drink soon after delivery; she is then fed with meat broth or with water in which mussels and fish have been boiled. After a short time she gets fish, mussels, yams or fruit as she likes, but no meat (Man, p. 86).

On the Fiji Islands, according to Williams and Calvert, the lying-in woman eats only certain foods. In New Zealand she has water in which pipis has been boiled or, if this is lacking, a decoction of sow thistle is substituted (Marston, p. 71).

Immediately after the child is born the Samoan who has assisted at his wife's delivery leaves the house to gather young coco-nuts : then he kindles a fire in the cook-house and prepares a food consisting of arrowroot, which he takes to his wife and relatives (Kubary).

The Samoan lying-in woman, according to Krämer, gets the strong starch soup, *vaisolo*, soon after delivery. This is perhaps the one just prescribed. In a song published by Krämer it goes :

"I hate barren women When they are ill in bed ; There is nobody to tap them, Nobody to knead them, Nobody makes good food for them. But when a woman has a child And she lies down, one cooks coco-nut for her And papaya and invalid starch soup And wild yams cooked in leaves."

The Malay lying-in woman on Luzon eats rice boiled in water; if means permit a fowl also comes to the table. In this case the fowl is drowned in water in order thus to expel all the air which (as they believe) is in the bodies of animals, otherwise the patient might suffer harm (Pardo de Tavera).

The Dyak woman has to undergo a very painful treatment after delivery. She sits with her back to a hot fire, and for 24 hours is not allowed to sleep or lie down, and, above all, not to drink water; if her throat becomes too bad, then she is allowed only a very little water, and that warm. The only drink is ginger tea, to which a healing action is ascribed.

The Sumatra woman, who was delivered in Fulda by Schwarz,² first drank some tea, and after an hour asked for a considerable quantity of pounded rice with beef; this was then her daily food.

According to Schlagintweit³ the food of the Burmese woman, when she is delivered, is strongly spiced and salted. On the third day, all noise is anxiously avoided in the living-room because it is supposed to disturb the blood change.

Among the Orang Bělenda in Malacca, as Stevens records, the lying-in woman is not allowed to drink cold water for 10 days. She therefore gets a warm infusion of *Mirian sejok* to drink. This is supposed to hasten the contraction of the genital organs. During the first five days she is allowed to eat only a species of tuber called *kadi* as well as rice and banana. Hot and spiced broths are specially and strictly forbidden.

W.-V.)L. III.

Lying-in women among the Achinese, as Jacobs² records, may eat what they like in the first three days, with the exception of acid dishes and fruit. From the fourth day, however, the lying-in diet begins; then she gets only dry rice and a little fish which has few bones. With this she has to be satisfied throughout the whole period. As drink she gets boiled, lukewarm water.

In the Nayar caste in India the lying-in woman gets three meals a day; at seven o'clock in the morning, seven in the evening and at midday after being washed, at which she eats rice, curry, ghi and buttermilk (Jagor). The lying-in woman in the Pulaya slave caste gets rice, and, if it can be got, fish and fowl, and besides this morning and evening a pellet consisting of thickened juice of the palmyra palm with black pepper. In Travancore the lying-in Veda woman, to gain strength, has to drink for 10 days a decoction of rice, tamarinds and pepper (Jagor ²).

Among the Hindus, as Renouard de St. Croix states, lying-in women are made to go without food or drink till the fifth day; then they are given, at most, some dry rice but no water, even in the most terrible heat. J. A. Roberton says that they get a powder consisting of black pepper, cubeb and ginger, which they have to take later, mixed to a paste with lukewarm water.

In Madras, according to information from the missionary Beierlein, a drink consisting of hot water with ground pepper is given.

The ancient Hindus, among whom it appears not to have been customary for the mothers to suckle their children (since Susruta generally speaks of wet-nurses) in the first days of the puerperal period, have regard to their food in relation to the coming of the milk :

For since in three or four days the milk sets in, the lying-in woman, as Susruta advises, should, on the first day, have only honey butter mixed with *Panicum Dactylon* Linn. (8) three times; not until after the third day is she to have milk mixed with honey and butter (twice daily as much as goes into the hollow of the hand). She next gets carminatives, and "if she was affected with the rest of the troubles," so long as the lochia flows, a powder of the various species of pepper, ginger, etc., in warm sugar-water; from then for three nights barley water in oil or milk, and after that she is allowed rice with meat broth, barley and other starchy foods. If the patient came from an uncultivated region, then the old Hindu physicians let her have only clarified butter or oil and, as drink, the decoction of long pepper, etc., and for from three to five nights she had to be constantly anointed with oil. (The spiced drinks and the anointing of the lying-in woman are still customary.) If, on the other hand, the woman was strong, she was given sour rice water to drink for from three to five nights, and then she had a fatty food mixture.

The Chinese doctors advise the lying-in woman to drink immediately after delivery a small wineglassful of the child's urine. Then she has weak meat broth with rusks. Meat, however, is forbidden; in particular she is not to eat pork or hen's or duck's eggs before the tenth day. Moreover, she must eat only "wholesome and fresh food," and must avoid hot drinks and salty foods. In South Shantung, according to Stenz, the first thing the patient has to drink after delivery is warm sugar-water. After this, if the child is a son, she eats two boiled duck's eggs and two hen's eggs; if it is a girl, only two hen's eggs.

The lying-in woman in Japan is given a well-known Japanese dish called *miso*, made from rice, beans and salt. According to Kangawa white plums and black beans should not be eaten during the puerperal period, because the former, by their acidity, disturb the lochial discharge; and the latter might hinder the action of the medicines. Spicy foods must not be used during the puerperium.

In the first five or six days, according to H. v. Siebold (p. 32), the lying-in woman among the Ainu is allowed to have only millet gruel and salmon.

Persian women eat nothing but vegetable food, much butter and sugar during the first three days (Polak). The Koryak women eat some of the flesh and blood of the reindeer which the husbands had sacrificed at their confinement.

Among the Chevsurs, when the child is born, relatives (usually little girls) bring the mother milk at twilight, together with cheese and the ordinary native bread. This last is the coarsest bread to be found in the Caucasus (Radde).

The lying-in woman among the Kirghiz in the Semipalatinsk district, on the third day after she has had a bath, gets *surpa* to drink, *i.e.*, a bouillon of mutton which has cinnamon sprinkled over it; also ginger, galanga and a root called *sarbug* are added. This "childbed soup" she gets till the eighth day.

The Kalmuck woman in Astrakhan, according to Meyerson, has, during the first three days of the puerperium, no other food than the broth of boiled sheeps' trotters. According to Krebel's information the Kalmuck woman eats a little mutton immediately after delivery, and gradually more and more, together with a great deal of meat broth.

Among the nomadic tribes of Asia Minor the root of *Rubia tinctorum* (dyer's madder) is used as a specific for promoting the discharge of the lochia if the flow has ceased.

In Jaffa, according to T. Tobler's report, the midwife, even before the placenta is expelled, gives the patient a glassful of olive oil to drink, and sometimes also a little brandy is given afterwards. In Jerusalem, immediately after delivery, the patient gets brandy and nutmeg or wine with olive oil; after three or four hours she is given camomile tea or chicken soup, and, in rare cases, chocolate as well. For 40 days she is not allowed to drink fresh water; it has to be boiled and have orange flowers added to it.

The negress in Old Calabar, immediately after delivery, gets a big meal which her husband has prepared during her labour and of which she eats abundantly (Hewan).

Among the Wolof negresses, immediately after delivery, the patient is given a calabash full of a drink made from sour milk, palm oil, sugar and tamarind pulp or the juice of the baobab fruit (A. T. de Rochebrune, p. 282).

The Guinea negress in the Bissago Archipelago gets a pumpkin-skin full of a decoction of rice, maize, palm wine and melegueta pepper ("grains of paradise"),

In Central Africa, according to Felkin, the lying-in woman is not allowed to eat meat for a week.

The rules for lying-in women among the Akamba and their neighbouring tribes in East Africa are little different from those in their ordinary life. Among the Swahili and Nyassa negresses she eats food highly seasoned with Cayenne pepper and similar spices (Hildebrandt²). Among the Masai the medicinal treatment of the lying-in woman consists, "first in giving aperients, one of which (in this case a mixture of fluid fat, honey, Steppe salt and a few ground *ol odoa* grains) is highly esteemed. Further, she gets a beef soup seasoned with *oilale* bark (*Colubrina asiatica* Brongn.) as well as a decoction of a herbaceous marsh plant. To both is ascribed an action which promotes the return of the genitals to their normal dimensions. This is helped also by the application of a leather abdominal belt 20 cm. wide (Merker).

Among the Basutos, during the first three days of the puerperium, the patient is not allowed a drink of water. On the fourth day she is allowed it for the first time. The people say : "Water will kill her, she will die." Grützner ¹ (p. 78), the missionary, could not discover how this idea arose.

The rules of conduct for the lying-in women among the Ovaherero are very peculiar :

On the very day of the delivery a beast is killed which is a sheep or an ox, according to the circumstances of the father. The neck and the long ribs with the corresponding part of the back are for the men; though the women, but *not* the lying-in woman, may eat of it. The men must not eat any of the rest of the meat. The meat for the patient is called *ongurangandye*. The breast and a thigh bone are put aside till the umbilical cord on the child has fallen off. Up to this time the meat for the mother may be cooked only at the back door of the hut. With the first meat which is cooked a knee-cap with the meat attached to it must be put into the pot. The patient, however, must not eat this meat, but it must be left untouched in the dish till the umbilical cord has come off her child. Then it may be eaten by anyone. Although the patient has chiefly only meat broth to drink, yet the meat dish may not be left empty. Likewise she must always have fermented milk in the milk pail standing beside her (Dannert, p. 364).

Among the Malagasy, if a woman has given birth to a son, the mother is not allowed to eat the meat of a male animal for some time; but if she has had a daughter, then she has to avoid female animals. Only after the weaning does the priest free her from this restriction (Audebert 3).

The lying-in woman in South Tunisia gets only light food to eat for six days, and absolutely no water to drink. She quenches her thirst with a decoction of figs, dried carob beans and raisins to which a little caraway is added (Narbeshuber).

In the Nile Valley lying-in women get vermouth, camomile, caraway, etc., for the promotion of the lochial discharge, and fatty, highly seasoned foods. In Darfur they are given for their midday meal chicken and *madideh* or *dokhu* broth with *alôb* (the astringent fruit of *Balanites aegyptiaca* Del.) or the pulp of the baobab fruit (*cf.* R. Hartmann,³ p. 405).

In Upper Egypt, immediately after delivery, the patient gets melted butter with honey and clover, and she has to eat daily at least one fowl or a good piece of meat which her neighbours and friends give her (Klunzinger²). In Kordofan she is given a drink prepared from milk, dried dates and soda (Ignaz Pallme). Among the Swahili, after delivery, she eats rice with a saffron-like substance and honey, then rice with meat broth, like the ordinary people (Kersten). In Abyssinia the lying-in woman gets as medicine a glass of melted butter mixed with honey and spice, which she has to swallow; this medicine often causes slight sickness (Dr. H. Blanc).

On Massaua on the East Coast of Africa the patient is given immediately after delivery a cup of butter which is always liquid there to drink, and this is repeated during the lying-in. However she is also well supplied with other food (Brehm).

Among the Mayoruna in South America the lying-in women must not eat the flesh of monkeys, but only that of hoccos (Spix and Martius). Immediately after delivery the Campa woman on the Amazon drinks the black infusion of the astringent genipa apple or *huitoch*, with which she also washes herself (Grandidier ¹).

The Indian on the Orinoco, on the other hand, has to fast during the puerperal period till the remains of the umbilical cord have come off the child (Abbé Gilij).

It is very welcome when, besides facts, we have attempts at explanation imparted, as happens in the descriptions in "Aus dem Leben der Kai-Leute" by the missionary Keysser (in Neuhauss' *Neuguinea*). We will quote one here :

"A few hard kinds of banana as well as certain species of yam are forbidden to the young mother. In the case of one of the latter there is always a little hollow in the ground above the tuber just as if the ground had been 'drawn back' at this spot. Thus the mother's breast would draw back too and the child get no milk. From other yams which have the shape of a long-necked bottle the child is supposed to get a very long neck. As the *kusus*, when they are attacked, make a snorting or hissing noise, mother and child are not allowed to eat the flesh of these animals. The soul 'stuff' of the wild animal would, without more ado, infect the mother and child with the 'snorting.'" Also the father and the nearest relatives have to give up such foods since they are always about the child and might infect it, etc.

4. LACK OF PROPER PUERPERAL HYGIENE

Among those peoples where the women resume their ordinary daily work almost immediately after delivery as if nothing had happened, there can be really no question of the care of the woman during the puerperium. We have already had numerous examples of this in an earlier chapter. Tribes which are constantly on the move cannot make a halt on account of a woman in labour : they must go on till they have reached the projected limit for the day where they can obtain shelter, food and especially water. Thus there is nothing left for the woman just delivered to do but to follow her fellow tribesmen as well as she can, carrying the child. For separation from them, the loneliness, at this stage of civilisation, is certain death. We find these conditions, according to Oberländer,¹ in Australia, in the Province of Victoria, and among many American Indians, and, according to G. C. Musters, also among the Patagonians, where the women, shortly after being delivered, remount their horses and ride after the tribe.

But also among settled peoples, and even those supposed to have already attained a very high degree of civilisation, there is very often a lack of proper attention and rest during the puerperal period.

In ancient Greece there seems in very many cases to have been no question of proper treatment in the puerperal period; for Hippocrates draws attention to the harmfulness of such neglect by pointing out that if a woman immediately after delivery lifts a weight which is beyond her strength, bruises corn, cuts wood, runs or the like, prolapse of the uterus may easily occur.

Jukić saw a Southern Slav peasant who had given birth to a child in the night breaking ice on the very next day in the frozen stream barefoot. Krauss thinks this by no means surprising as the women are so inured to cold. Likewise American Indian women, as soon as they have had their cleansing bath immediately after delivery, resume their work at once (Baumgarten).

How little the Votiak woman thinks of resting for a time after delivery M. Buch³ has described from personal observation :

"On the occasion of the Votiak marriage celebrations I went out every day to the village of Gondyrgurt, and always stabled my horse with the same peasant. On one of these days I was very much astonished to find his whole household still asleep; his father lay in the courtyard, he himself otherwise a very active man, was lying on his face on the floor snoring. I thought at first it was the result of the neighbouring wedding. In the living-room, however, I found the mistress of the house busy clearing away the remains of a feast; she went on briskly with her housework and told me that there had just been a baptism. 'There is the baby, will you look at it ?' she said. 'But I saw you yesterday still cooking and baking quite briskly,' I replied, very much astonished, 'how were you able to get through so quickly ?' 'Well,' she said, 'in the night I was confined and in the morning the child was taken to the church and baptised; then came the christening guests, so I had to cook and bake, for who else was there to do it ?' 'Is this how you always do it ?' I asked, still more astonished. 'Of course,' she replied, 'who else would cook and bake the men's food, for who else is there to do it ?'" Buch went on to the wedding, and not long after the woman was there too; she drank a glass of *kumyska* from time to time and was apparently quite well. She had already gone through six confinements in the same manner and always enjoyed perfect health."

Pallas says of the Kalmuck women :

"One often sees the lying-in women as early as the second day after delivery riding about and seeing to all their duties, but at the beginning they are not allowed to appear except with their heads covered and cannot appear at service in church for 40 days."

Rütimeyer states that among the Hennebedda Veddas the young mother stays in bed for about six days; whilst the Danigala Vedda woman does not allow herself any care and rest, but wanders on if she is on the march or attends to her usual duties.

We find a similar lack of any care of the lying-in woman on many islands of the Moluccan Sea and elsewhere, *e.g.*, on Samoa (Wilkes, I., 218), the Marquesas Islands (v. Langsdorff, p. 131) and Hawaii. The lying-in woman in Engano must certainly, as we saw, crouch beside a fire for a short time after delivery, but thereafter, says Modigliani,² she has no further treatment; she can return to her work, and consequently can give little attention to the child, and the mortality among them is terrible, and in reality one sees only a few in the island.

We shall now give our attention to another evil of the lack of treatment in the puerperal period.

In the Philippines the Malay woman also goes to work immediately after delivery (but not the Negrito woman) (Blumentritt,³ p. 37). We find the same among the non-Mohammedans on Ceram, and also among certain of the South African tribes.

In the whole of Southern China and in Canton (where about 300,000 human beings live continually in boats on the river) the passenger boats are managed by women who are very poor, generally unmarried, but not very "moral," and have a very hard life. Often these women have a three-day-old child on their backs, while the rest of their five- or six-year-old children work forward in the boat with little oars, and at the same time they, too, have to do the heavy work of rowing.

In spite of the little care these boatwomen give their bodies, they are outstanding examples of the uncommon fertility of Chinese women, for W. Reinhold found in Hong-Kong, Macao and Canton among ten boatwomen that there were always nine with a child on their backs, while the mother herself often seemed to be still a child.

Of the American natives we have already spoken ; almost all of them consider rest after delivery to be absolutely unnecessary.

A few cases which Parker records may also be mentioned. A Chippewa Indian woman of the White Earth Reservation had continued to carry home wood daily on her back, even in the last days of pregnancy : at 2 a.m. she gave birth to a daughter, whilst at ten o'clock in the morning she was again carrying wood along with the child on her back. The wife of a chief of the same tribe was confined outside the village when she was fetching a sack of rice. She then loaded the sack and the child on her back and went to a woman friend in the village, who helped her to see to the child. She herself was on her feet all this time, and as the woman friend and her husband were building a wigwam, the newly delivered woman also helped at this work.

We saw above that the Bedouin in South Tunisia gives birth to her child in the open air, and immediately afterwards, when she has cleaned herself and the child superficially, she returns to the village. Generally also she resumes her hard work at once, carrying the child at her breast or tied on her back with a cloth (see Narbeshuber). Among the Wapogoro (Tanganyika) the mother stays in the house for one day. Then the puerperium is finished for her and she goes on with her usual work (Fabry).

It is not necessary, however, for us to look so far afield in this connection. For the women of the North German proletariat may often be seen as early as the second day, or at latest the third day, resuming their heavy labour, and very similar customs prevail in the Upper Palatinate (Brennar-Schaeffer) and in the country in Bavaria (Fuchs ¹). Also in many parts of Saxon Transylvania the puerpera does not get proper rest or the necessary care; the poor thing has to get out of bed immediately after delivery, milk the buffalo cows and see to the housework, owing to which she not infrequently falls seriously ill and is afflicted for her whole life long with a sickly body. Usually a lying-in woman in the country keeps her bed for three to eight days.

It is no wonder that such want of consideration for the body weakened by pregnancy and labour does not pass without serious injury. A quick and very surprising fading and withering is the usual result of this want of care, and it is no rare phenomenon to see women, not yet in the thirties, looking like old women of sixty. But the premature going about also very often causes the development of prolapse or displacement of the uterus and of the vagina, etc., which are a constant source of illness and disease for the whole later life.

5. THE DURATION OF THE PUERPERIUM

After the above analyses it is scarcely necessary to remark that the duration of the puerperal period among the various nations is very varied. How much or how little care the newly delivered woman is given does not depend at all upon "race." On the contrary, we often find in this respect among kindred and neighbouring peoples very different treatment. Here, too, traditional usage and ancient custom govern these conditions.

There are two phenomena, however, which may, in many nations at least, have been decisive factors. One is the discharge of blood from the genitals of the mother; and second, the gradually shrivelling and final falling away of the remains of the umbilical cord. When one or other of these processes was finished, then people no doubt considered the puerperal period at an end. And this no doubt explains the treatment confined to only a few days among so many nations.

Thus on the Watubela islands on the day when the remains of the umbilical cord have fallen off, the lying-in woman is ceremoniously conducted to bathe.

As to the duration of the lochial discharge among foreign races we unfortunately know extraordinarily little so far. Among German women it usually loses its bloody colour gradually from the fifth day; however it continues as a pale red mucous discharge not infrequently for three or four weeks more.

The lochial discharge of the women on the Amboina Group, on Ceram, Tenimber and Timor Laut, on Leti, Moa and Lakor and on the Watubela islands, is described by Riedel¹ as of very short duration, lasting only a few days. In Guinea and Cayenne, according to Bajon, the lochia ceases as early as the third day.

The Achin women, according to Jacobs,² reckon the beginning of the actual lochia from the fourth day of the puerperium and the cleansing period they reckon as 40 days. Hence the lying-in woman is not allowed to leave her bed for 43 days.

If lochia still continues on the fortieth day, this period of confinement is extended to 60 days.

Of the Chingpaw (Kachin) in Upper Burma Wehrli writes :

"During the first three days after delivery the patient is not allowed to leave the house, but she is allowed to receive visitors. On the fourth day, in the morning, accompanied by an old woman, she repairs to the place of the water supply of the village. Her companion throws a spear towards the spring and cries: 'Begone, ye evil spirits,' so that the *Nat* may be frightened away and mother and child not be misled. Then the woman bathes, washes her clothes thoroughly, returns to the village and resumes her ordinary way of life."

The lochial discharge of the Fiji islanders lasts 10 days, according to Blyth.

In Mexico, on the other hand, as Engelmann 2 records, the lochia among the natives generally lasts till the fortieth day, and only at the end of this period do the women venture to take a bath.

The minimum duration, which may almost be regarded as equivalent to none at all, where the patient is to be found at her ordinary work again on the same or at latest the following day, has already been discussed. A puerperium lasting for two or three days is granted to the Formosan women; and the same, according to G. Turner ² (p. 178), among the Samoans, whilst we find the same conditions in the case of the Mohammedan women in Bagdad and in Siam. The wives of the Madi in Equatorial Africa rest for three or four days, as do also the Russians, the Tatars and the Kalmuck women in Astrakhan, the lower-class Persian women and the Lapps. The last named then get up and walk many miles away on foot in order to carry their children themselves to the baptism and to church. Scheffer wrote :

"Cum baptismate plerumque festinant sic ut femina Lapponica octo aut quatuordecim dies post labores partus iter faciat longissimum, per juga montium altissima, per lacus vastos et profundas sylvas, cum infante suo ad sacerdotum."

But Leem, who was a priest among them, states as an example of their inurement :

"Quod cum apud Altenses in Finmarchia occidentali curio essem, mulier quaedam lapponica quinto post puerperium die, circa festem natalem Christi per montes perpetuis nivibus coopertos ad me venerit, rogitans ut se pro more ecclesiae nostrae in templo solemniter inducerem."

The Chinese woman in Peking, as M. Bartels learnt from Grube, is not allowed to leave the house for a month, and in Southern China, according to Katscher, she has to remain at home for 100 days.

The lying-in woman among certain of the uncivilised tribes in Annam is not permitted to go out for from 6 to 8 days; till then she stays near the fire (Pinabel). The nomadic Kalmuck woman rests for seven days; and the Japanese for eight days. The lying-in woman among the Tlinkit in North-West America remains for 10 days in the lying-in hut made of branches or of snow (according to Krause,² however, only five days), and also the better-class Persian is accustomed to rest for 10 days. The Syrian in Aleppo from 10 to 12 days (A. Russell). In many districts the young mother among the Masai stays in her hut for 10 days and refrains from work, which is done by the woman helping her; in most Masai districts, it is true, she often leaves the house on the day after delivery or as soon as her condition permits (Merker). However among many half-civilised peoples we find a considerably longer puerperium; thus among the Wasegua in Abyssinia (J. M. Hildebrant, p. 395) and the Armenians in Astrakhan (Meyerson, pp. 174, 189) the lying-in woman remains in bed for 14 days; on the Watubela islands for 40 days. In the Carolines the lying-in woman bathes 10 days after delivery in fresh water, but she does not resume her work for five or six months (Mertens).

Of the lying-in woman in Samoa, Krämer says that she is certainly on her legs again in three days, unless there is some trouble, so as to take part in the festivities for the new-born child. However, she usually does not return from her parents' house to her husband's till six months after delivery. The latter in this period sends frequent consignments of food to his wife.

The wives of the Kolosh and Potowatomi are carefully protected from cold for 20 days after delivery (Keating, I., 130), and the negress slaves in Surinam (Ludwig²), in Brazil and formerly in the United States (C. Lyell) were set free from their usual work for four weeks. In Laos in Eastern Asia the puerperium, according to Bock, lasts for one month.

On the south-west coast of the Malay Peninsula the midwife stays with the lying-in woman for 40 days; only then does the latter undertake the lawful cleansing and the prescribed exercises in prayer, and after this returns to her accustomed duties. In Ceram Laut also the lying-in woman has to stay in bed for 40 days.

In South Tunisia the lying-in woman among the town Arabs gets up on the seventh day and the child gets its first bath, on which occasion, too, it receives its name (Narbeshuber).

The Omaha Indian woman, if she is strong, goes to her usual work immediately after delivery. But if she is exhausted, then she may rest for three weeks.

On the Aru islands Ribbe says the newly delivered woman has no lying in; on the same day she goes about her ordinary domestic duties, but she is not allowed to leave the house for 40 days : that is to say, she is forbidden to tread on the ground before this.

It is noteworthy that in many peoples the rules and regulations in the first lying-in are different from those in later ones.

In Massaua on the Arabian Gulf, for example, multiparæ are accustomed to return to their work at once, and the same holds good for primiparæ if they are confined in the second year of marriage or later. But if the confinement takes place in the first year of marriage, then the puerperal period lasts till the first year has passed (Brehm). In Palestine precisely the reverse is the case. Here the primiparæ enjoys only from 7 to 10 days' rest, whilst in later confinements the puerperium is extended to 40 days (T. Tobler).

CHAPTER IX

THE CEREMONIAL, SYMBOLISM AND MYSTICISM OF THE PUERPERIUM

1. THE SPECIAL ROOM

THERE are two rooms in the house which we have to regard as the real and exclusive domain of women : these are the nursery and the lying-in room. As we have seen, entry to the latter is forbidden to the husband among very many peoples, and among the civilised nations, though he is certainly allowed to enter the lying-in room, yet when there he has lost his authority completely. Here matters are involved in which he has to refrain from any objection. Here only the word, opinion and the point of view of women have any value. And hence it cannot surprise us that we see sprouting up in the lying-in room itself a profusion of superstitious and unhygienic measures.

But here, too, proper regard to the desires of female vanity has to be given. For since the lying-in woman receives the visits of friends and neighbours, she tries to adorn herself, her new-born babe and the whole lying-in room as splendidly as possible, not only to arouse the admiration of her visitors, but, when possible, also their envy. Thus the lying-in room used to present, and still presents, a suitable opportunity for the display of dainty furniture.

We shall learn in a later section that the lying-in room is not by any means an institution of European civilisation. For we find among many uncivilised nations also that a special room is assigned to lying-in women in their indisposition, and that in many tribes the women, as early as the last days of pregnancy, withdraw to a separate hut erected specially for this purpose and have to remain there till they have successfully finished the puerperal period, which was discussed further above.

Now it sometimes happens that these isolation huts are, in the real sense of the word, "lying-in huts for the women," *i.e.*, that they are not occupied till the delivery is successfully accomplished. Thus it is said of the Paya tribes in Honduras that with them lying-in women have to occupy a special leaf-clad hut. In India, too, they have a separate hut for the lying-in woman. Immediately after delivery, whether she is rich or poor, she is taken to this little, musty hut, which has a small door but neither window nor chimney, and which is put up specially for this purpose at some distance from the dwelling-house. It is made of mats and bamboo poles and covered with straw and grass. As soon as the lying-in woman has entered the hut the door is closed, and the woman is in a temperature of 26° R., tortured with smoke and medicines, hunger and thirst. Thus the patient remains for a month ; the wife of a Brahmin, however, is only for 21 days unclean (Roberton) (*i.e.*, in the religious sense).

The hill tribes in the Arfaks Mountains in New Guinea also erect special lying-in huts. Finsch³ describes them as follows :

"They rest on piles 14 ft. high, and, like all the houses in that region, are about 6 ft. long, 3 ft. wide and 4 ft. high, just high enough for a human being to stay in when lying

THE SPECIAL ROOM

down. In this cage, without a window and with only one opening, which is so small that one can only get in by sliding through on one's stomach, the woman has to stay for one or two weeks strictly cut off from all human intercourse. Only the husband is allowed at night time to climb up to this eyrie with the aid of a bamboo pole. Moreover, sticks are driven into the ground at intervals of 3 or 4 ft. as a sign that no unauthorised person may approach. As may easily be understood, this dwelling is unbearably hot during the day, and, moreover, the considerable coolness at night cannot be too good for a nude puerpera and a tender nursling."

Peculiar customs in this connection prevail also among the Ovaherero in South Africa. We have a good deal of information about them. Viehe writes of them :

"After the birth of a child mother and child remain in the *onganda* (village), but she has to be out of her house on the same day and many industrious hands have to be active for her sake. A hut has to be erected for her on the day of delivery. This is put right beside the sacred house, and on the south side if the child is a boy, on the north side if it is a girl. The



FIG. 839.—A seventeenth-century German lying-in room. (After Hirth.)

hut has two entrances, one on the west side, which is thus turned to the *okurno*, and one directly opposite this. The lying-in woman is really supposed to remain a whole month in this hut, but in most cases she leaves it after only a few days. But in certain circumstances she has to stay much longer in it, *e.g.*, when the head of the family is away, for at her removal to her proper dwelling place he must be present. During her stay in the hut she has to use the east entrance because she is not allowed to look towards the *okurno*. During this puerperal period the woman is considered sacred (*uzera*)."

We shall revert to this later, but we must mention at this point a statement of the missionary Dannert :

"When among the Ovaherero the new-born child belongs to the family or the oruzo of the chief, a hut is erected in all haste by the women of the enclosure for the lying-in woman near the otyizero (holy house), and on the birth of a boy this house must be towards the south, and of a girl towards the north beside the otyizero or the house of the chief. This house is called ondyno yomunari, house of lying-in woman. It must not, as is usual with the huts of the Ovaherero, be plastered with cow dung, but is covered simply with grass, twigs, bark, skins, etc. This hut of

the lying-in woman is sacred, as is the lying-in woman herself. The hut is never repaired, but is allowed to fall into ruins."

Of the Toda, Marshall records that the morning after delivery the mother is taken to a hut $(purz \hat{a}rsh)$ which was erected for her in a secluded corner of the village when labour was about to begin. Here she remains until the next new moon (3 to 30 days). For a month after her return home she appears to live alone in the house; her husband meanwhile is obliged to seek refuge with friends.

In the last case one might really speak of two lying-in rooms, for when the woman has returned to her home from the lying-in hut it is again assigned to her as a lying-in room.

The matter is still more complicated in the case of the Kota in the Nilgiri Hills.

Here the lying-in woman has to stay in three different lying-in huts, which one comes across in every village. To the first, made of branches, she is taken immediately after delivery and stays there for 30 days; the two following months she spends in one of the two other huts, but even then does not return home at once, but betakes herself first to the house of a relative for a few days whilst the husband cleans the house by sprinkling it with cow dung and water.

By the Orang-Hutan in Malacca, according to Vaughan Stevens, as well as by the women of the settlement, the hut of the midwife is used for confinements. They remain in it for 14 days after delivery.

2. VISITS TO THE WOMAN IN CHILDBED

Offering good wishes to the young mother and the new-born child is regarded almost everywhere as a very special ceremony (see Fig. 840), and even nowadays, particularly among the rural population, these visits to the woman in childbed play a very prominent part. This appears to have been no less the case in early times, and we have some evidence showing, to our ideas, the excessive extent of this custom.

Thus it was customary in Naples in the century before last for the women of high rank to receive visits from every possible acquaintance on the day of their delivery, and they did not try to behave quietly during these visits. Rather it is said :

"People take care only that not more than five or six persons are in the lying-in room at once, but the doors stand open, and for two days often a hundred or more persons made a noise outside" (Volkmann, p. 150).

But the visitors, too, on their side were not wanting in rich display. In the fifteenth and sixteenth centuries such luxury was displayed on these visits to women in childbed than in the year 1537 the Senate felt obliged to intervene; on pain of a fine of 30 ducats only women relatives were allowed entrance. Casola, on one such occasion, saw in the Casa Dolfin 25 noblewomen in evening dress, head, neck and arms profusely adorned with pearls and precious stones. The valuables represented a fortune of a 100,000 ducats (Kämmel).

We can get a very good idea of the appearance of such lying-in rooms in Italy at that time. The characteristic of painters of that period in painting biblical stories was always to use the costume portraits of their contemporaries, and this has preserved for us an insight into the lying-in room.

In a picture of the Madonna from the first half of the fifteenth century in the Palazzo Pitti painted by Fra Filippo Lippi, we see in the background Saint Anne as the lying-in woman sitting in bed with her back supported by pillows. A nurse is handing her the wrapped-up child; another woman is standing on the left; and an older woman on the right near the head. The last seems to be holding a gift in her hands, and a woman behind her with a basket on her head is no doubt also bringing gifts. Through the door are entering three more female figures and a child, likewise laden with gifts (Seemann: Crowe and Cavalcaselle).

Among the frescoes of Dominico Ghirlandajo in the choir of the church of Santa Maria Novella in Florence (about 1485) there is one representation of the birth of Mary :

It is the lying-in room of a Florentine patrician lady which is displayed to us. Anna,



FIG. 840.-Visiting the mother and child. Holland. (Germanic Museum, Nuremberg.)

half-erect on her couch (lying on her side and leaning on her elbows), is looking towards the visitors who are entering slowly; five beautiful women whose manner, bearing and looks are absolutely those of the great world (Crowe and Cavalcaselle). In the foreground on the right where the bath is being prepared for the new-born child, a maid is pouring water into the metal bath. The nursling, wrapped only in a napkin, lies on the lap of the waiting-woman, and a lady is kneeling beside her looking round to the incomers while she busies herself with the child.

There is a similar representation in a wall painting by Girolamo del Pacchia in San Bernardino in Siena (Fig. 841). In this, however, the puerpera is almost lying on her stomach.

We get a very characteristic view of Florentine customs of the first half of the

fifteenth century in a small painting of Masaccio which is in the Berlin Museum. It also shows a visit to a lying-in woman (Fig. 842).

The lying-in room is a square plain room the walls of which are hung with tapestry. The lying-in woman, who is lying on her side, has turned so that she is almost resting on her arms, which are crossed over her breast, and she is looking through the half-open door near the head of her bed out into the gallery beyond. Three women are standing by the bed near the foot. A fourth woman is sitting on the high step-like base of the bed holding the wrapped-up child on



FIG. 841.—The lying-in of a noble lady of Siena. Sixteenth century. Girolamo del Pacchia. (After Woltmann.)

her lap. Three ladies are entering the room from the gallery and are accompanied by two nuns. In the gallery stand two trumpeters, one of whom is blowing a trumpet whilst the other has just taken a similar instrument from his mouth. They appear to take turns in their music, which is scarcely very soft. Two serving maids are bringing in pastries or tarts on dishes. The trumpets are adorned with a wide hanging cloth on which the arms of Florence are embroidered.

What this scene signifies is not so easy to decide. The pomp of the pageant, the costumes of the ladies visiting the lying-in woman, as well as the heraldic standards on the trumpets, suggest that visitors of very high rank are in question who, as the dishes of the servants show, are bringing the young mother food. Probably

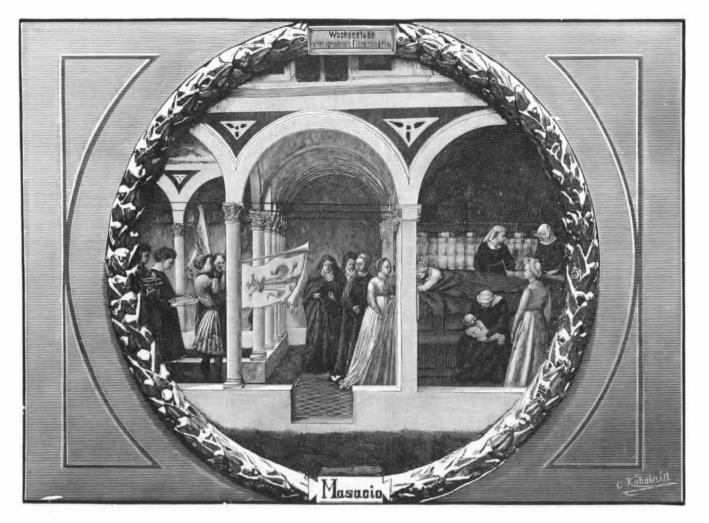


FIG. 842.—A noble lady of Florence is visited in her lying-in room. Fifteenth century. Masaccio. (Staatl. Museum, Berlin.)

she is a lady of the ruling princely family. But the persons busied about the patient are not wearing any conventual garb. Do we perhaps see before us a lying-in house conducted by nuns ?

It has already been mentioned earlier that in the sixteenth century in Italy refreshments were brought to lying-in women in special majolica dishes which were designated *scodelle delle donne*. Figs. 719 and 720 show how the inside of these dishes was ornamented with pictures dealing with parturition. In Fig. 843 the outside of the two "women's dishes" is represented; it must, nevertheless, be observed that on one of them, that on the wire stand, the foot is broken off. In it is contained Fig. 719. Both dishes are in the Kunstgewerbemuseum in Berlin.

The Museum für Künst und Gewerbe in Hamburg also possesses one of these dishes. In the guide edited by Brinckmann it is said to have come from $U_{\rm F}$ bino in the year 1550. On the inside it has "painted on it a woman in a canopy bed being given water to wash her hands by serving women." Outside it shows grotesques



FIG. 843.—Scodelle delle donne. Italian majolica of the sixteenth century. Used for bringing refreshments to lying in women. On the inside delivery scenes are portrayed. Cf. Figs. 719 and 720. Kunstgewerbemuseum, Berlin. (Photo : M. Bartels.)

and medallions in precious stones on a black ground. Then Brinckmann gives the following explanation :

"Piccolpasso describes the *scodelle da donna di parto* as a special kind of turned dishes, the food dishes of lying-in women. They consist of from five to nine single pieces, which are so constructed that when placed on one another they form a vessel with the outline of a fine vase. At the bottom stands the *scodella*, a soup tureen with a foot ; the lid over it acts at the same time as a plate for the bread ; this is covered by a dish with its foot turned upwards, on which the salt celler, *saliera*, with its lid stands. Complete sets of this kind have not been preserved ; single pieces of it are common."

Besides these it was customary to give kinds of presentation plates, the so-called *deschi da parto*, which were also decorated with parturition and lying-in scenes; a few have been preserved, and Müllerheim has copied these. They were varied in form, round, oblong, octagonal or twelve-sided, mostly with a slight rim, which was gilded.

In lying-in rooms in Germany there seems to have been a constant coming and going. In the broadsheet *Des Holdseligen Frauenzimmers Kindbeth-Gesprach* it runs :

"Two sisters came first, with nobody yet there— But now there came another woman in, Then they went away and left her alone. . . . and then goes to the door, And again come four of them at once."

In this case two people of high rank seem to be involved, while the pictures of



FIG. 844.—German lying-in room of the sixteenth century. (After A. Dürer.)

German lying-in rooms of the sixteenth century which have come down to us usually present ordinary lower-middle-class conditions. The most famous representation of this kind is the woodcut of Albrecht Dürer which shows the birth of Mary (Fig. 844).

In a wide canopy bed, the curtains of which are drawn back and give a look inside, lies weak and exhausted the holy patient about whom two women are busy, whilst a third has fallen asleep by the bed. A waiting woman had just lifted the child out of the bath; its coverlet lies $w_{.}$ work the second s

ready on a table, at which two women are sitting and drinking out of a common cup. Beside them stands a half-grown girl. A serving maid with a big water jug in her right hand and Mary's cradle under her left arm walks towards them. In the foreground on the left is another group of two women sitting and one standing along with a little boy. One of the women is just drinking out of a huge jug (Hirth).

Thus there are besides the patient and the new-born child twelve persons in the lying-in room.

That German lying-in women also were not averse from food and drink has already been mentioned. We find this confirmed by an illustration drawn by Jost Ammann (Fig. 845). It is to be found in Johannes Heyden von Dhaun's German edition of Pliny of the year 1584 in the chapter which bears the title *Vom*



FIG. 845.—German lying-in room of the sixteenth century. Attr. to J. Ammann. (After Rueff.)

empfengnis, tragt und geburt dess Menschen, and it is also contained in Rueffs' Hebammenbuch.

The lying-in woman is sitting in bed supported with high pillows; a woman on one side is handing her a basin of food, while on the other side an old man presents a splendid jug to her. A woman crouching in the corner is bathing the new-born child in a big shallow dish. Behind her a girl is holding ready the towel for drying. A little girl sitting with a doll in her arms is amusing herself by rocking the cradle. At a table in the background sit two women, one of whom is eating, the other drinking the dregs from a huge jug. A figure standing behind them is likewise busy eating. A dog is enjoying a bone. The door to the kitchen is half open; one sees at the fire a woman busy cooking.

The luxury of the lying-in rooms in Switzerland which prevailed in early times is described in a letter of Aloysius von Orelli which he sent from Zurich to his brother in the year 1555 (see Scheible). It is said in it :

"Even people of moderate means think they must provide their lying-in women with a silver soup dish. No matter how economical and simple the housekeeping is ordinarily, yet visit her frequently, and for these visits dress at least a few times in their best clothes. The

everything has to be grand and fine in the woman's room during the lying-in, which is nearly always the best room in the house. All the available silver utensils which women ever use are displayed in this room. So long as the lying-in lasts the patient is served with the finest and best that the house can produce, and the same is the case with her friends and relatives who

visitors are regaled with wine, soup and confectionery. "The lying-in is the convenient time when women in childbed can show the precious things in the house and their best finery to their friends, neighbours and acquaintances. If there are elder daughters in the house, they too have to appear in the lying-in room in their best clothes; the youngest child lies in the finest linen, in embroidered sheets, which, however, are not much esteemed unless they have been worked by the mother. Now if there should be a 10-year-old daughter, she is the child's nurse, and she is not a little proud of this office; she shows the admiring women the pretty white outfit made by the mother, and is then encouraged to be as industrious as her mother, who then puts in a word for the child and tells her to bring her own work, which is, of course, praised. This display of their own work to all their friends and neighbours spurs on the industry and ambition of the girls enormously, and during the mother's pregnancy they work diligently in preparation. And Zurich women have to thank these customs for their skill in artistic work, in which they resemble the Italian nuns and are all trained to be excellent housewives. For a long time after the valuables and the orderliness in the house of the lying-in woman are talked about till another lying-in woman provides fresh material for conversation. The husband is blamed if he does not as much as his business permits appear in the lying-in room at visiting times to receive the congratulations of the women. Costly presents are made to the mother and child by the relations, especially the godparents."

In the Royal Museum in Copenhagen there is an interesting representation of a Danish lying-in room, probably from the first half of last century. It is an oil painting by W. Marstrand and is reproduced in Fig. 846.

The young mother has already left her bed, over the curtains of which a bed-screen hangs at the top and the sides. A little away from it beside a table set out with all kinds of objects sits the lying-in woman in a high arm-chair; she is holding an object to her nose, of which it is difficult to say whether it is meant to be a flower or a smelling-bottle.

Near the bed sits the nurse, or perhaps the midwife, who is proudly showing the child to an old matron. A young person, no doubt a maidservant of the house, brings in something which she is stirring with a spoon.

The door of the lying-in room is open and a lady of high rank is just coming in followed by a gentleman and a female individual. A young girl at the door receives them with a deep curtsey.

As we shall see later, it was customary among the Jews in Fürth in the eighteenth century for the neighbours to come to the lying-in woman in the evening in order to say the evening prayers by her bed, "and also to eat and drink valiantly so that the time did not seem long to them especially in the seventh night," adds Jungendres. Fig. 847 shows this entertainment.

All this is significant enough to show us how little people at that time used to consider those points in the care of the lying-in woman which nowadays we are accustomed to put first : the absolute quiet for the patient and the maintenance of fresh air shared by as few people as possible in the lying-in room.

Likewise, in the lying-in room of the Chinese woman, it must often be very noisy. As M. Bartels learnt from Grube, when a woman in Peking is delivered, her friends hasten in the following days to give her their congratulations. This, however, must be done in the first three days, for later the patient is allowed to receive only three visitors who have presented themselves at her house within the first three days. The rule goes so far that even the doctor may not go to the lying-in

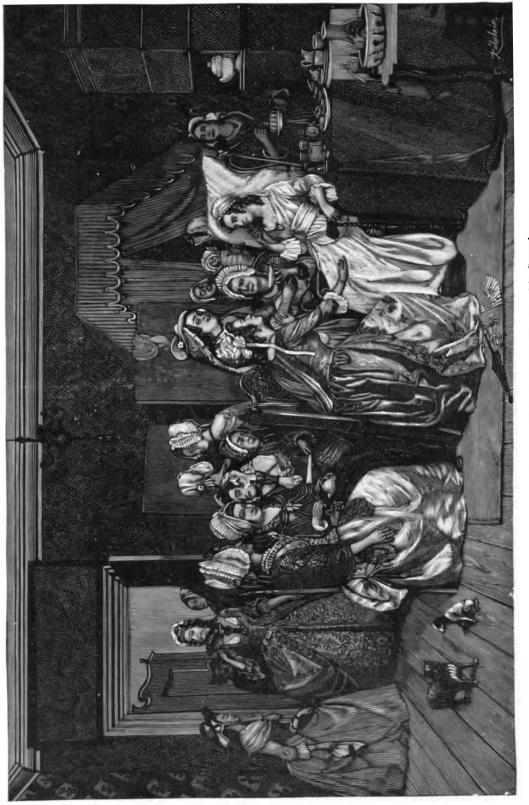


FIG. 846.—Danish lying-in room. Painting by W. Marstrand in Copenhagen.

woman if he has not been called in at latest on the third day. If now some visitor should act contrary to this rule and go into the lying-in woman in spite of it, although he had not come to her in the first three days, then that would take her milk away from her. By what means this injury can be made good again we shall see in a later section.

Of the Hindu lying-in woman Schmidt ⁹ reports: "Not only women of the household but also friends and relatives come from far and near to visit the young mother and crowd into the narrow little room, in which the heat is brought to such a degree that it must be simply unbearable to stay there. This does not happen only from the want of means of ventilation, for which normally scarcely the least provision is made, but also from the belief that as often as the child cries more fuel must be put on the fire."

Among the Achinese, as we learn through $Jacobs^2$ quite sensible regulations govern the visits to the woman in childbed. The fact that men are not allowed to

enter at all we shall learn later. But also women from another village are not allowed in to see the lying-in woman in the first 10 days and neither are women in the same village if they have been in the wood beforehand. Here again we have the underlying belief that in wandering through the wood, demons might cling to the women. But neighbours regularly visit the house in the period in which the woman in childbed is not allowed to leave the lying-in room in order to see to the kitchen and the housekeeping.

Among the Annamites, according to Mondière, it is believed that all the inhabitants of a house in which a child has been born are in the power of a fate which



FIG. 847.—A Jewish lying-in room of the eighteenth century. (After Jungendres.)

is called the *Phong Long*. The same holds good for those in whose house there is smallpox or cholera :

"Ce sort est mauvais et quand on voit entrer dans sa maison un des membres de la famille où il y a un nouveau-né on ne manque pas de lui dire : 'Tu m'apportes le Phong Long !' Si un individu d'une famille où il y a une personne gravement malade est obligé d'aller dans une maison qui a le Phong Long, au retour il ne manque pas de faire bouillir des feuilles de thé ou de n'importe quel arbre pour prendre des fumigations et enlever le Phong Long. On craint que le sang de l'accouchée ne nuise au malade."

In the period during which the house is in the power of the Phong Long, it is made known by hanging up a branch of pandanus or *Euphorbia antiquorum*.

3. THE UNCLEAN PERIOD

How very widespread over the globe is the view that all bloody discharge from woman's genitals exerts a dangerous influence we have already learnt. Hence we might expect *a priori* to come across peoples where also the lochia and, associated with them, of course, the lying-in woman herself are regarded as unclean and contaminating. Among the ancient Iranians, the puerpera, like the menstruating woman, was regarded as "unclean." According to the law of Zoroaster, the lying-in woman among the Medes, the Bactrians and the Persians had to live in an isolated place for 40 days before she could show herself, and had to wait for 40 days longer before her husband could approach her. Thus her "uncleanness" lasted for 80 days. Zoroaster also prescribed that the lying-in woman must be taken to a high place in the house, which is strewn with dry dust 15 paces distant from the fire, from water, and from the sacred bundles of rods (also from trees). Here she must be laid so that she cannot see the fire from her couch. Nobody must touch her. Only a certain quantity of food might be handed to her, and that in metal dishes, because they acquire uncleanness least, and can most easily be cleansed, and the person who brought her her food had to remain three paces away from her couch.

Many Parsees still follow these rules strictly: immediately after delivery, the young mother has to submit to washing with *nirang*, *i.e.*, with the urine of a cow, an ox or a goat. This liquid, which comes into use in all ritual doings, is supposed even to be drunk by the lying-in woman. If she has had a miscarriage, her body is still soiled by death; then she has to be laid on her couch 30 paces away from the fire and from the holy objects of the house and remain on her bed of dust for one and 40 days. After this, it is her duty to wash out the nine hollows of her body with cow urine and ashes. She may not drink water out of her unclean hand; if she does it all the same, then she shall receive 200 lashes with the horsewhip (*Vendîdâd* V. (136-137)).

The woman of the Nayar caste in Malabar is taken immediately after her delivery to the sacred pond of the pagoda, where she has to take a bath of purification. For the midwife, since she is of lower class, has made her unclean by touching her. After this, she stays for 14 days in an isolated room, and she may not touch cooking utensils; her food is brought to her in special vessels by women who have to cleanse themselves after each visit. After this period, the puerpera bathes in the pond again and a woman sprinkles water over the floor of the room and on the utensils used. With this ceremony, the "cleansing" of the woman is complete (Jagor ²).

In a number of tribes in India, the lying-in woman has to remain in an isolated hut because she is regarded as "unclean."

The lying-in woman of the Pulaya slave caste stays in this hut for 22 days after the birth of her first child; after later confinements, however, only from 13 to 16 days. Only her mother or mother-in-law or in the absence of these an old woman has the right of entry into it. Among the Vedas in Travancore, the woman is looked after by her mother or sister. On the sixth day, she goes to a refuge situated nearer the village, where again she has to stay for five days (Jagor,⁸ p. 168). The uncivilised inhabitants of Bustar in Central India isolate the lying-in woman for 30 days, but the rest of the members of the family are permitted to give her aid (cf. Glasfurd).

The "uncleanness" among the Munda-Kol, according to Jellinghaus, extends to eight days, and it also affects all those who come into contact with the lying-in woman.

Among the Badaga in the Nilgiri Hills, the isolation of the puerpera in the lying-in hut does not last longer than two or three days, and this is only observed in the first confinement. In later confinements, the woman is very often permitted to stay in the first room in the house, but she is not allowed to enter the second in which is the fireplace. A woman who has given birth to a child may not touch any household utensil till the third, fifth, seventh or ninth day after the first full or new moon. Then, after five, seven, nine or 15 days, lying-in women begin to resume their work again.

According to Sir S. B. St. John, among the Dyaks in Borneo, the whole of the family is unclean for eight days after a delivery, and people avoid contact with them.

Among the Achinese, according to $Jacobs,^2$ the lying-in woman is regarded as "unclean" for 43 days. If, however, the lochia has not ceased after 40 days, the uncleanness is extended to 60 days. In this period, women have entry to her, but none of her male relatives. Her husband may go in to her to take her food, but he may only say what is absolutely necessary to her and he is not permitted to touch his wife or to take any of the food and drink which she has touched.

In Southern China, according to Katscher, it is the rule in the higher classes of society that the husband does not speak with his wife for a full month after the birth of a child and that for just as long no visitor may enter the house. To announce this, a bunch of evergreens is hung up over the main entrance of the house. Anyone who sees this sign avoids the house to such an extent that he does not even present his card at the door. During the whole month, all the occupants of the house are regarded as unclean, as is everyone who has entered the house during this period. None of the unclean persons may visit a temple.

The Samoyedes have an "unclean" period which is called *samajama* or *madiko*. In this, the lying-in woman has to be billeted and is very badly cared for.

Among the Koryaks, the lying-in woman keeps hidden during the first 10 days after delivery.

Also the Ostiak woman seeks a special yurt for the delivery and stays there for five weeks (see Alexandrow 1).

The Tungus woman is left by herself in the puerperium as "unclean."

In the case of the Vogul woman, uncleanness lasts six weeks (J. G. Georgi); with the Orochon only three or four days. The latter is attended in this period by an old woman in an isolated yurt and nobody else goes near her. After four days. she may leave the yurt, but when she does so she is not permitted to step over the threshold; but, for this purpose, a skin is removed at the side of the hut; then, however, she resumes her usual duties.

Among the Kalmucks, the woman remains unclean for three weeks after delivery till she has cleansed her whole body in the hut with warm water. Among the Kirghiz in Semipalatinsk, the lying-in woman is regarded as cleansed from the third day, but before then she is forbidden to hand her husband food (see *Globus*, 1881, 39, 109).

The Georgian woman is taken charge of by her nearest female relatives for three weeks after delivery in order to keep her husband away from her. At the beginning of the fourth week, she takes a bath, and is then given back to her husband.

Among the Chevsurs, the lying-in woman has to stay a month, and among the Pshavs 40 days in the lying-in hut. In recent times, they have become more indulgent and leave the mother alone in the separate hut for from three to six days, after which she moves to the menstruation hut near the village and lives apart for six or seven weeks; the lying-in hut, however, is burnt down (Radde).

The lying-in woman among the Samaritans gets a special division of the room and is separated from the rest by a low stone wall. She has her own spoon, dish, etc., and nobody may touch her. Thus, according to Mosaic law, if she has given birth to a son, she remains for 66 days, at the end of which she must go into a bath and all her clothes be cleansed. The Bedouin lying-in woman does not leave the house for a week, then all her clothes are washed. Sometimes the seclusion is extended to 40 days (Palmer).

In Morocco, the lying-in woman is isolated for two full years, during which period she suckles her child; however, the husband may have intercourse with her again when she has had her menstruation for the third time after her confinement.

The Egyptian woman, too, is subject to a state of uncleanness after delivery, the duration of which varies according to the laws of the various sects; in Cairo, this period, which is called mifas, generally lasts 40 days; here, too, the woman takes a bath of purification when this period is over (Lane).

The uncleanness of the lying-in woman is reckoned at 40 days, according to Brehm, in Massaua also, and among the Swahili, according to Kersten, for the same period it is at least forbidden to practise coitus. There is similar information from H. Krauss² that the Swahili lying-in woman may not have intercourse with her husband for two months, for which he gives a typical reason, namely, that otherwise the child will become lame. A third statement showing the same violation of the taboo laws comes from Velten. For a whole year, *i.e.*, the whole suckling period of the child, she may not have sexual intercourse with her husband, otherwise the child will be afflicted with rickets, "so that it can neither stand nor walk even at the age of two years. It wastes away continually, the whole body consists only of bones and veins." It is said of such a child : "The child has been ruined by its mother and father." All the people in the place speak about it.

In Abyssinia, the house is closed to the father and to any man for the period of a month (Reinisch). Among the Bombé, a Niam-Niam tribe, the lying-in woman is unclean for five days; she is then fumigated, and only after this purification process may she leave the house (according to Buchta's verbal information to Ploss).

Among the Basuto in South Africa, the lying-in woman does not leave the hut for two months (Casalis). It is the same with the Bechuana tribes. When a Bechuana woman feels her time approaching, she retires into her hut, which her husband may not enter for the next three months. According to some authorities, this prohibition holds good for two months, but in all this period the father may also not take part in any hunting expedition. Thus, he too is regarded as unclean. Among the Makololo and others on the Zambesi, a woman who suffers a miscarriage has to leave her settlement for three or four weeks and live apart in a hut in the bush; she is regarded as particularly unclean; she may not eat or drink from a dish, her food is put in her hands which have to serve as plate as well as cup (Holub).

Of the Ovaherero the missionary Dannert records that men may not see the lying-in woman till the remains of the umbilical cord have fallen off the child, otherwise the child would become a weakling and in battle would be hit by arrows and spears. The house in which the lying-in woman has to stay has two doors; the one goes towards the *okuro* (sacred fire), which is always to the west of the chief's house, whilst the other lies at the opposite side of her hut. These doors, however, are only holes, and besides these big holes there are innumerable smaller ones so that the wind has fair play. The lying-in woman is taken as soon as possible to the hut erected for her, generally after two or three hours. She has to go in at the back door, *i.e.*, that turned away from the sacred fire, as she has to use this door later for all going out and in. Indeed, until the umbilical cord has fallen off the child she may not even look out of the front door. Now the lying-in woman stays in this hut for about four weeks; however, if she is a poor woman, who has not servants by whom she can have her house looked after, she may leave the hut sooner, but, in any case, not before the navel cord has fallen off the child.

Among the Loango negresses, likewise, the lying-in woman may not be visited by men before the remains of the umbilical cord have fallen away. Among the Ewe speaking peoples the mother is unclean for seven days; among them, however, as well as among the negroes of Sierra Leone, she is inaccessible to her husband not only in childbed but also during the whole suckling period (Zündel).

Among the Masai the husband may not enter the hut for ten days after the birth of the child; also he may not eat food there until the new-born child can walk (Merker).

On the Hawaii islands the woman has to spend ten days in the woods completely secluded from men (A. Campbell).

In the Polynesian islands the mother goes immediately after delivery with her child to the priest in the *marae*, where he ligatures the umbilical cord, and here she stays until the remains of the cord have fallen away from the child (Moerenhout).

On the island of Nauru the lying-in woman was regarded as unclean for 15 days (A. Brandeis).

On Tahiti the lying-in woman of high rank has to spend two or three months, but of the lower classes only two or three weeks, in an isolated hut. In this period she may suckle her child, but she herself must be fed. The father of the child has unrestricted right of entry; the other relatives, however, may enter the hut only when they have taken off all their clothes. Everything the child touches, especially with its head, is its property. The poorer women at the end of this seclusion have to undergo five lustrations; the rich are purged from their uncleanness by a great festival on the *marae*, the so-called *oroa* festival (Wilson).

On the Pelew islands, according to Kubary,¹ the husband is strictly separated from the lying-in woman for 10 months; during this time he sleeps in the bachelor's house (baj) and goes to his own house only to eat.

In Andai, on the north coast of New Guinea, according to v. Rosenberg, the lying-in woman has to stay 14 days in the lying-in hut. She is not absolutely forbidden to go into her husband's house, but the less this happens the better it is for the occupants.

"In no case, however, may the house be entered by the ordinary steps, but rather by a beam in which a few very shallow notches have been made in this way to make climbing up and down as troublesome as possible. People believe that if the woman were to enter in the usual way, the inhabitants would be afflicted with disease. If anybody goes past the hut whilst mother and child are there, he is forbidden to return the same way he came because they believe that in this case the gardens would be laid waste by pigs. According to another custom, anyone who meets the mother with the still unweaned child outside the house has to turn his face away for fear of becoming ill otherwise."

According to Macdonald, the missionary in the New Hebrides, the lying-in woman is regarded as unclean; no man may enter her hut. In it she has to stay with her child for 30 days. Her husband and relatives provide her with food. They believe that her milk would dry up if she were to work during this period. At the end of it she bathes in the sea.

The same ideas prevail in the Marianne and Marshall islands and in the Carolines according to v. Milkucho-Maclay.⁸

From Samoa, Kramer² mentions the proverb :

"Step not over the suckling mother," and he adds that in the Gilbert Islands, too, sexual intercourse is forbidden for at least two months.

On the Aru Islands the lying-in woman is likewise considered unclean and has to lie in the room turned towards the fire for a whole month (Reidel ⁶).

Among the Eskimo the woman is not allowed to leave the house for a certain time after delivery: then (sometimes not till two months afterwards) she visits all the houses near by after she has changed her clothes, which she never wears again, for another outfit. According to another custom, she may not eat alone for a full year. The Eskimo who were asked for the reason of this custom said the first Eskimo did that also (Hall). Among the Greenlanders, lying-in women, as David Cranz records, have a great deal to observe. They may not eat in the open air, nobody may drink from their water jugs or light a splinter of wood at their lamps, and they themselves may not cook over them for a time.

The Tlinkit woman also is unclean during the puerperal period, and only the nearest female relatives may provide her with food.

The Indians on Hudson Bay leave the lying-in woman as unclean for six weeks in the lying-in hut in the care of two women (Hearne). The Chippewa lying-in woman is likewise unclean and for eight days she has to use a special fire for cooking. If anyone else uses it they are overtaken by illness. The missionary Beierlein, who told Ploss this, saw several young Indians, who had eaten food cooked on the fire with the food of the lying-in woman, wriggling about, complaining of abdominal pains, and, finally, had a bitter medicine given to them because they were afraid of becoming ill.

The Uinta Indian woman remains in the lying-in hut for three or four weeks; whilst the Pueblo has to go through a special act of purification. Among the Macusi, in British Guiana, the woman in childbed is unclean till the umbilical cord has fallen away from the child (Schomburgk); among the Californian Indians the uncleanness lasts for 40 days (P. F. X. de Charlevoix).

4. THE UNCLEAN PERIOD AMONG CIVILISED NATIONS

It may well surprise us to find the lying-in woman, even in relatively highly civilised nations, sometimes quite isolated from human society. Kerr states that in Canton lying-in women of the well-to-do classes keep their rooms because they are "unclean." Of the poor classes in Canton, Kerr says that the women often get up again just after delivery and leave the house as early as the third day.

Among the Miaotze, the original inhabitants of Kwan-Tung, the lying-in woman may leave the house on the tenth day, but she does not work till after 40 days. Here a purification festival is customary which, however, is commonly celebrated as early as the thirtieth day (Krósczyk).

The Japanese woman also is regarded as unclean after delivery, and that for 50 days. Until the expiration of this period she may not leave the house.

And even among many of the nations of Europe in modern times the lying-in woman is regarded as unclean. Thus, among the Lapps, as Scheffer stated, she has to occupy a special place in the hut on the left of the door, where nobody goes, because she is unclean, and the husband does not approach his wife before the end of the sixth week. In Hungary no man except the father may go near the lying-in bed; if one, nevertheless, ventures to do so, then his hat is taken from him and he has to redeem it with money (v. Csaplovics, II., p. 303). In Bohemia and Moravia the lying-in woman is not allowed to go alone to the well or river for water in order that she may not spoil the water (Sumzow, p. 349).

In Russia also delivery makes mother and child unclean; for other persons contact with them before the end of the natural process and before the accomplishment of certain prescribed customs is dangerous. The duration of the uncleanness is generally 40 days. Among the Great Russians the lying-in woman is separated from the rest of the family for a time; not, however, among the Little Russians. In the Province of Nijni Novgorod, where delivery takes place in the bath-house, the lying-in woman stays there for a few days. In the Province of Tula she remains in the bath-house for eight days, then she goes to her mother, with whom she stays for six weeks, and only then returns home to her husband.

The idea that sexual intercourse with a woman in childbed causes infection is to be found in various forms, even among peoples of Teutonic origin. In Germany people call the excretion from the genitals "puerperal purification," and regard the non-appearance of this as the cause of illness, when people say: "The mother did not cleanse herself." Traces of an idea of the state of being unclean are to be found in the following superstitions. In the Frankenwald the lying-in woman may not go to the well before the end of the period of six weeks, otherwise the spring dries up. She is also forbidden to go into the fields and garden, otherwise the crops will not thrive. In Swabia nothing may be borrowed from a house where there is a woman in childbed; she herself may not take holy water until she is blessed, but she must have it given to her.

Likewise the lying-in woman in Upper Austria and in Salzburg is subject to various prohibitions owing to the idea of uncleanness, as Pachinger records : she may not go into the brewery, or the beer will turn ; neither to the well, or the water will become troubled ; nor to the bakehouse, so as not to spoil the bread.

Among the modern Greeks the lying-in woman is unclean for 40 days. During this period she may not enter the church; on the fortieth day, however, she goes to the thanksgiving in the church. She is forbidden to touch during this period any object at all that is for sacred use. Anyone in possession of a talisman must avoid the house of a lying-in woman; near her it would lose its power (Wachsmuth,¹ p. 74).

We have here a survival from ancient Greece, for the Athenian woman was forbidden to go into the open air for 40 days; a lying-in woman was forbidden to set foot in the temple or to do any sacred action without first having had a purification bath.

Likewise, among other early civilised peoples, we find that the lying-in woman was regarded as unclean, *e.g.*, among the Romans, the Jews and the Hindus. The Romans regarded the house in which the lying-in woman was staying as unclean; anybody who came from it had to wash and the house had to be purged later. That the Jewess, too, had at the end of the puerperium to undergo a purification is, of course, well known.

5. DIFFERENCES IN UNCLEANNESS ACCORDING TO SEX OF CHILD

In the Pulaya caste in India we have seen that the lying-in woman was more unclean by the birth of her first child than by her following confinements. However, we also come across the custom of the lying-in woman's period of uncleanness varying in length according as she has given birth to a boy or a girl.

The Law of Moses, as is well known, made variations in the length of the unclean period according to the sex of the child. The Law is (Leviticus xii. 2-5):

"If a woman have conceived seed, and born a man child : then she shall be unclean for seven days; according to the days of the separation for her infirmity shall she be unclean. And she shall then continue in the blood of her purifying three and thirty days; she shall touch no hallowed thing nor come into the sanctuary, until the days of her purifying be fulfilled. But if she bear a maid child, then she shall be unclean two weeks, as in her separation ; and she shall continue in the blood of her purifying three-score and six days."

This difference in the duration of the puerperium after the birth of a boy and after that of a girl is ascribed by the Talmudist Maimonides to the colder nature of the female sex ; he says :

"The illnesses of cold (female) natures need a longer cleansing than those of the warm (male) natures, and as woman's nature is cold and moist, so the uterus at the birth of a female is larger than at that of a male, hence more time is required for the discharge of the cold mucus and putrid fluids at the birth of a female than at that of a male, where there is more heat and less fluid. Also a woman brings a male child into the world if the seed comes first from her, but a female when it comes first from the man. The birth of a male child shows therefore a hot nature in the mother as the birth of a female child a cold nature in her. And by virtue of the warm nature, the excretion and purification of the morbid discharges proceeds more quickly with a male than with a female nature " (see Trusen, p. 111).

The Hippocratic school taught similarly that at the birth of boys the lochial discharge does not last so long as after confinement with a girl because, in the development of the fœtus, the separation of the limbs in the female fœtus was supposed to require at most 40 days; in the male, on the other hand, 30 days (*De nat. pueri.*).

It says that in a healthy woman there takes place as a rule after delivery a cleansing for 40 days at the birth of a girl when the purification lasts its longest; however, it is not dangerous if the purification lasts only 25 days. At the birth of a boy, on the other hand, the purification lasts in the case of the longer time, 30 days; however, it is not dangerous even if it lasts only 20 days.

We find an echo of this in what Klunzinger has reported from Upper Egypt. Here the uncleanness of the lying-in woman lasts for 40 days, at the end of which she has to have a bath. On this occasion she has 40 cups of water poured over her head if she has given birth to a boy; but if the child is a girl then 30 cups of water are enough.

Among certain tribes in New Guinea, according to Härtter, custom requires the mother to stay in the hut for 36 days in the case of the birth of a daughter and 12 days at the birth of a son. She looks after the housekeeping during these days, but she does not fetch water from the well or wood from the bush and pays no visits in the town.

In the traditions of the Masai, which Merker has collected in his fine monograph, traces of customs of this kind are frequently met with. The length of the puerperium varies very much. Thus we find stated among the El debeti as the length of the puerperium after the birth of a boy 15 days, after the birth of a girl 25 days; among the El maina, 2 days and 15 days; among the El gidûn, in both cases, 6 months; among the El merro, 5 and 10 days; among the El tumbaine, in both cases 10 days; among the El ginjollo, 8 days; with the El manunjo, 8 and 4 days respectively; with the El diditi, 16 and 5 days; with the El gassiarok, in both cases 5 days. Thus here the length of the puerperal period moves sometimes in favour of the male, sometimes of the female sex; in some cases no difference at all is made.

Likewise of the Bogos, in East Africa, we learn from Munzinger that the house in which the lying-in woman stays is closed to every man, and this exclusion after delivery of a boy lasts four weeks, whilst after the birth of a girl three weeks are considered sufficient. After this period is over the house is purified by fumigation. However, there is no question of transmission when we hear of the Cree Indian woman that, after confinement with a boy, she must separate from her husband for two months, but after the birth of a girl for three months. So, in this case again the girl causes greater uncleanness (see Franklin, *Reise*, etc., I., 71).

6. CUSTOMS OF THE PUERPERIUM

The arrival of a child and, along with this, the relief of the mother from long and anxious care and waiting and from the pains of labour, is such a joyous event that we not infrequently see also some external expression of this joy. This is done among other ways by decorating the house in which the mother is. In Old Calabar, over the middle of the door of a house in which a birth has taken place, a bunch of green leaves is tied on a string, hung out as a sign of what has taken place (Hewan).

This marking of a house of birth appears also to be customary in other parts of Africa, for the Basutos hang a bundle of reeds over the gate (Casalis). Further, as a sign that a child has been born, among the Marolong (Bechuana tribe), a kaross is hung over the door of the hut (Joest). In ancient Greece the door-posts were entwined with olive branches or with wool in order to let the neighbours know at once by this the sex of the new-born child. The ancient Romans placed wreaths of laurel, ivy and fragrant herbs on the door of the house.

There are a few isolated peoples among which general popular opinion prescribed no outward sign. Among the non-Mohammedans, in the island of Ceram in the Dutch East Indies, the father bothers very little or not at all about the child in the first three or four months; and also among many other peoples the father is not allowed even to see the new-born child, chiefly, no doubt, because the lyingin woman would make him unclean and he might bring harm to the child.

How very differently in most nations the father expresses his pleasure according to the sex of the child has been thoroughly discussed, and the lying-in woman gets very little thanks for the birth of a daughter, a fact which is very characteristic of the value and importance of the female sex in the nation in question.

The relatives and friends also have, to some extent, an active share in the happy event. Thus, according to Felkin, among the Madi negresses the lying-in woman sits in the door of the hut with her child on the fourth day and receives the congratulations of her friends. Among the Hindus the father sends a little boy or girl of the family with a maid to announce the birth to the relatives. On the Tenimber and Timor Laut islands the husband informs his father-in-law and the blood relations of the successfully concluded delivery, and they then come with gifts (fruits of the earth and fields, a few pieces of money and linen) to admire the family offspring. In Sermata, after the first confinement, the blood relations pay their visits in the dwelling-house on the second or fifth day in order to offer their congratulations. On this occasion the women bring presents with them-red, black and white linen, rice, sirih-pinang, bananas, sago, kalapa nuts, tobacco, fish, and even water and firewood. Twenty days later the father is obliged to give a feast. Among the Babar island women this feast is held as early as the tenth day, and with it the puerperium is regarded as finished. At this feast the relatives first appear with their presents and congratulations. The lying-in woman in the Kei islands receives the congratulations of her relatives immediately after delivery, but only of those of the female sex (Riedel ¹).

We have already learnt the peculiar customs of the Ovaherero in South Africa in the puerperal period. Though the sight of lying-in women had the effect of making the men unclean and doing them harm, yet in another respect it was regarded to a certain extent as sacred. Viehe writes of this :

"They perform certain sacred rites which, otherwise, are done by the priest as acting head of the family. He must, namely, consecrate the milk on the *onganda* daily by tasting a little of it before it is used. On the other hand, if there is a lying-in woman in the *onganda*, the milk is brought to him only so that he may dip his right forefinger into it and point it then towards the pit of the stomach. The so-called *makaran*, *i.e.*, consecration by contact with the mouth, however, is done during this period by the lying-in woman."

According to the report by Dannert, the lying-in woman takes from the meat cooked for her a few very small pieces. These she consecrates by breathing on them and stroking the new-born child's toes with them. They are then called *ondendura*, and after the consecration are put away till evening. Now if the new-born child is a boy these *ondendura* are given after sunset to a favourite little girl to eat; if the child is a girl, then a boy has to eat these little pieces of meat.

From the time when the remains of the umbilical cord fall off the child the fire is moved from the back door of the lying-in hut to the front one. The first thing cooked after this is the breast and thigh of an animal which has been kept till now. Then the father of the family, too, may come to see his wife and new-born child, yet he is not permitted to set foot inside the lying-in hut. Now he consecrates the flesh of the breast and thigh by taking water into his mouth, sprinkling it on the meat, and then biting off a little piece of it. In doing so he recites the following :

"A child is born to me, a boy (or girl) in this village, given to me by you (ancestors, forefathers): May he (she) prosper. May it (the village) never perish!"

Stoll records of the ancient inhabitants of Guatemala:

"On the birth of a child, a fowl was given to the priest as a thank-offering for the gods and the event celebrated by the relatives. When the child was washed for the first time, which was done in a spring, or, failing that, in the river, they offered up incense and parrots. On this occasion, people threw all the crockery used for the mother during labour into the river as an offering to its gods. They had the soothsayer draw lots to find out the day on which the umbilical cord was to be removed, and when the day was decided they placed it on a corncob and, amid the saying of blessings, divided it with a stone knife which was thrown into a spring as a sacred object."

On the Tenimber and Timor Laut Islands, the husband has to carry and look after the child at first, whilst the woman, after she has bathed, does her usual work. As with the Ovaherero, we find with the Kirghiz the custom of offering a sacrifice of food to the gods for a successfully concluded labour. Immediately after delivery a ram is killed, the right hindquarters, the liver, the fatty tail, the backbone and the neck are put into a cauldron and boiled; the remaining meat is kept raw, and, three or four days after the delivery, is burnt as a sacrifice. When the cooked meat is ready, the neighbours are summoned in order to announce the birth of the child to them; the cooked meat is shared among the women present; the woman who received the child gets the neck. The day following the delivery is regarded as a specially happy one and is spent in gaiety, and the women assembled are entertained as well as can be afforded.

This is perhaps the suitable place for calling to mind an old Dutch custom which is recorded by van Engelenberg and Geyl. In the most diverse towns in the land, there existed the law that the unauthorised entry of houses in which there was a lying-in woman would be punished as a profanation of childbed. In Haarlem, every believer was forbidden to enter the house of a woman in childbed; a guard was even placed before the house by the town authorities. In this period, even a judicial summons could not be delivered in the house. Tax collectors might not enter it, and the head of the house was released from military service for the period of his wife's lying-in. To make such a house recognisable, the *Kraamklopertje* was fastened to the house door.

Van Engelenberg writes : "As soon as a child was born, a Kloppertje, a little wooden board, was fixed to the door by means of a bolt. The front of this board was covered with rose-coloured silk, over which ornamentally folded lace was stretched in such a way that a longitudinal rectangle was formed. Under this lacework a white paper was put, which took up about half the rectangle. If a girl was born, the paper was left in its place; if a boy was born, the paper was taken away, so that it shone in its full splendour. The wealthier the people, the finer were these A stillborn child or one which had died caused no change in this, Kloppertjes. because people did not put on mourning for such a young child. But, if the parents were already in mourning, then this could be seen in the *Kloppertje*, and black silk was used instead of red, and batiste or linen instead of lace. Such a Kloppert je was put on the door each day from the time the child was born till the lying-in woman had attended her first church service." That the Kraamkloppertje was used also in the case of stillbirths is not to be wondered at; for its chief purpose was to guard the lying-in woman from unpleasant disturbance and annoyance. The announcement of the sex of the child is only a secondary purpose. According to Geyl's information, it was originally the door-knocker which was wrapped in cloth, at any rate to deaden the noise. He adds : "that in the forties of last century in certain villages in North Holland, the door-knocker, when a boy was born, was entirely muffled in a white cloth, but if it was a girl, only half-covered, and that, in other parts of the country, the peasants, in order to announce the birth of a child, were accustomed to tie a little bundle of beech (?) (palm ?) wood to the doorposts, or to the corner of the farmyard fence."

Geyl, writing in 1903, states: "The door-knocker itself is now no longer used, and only the desire for show and parade has kept the token of lying-in women from dying out. Thus, from the door-knocker simply wrapped in linen has developed the rectangular Kloppertje trimmed up and framed in silk or satin."

Moreover, as Müllerheim has established, such points of view, according to which the puerperal period has to be kept from disturbance at any price, were authoritative not only in Holland. In Athens, even a criminal who took refuge in the house of a woman in childbed was spared. In Rome, a wreath was hung before the door of the house in which was lying a woman in childbed. A passage from Juvenal (9th Satire) quoted by Müllerheim runs accordingly: "foribus suspende coronas iam pater es !" According to Laufenberg municipal law, every house in which there was a lying-in woman was freed from legal proceedings and charges, from town guard and tax for six weeks.

7. SUPERSTITION DURING THE PUERPERIUM

We come across, in the puerperal period, from the very first hours, many peculiar and superstitious customs, the origin, meaning and significance of which the peoples among whom we find them prevalent are very often unable to give any account. Of course, religious development is always changing and new opinions corresponding to the changed ideas are always coming into circulation. Some of these customs have their origin in the risks of illness to which the lying-in woman is exposed. Among these, next to the uterine hæmorrhages already discussed, the terrible puerperal fever has a prominent place. The outbreak, the whole course and the serious nature of this affection have something demonic, and in almost every nation the belief appears that every disease is the act of evil spirits. Therefore, people try by every means to banish the malicious devil of disease. Men have characteristic ways of imagining the spirits.

The Jews feared for the lying-in woman and her child dangers from Lilith, against whom they hung up amulets and cards with texts from the Bible in the room. We have already made the acquaintance of this demon. In Galicia this is still the case, as Spinner records in Leinberg. Immediately after delivery, a card is hung up towards each of the four quarters of the globe which, printed in Hebrew, contains the following magical invocation :

"In the name of the great and awful God of Israel! The Prophet Elijah once encountered a phantom named Lilith and her whole train. 'Whither goest thou, unclean and evil woman and all thy unclean followers ?' 'Elijah,' she replied, 'I go to the house of the lying-in woman so and so, in order to give her to Morpheus and to take her newborn son from her so that I may fill myself with his blood, suck the marrow from his bones and leave his corpse behind.' Then answered Elijah : 'Thou shalt be banished by the Almighty and a dumb stone shalt thou become.' ' For God's sake, set me free, I will fly and swear to thee by the Almighty, the ruler of the fate of Israel, to leave this woman and her newborn son in peace, also I swear to thee that as soon as I hear my name which I now disclose to thee, I shall fly at once. If anyone discover my name, neither I nor my followers will have any power to do evil and to come into the house of the lying-in woman, much less to harm her. So now let the names be introduced into the house of the lying-in woman or of the child. They are : Strina, Lilith, Abithu, Amisu, Amisrofuh, K(e)kasch, Odem, Ik, Podu, Eilu, Patruto, Abshu, Kata, Kali, Bitno, Toltu and Partshu. And anyone who knows these names and inscribes them will cause me to flee immediately from the child.' So Elijah introduced this formula of protection into the house of the lying-in woman as of the child and thus the mother will never be harmed by me. Amen. Amen. Selah. Selah ! "

At the foot of this card then the following pattern is introduced. It contains the words Sinov, Vsinsinov and Isomngolof, which are the names of certain angels :

Almighty. Sinov. Abraham and Sara.	rend Vsinsinov. Isaac and Rebecca.	Satan. Ismngolof. Jacob and Leah.
Let not a witch live.	Adam and Eve within.	Let not a witch live.
	Lilith and her followers.	

Likewise, the Jews in Southern Russia make use of such a card in the lying-in room. Fig. 848 represents an exact copy in its natural size of one such card * from Elisabethgrad. According to Weissenberg, these "childbed cards" are to be found in the room of every Jewish lying-in woman in Russia.

* For the original, M. Bartels had to thank the kindness of Dr. Weissenberg, of Elisabethgrad.

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FIG. 848.—Amulet, with inscriptions, used for protection in lying-in among the South Russian Jews in Elisabethgrad.

Similar amulets were still in use among the Jews in the Provinces of Saxony and Brandenburg, and probably also in the whole of North Germany in the middle of last century. The well-known Berlin neurologist, Martin Bernhardt, was kind enough to give M. Bartels, in the year 1904, two such amulets which had still been in use in Saxony about fifty years before. The whole matter consists of eight sheets similar in form and size to the Hebrew printed text. A German inscription below,



FIG. 849.—Amulet used by Jews in North Russia to protect lying-in women. Nineteenth century.

done in Hebrew letters, gives Danzig as the place where it was printed. Each sheet is 19 cm. wide and about 25 cm. high. A fillet entwined with leaves and printed in blue frames the text (*cf.* Fig. 849). A small oval wreath, also printed in blue, encloses the title. Each sheet is stuck on blue cardboard and fitted with a brown ribbon for hanging up. The text is the same in all the sheets; only four bear the title "For a girl," and four the title : "For a boy." Thus, there are four cards for each sex, to hang, at any rate, one towards each point of the compass. The text, according to the translation of Professor N. Sameter, runs :

" For a Girl.

"Adam and Eve! Let Lilith (remain) outside. Let Eve be the first woman! Sinoj, Sanrenoj, Samnaglof, Shamuel, Chasdiel!

"This is the oath of the Prophet Elijah of blessed memory with which he exorcised the witches till they promised him to go away from the house if their names should be called :

"In the name of the Eternal, the God of Israel who rules over the Cherubim, whose name is great and sublime! The Prophet Elijah of blessed memory went once on his way and encountered Lilith and all her followers. Then he said to the godless Lilith: 'Whither go ye?' Then she answered and said unto him: 'My Lord Elijah, I go to the house of the lying-in woman X, daughter of X, to give her the sleep of death, to take from her the only begotten son (the only begotten daughter), to drink the blood, to suck out the marrow of the bones and to devour the flesh!' Then answered the Prophet Elijah of blessed memory, and said unto her: 'Thou shalt be shut up in a mountain by God, praised be the Lord! and like a dumb stone!' Then she replied and said: 'For God's sake! Let me go! I will flee and swear to thee in the name of God the Eternal, Israel's God famed in battle, to keep away from the path of the newborn son (newborn daughter) and at any time that I hear my name, I will fly! Now I will tell you my names and at any time they are called, I and all my followers shall be without power to do evil, namely, to enter the house of a lying-in woman, much less to do her harm.'

"' My names are : Lilith, Abitu, Abisu, Amsoerpho, Hakash, Ores, Hikdofu, Ilju, Matrota, Abanukta, Satrona, Kalikatasa, Tilothuj, Piratsha.'

"Destroy Satan! A witch thou shalt not allow to live. (The Hebrew verse repeated six times.) Amen! Selah! (six times.) Adam and Eve. Let Lilith (stay) outside! Let Eve be the first woman. Sinoj, Sanrenoj, Samnaglof, Shamuel, Chasdiel!

"A song of degrees. I will lift up mine eyes unto the hills, from whence cometh my help. My help comes from the Lord which made heaven and earth. He will not suffer thy foot to be moved : He that keepeth thee will not slumber. Behold ! He that keepeth Israel shall neither slumber nor sleep. The Lord is thy keeper : the Lord is thy shade upon thy right hand. The sun shall not smite thee by day nor the moon by night. The Lord shall preserve thee from all evil : He shall preserve thy soul. The Lord shall preserve thy going out and thy coming in from this time forth and even for evermore."

Of the Jews in Fürth, Kirchner relates :

"At the same time too, a naked dagger or sword is put at the head of the woman's bed, as with the said sword or dagger they pass three times round the lying-in bed and along the walls and over the floor, and this they do once every night for 30 days. Also the nearest neighbours, husbands and also young boys are accustomed to appear at the house of a lying-in woman every evening for 30 days and there to surround her bed (cf. Fig. 850) and to read aloud altogether the evening prayer or blessing in clear, loud voices " (Jungendres).

Among the South Russian Jews, according to Weissenberg, a knife or a prayerbook or a Bible is put under the lying-in woman's pillow to frighten away the evil spirits. The cards which are fixed on the walls, windows and doors of the lying-in room have already been discussed.

One often sees in mediæval Christian representations of childbed, the pentagram or pentacle (thus, in the painting by Giotto of the birth of John, a protective sign of this kind is put on the bed-rail). Among the Romans, Sylvanus was regarded as the enemy of lying-in women; in order to protect them, three men with special symbolical tools had to keep guard. The symbols were connected with three gods who used to protect women in childbed. One of the men, as the representative of Intercidona, sprang up with an axe; the second threw at the door a pestle, such as was used for bruising corn; this signified Pilumnus. Finally, the third carried a broom with which he swept the threshold of the house; that was the symbol of Deverra (see Hartung, II., p. 175).

In Abyssinia, many amulets are hung on the lying-in woman and, as soon as she has recovered from the exertion of labour, a mirror is put before her face into which she is made to look at herself steadily without turning her eyes away. In addition, the old woman attending her from time to time makes fumes with aromatic herbs in a pot half-filled with coal. These fumes fill the hut and almost suffocate the puerpera (H. Blanc).

Among the peoples of Islam, the lying-in woman (and also according to Polak



FIG. 850.—Neighbours at evening prayer round the bed of a Jewish lying in woman. Eighteenth century. (After Jungendres.)

in Persia) is hung with amulets which consist of pieces of paper on which a passage of the Koran has been written.

In Armenia, for the first six weeks after delivery, no lying-in woman is left alone for fear of the devil, which is especially dangerous for her (Meyerson). Among the Georgians, the priest consecrates the house of the woman in childbed with holy water and lays the Bible on the woman (Eichwald, p. 143).

Among the Gurians, the puerpera is put to bed in a decorated room where she is covered with a net to keep off evil spirits; the couch has curtains of damask, and shells are put under the pillow. In the first night, the family does not go to bed till daybreak. As soon as the news of

the birth of the child is spread abroad, princes and noblemen, commoners and even the women of the neighbourhood hasten there, the last dressed in strange disguises, some as pigs and some as horses ; then they sing, play and dance.

Among the Kirghiz in the Semipalatinsk district, to ward off evil, a cord is drawn over the lying-in woman and on to it some religious books are hung to keep away the devil. The women stay with her during the night and light a fire on the hearth, else the devil will come. These books are not removed till the puerperium is regarded as concluded.

We have already seen that with Italian women, the eagle stone, the *pietra della* gravidanza, is regarded as a helpful amulet in labour. In the puerperium also it gives protection. Whilst in labour it must be tied to the left leg, in the puerperal period, on the other hand, it is tied on the patient's left arm.

The evil eye is also feared for the mother and child. In Serbia, according to Petrowitsch, this is the reason that the lying-in woman stays in bed for forty days.

Among the Hungarians, the lying-in bed is generally prepared in a corner of the living room and darkened by having linen cloths hung round it so that neither the mother nor the child may fall ill from the glance of strangers. The godmothers send the lying-in woman daily a few well-prepared meals till she gets up again, which usually happens within from 12 to 14 days, often even sooner. The husband meanwhile fares well, for he consumes the cakes and food which his wife is unable to eat.

In the Russian Province of Perm, the midwife sometimes goes immediately after delivery, but often not till six weeks after, to the river with a clean pail; after she has filled it with her right hand, she scoops three times nine handfuls of water into a basin held ready and, while doing so, murmurs all kinds of things in order to protect the lying-in woman.

In some parts of Russia, water which has had incantations spoken over it is poured on the lying-in woman's hands and over her back. This calls to mind the washing of the lying-in woman's hands by the midwife among the ancient Greeks.

Immediately after delivery, people in Russia put something in the patient's hands or under her head, which is supposed to protect her from witchcraft. In Little Russia, they use cornflowers or a knife consecrated on Easter Sunday; in Bulgaria, a ring or some garlic.

It appears also as if in Bulgaria the lying-in woman may not remain alone, at least not during the first night in which the goddesses of fate, the "Urisnicen," come to announce the fate of the child. In a song, the subject of which is the confinement of a queen, it runs :

> "It was late evening when the women departed Only the first one stayed, the first and the last, The last was the Turkish one, and thus spake the Turk woman 'O king, O wise king, lie down, rest thyself ! We will watch over thy consort, thy child, When the Urisnicen come to tell the fate We shall then hear it.'" (A. Strauss.)

In Great Russia in olden times, a bath broom was placed in the corner; they thought they could protect the lying-in woman and the child with this (Sumzow, p. 349).

In the Province of Kharkov, a vessel containing water is placed beside the lying-in woman so that she may not get milk fever.

Among the Kashubes, people protect themselves by drawing a cross on the house door with chalk (Sumzow).

The Polish woman in Cracow, according to Kopernicki,² is protected from the nixies by blue-bells.

In Germany there are numerous superstitious precautions in use for the protection of the lying-in woman. She must, so it is said in Ruhla in Thüringia, be in bed at 12 o'clock at night "because then the Lord is with her." Anyone who enters the room has to bless the child before addressing the mother in Mecklenburg; and a pair of trousers, which is put on the bed of the lying-in woman, protects her from after-pains. In the district round Königsberg in Prussia, they wash the woman with her own blood after delivery, so that the yellow spots may go away. In Berlin, in the first part of the period after delivery, the lying-in woman is not allowed to receive male visitors, not even her nearest relations, unless three women visitors, who have not arrived at the same time, have previously been with her and seen her child. If she acts contrary to this, then the child will not live for one year, and she will never again give birth to a child (Krause).

In many parts of Germany (Swabia, Thüringia, etc.), nothing may be borrowed before the third or the ninth day from the house of a lying-in woman. During the first nine days in Thüringia no clothes are washed ; for three days, the woman must not be left alone; until after six weeks, she is not allowed to go into the cellar or to the attic or to the well; there must always be a candle burning in her room, otherwise the witches will come and put a changeling in the child's place. In Swabia the lying-in woman may not comb her hair in the first 14 days otherwise she will get headaches or her hair will come out; there too, she may not hang any of her clothes in the open air before she has been blessed, otherwise the devil will acquire power over her. In the Vogtland, the first time the lying-in woman fetches water from the well, she must throw a coin in it, otherwise the water will stay away and, when she



FIG. 851.—Talisman used by a Tula Toba lying-in woman in Sumatra. It is made of the shoulder-blade of a dead enemy. Mus. f. Völkerk., Berlin. (Photo: M. Bartels.)

goes into the cellar for the first time, she must carry in a strip of paper, "nine kinds of ribbon or dead nettle and marjoram" for protection from goblins.

In German Switzerland, the lying-in woman must go out after the puerperal period in new shoes, otherwise the child will have a dangerous fall at some time. In the Canton of Berne, if she wishes to have luck, she must not go out in front of the eaves till the child has been baptiscd. In some parts of Germany, a pair of scissors is laid on the bed to protect the lying-in woman from the malice of the elves. In Upper Austria and in Salzburg, the lying-in woman may prevent all attacks of the evil one by not being left alone or without light when twilight comes; her husband's trousers must be hidden in the bed (Pachinger). Also they protect the lying-in woman from witches, as Pachinger records, by putting over the door of the room a knife in the blade of which nine crosses are scratched; "if a woman in childbed thinks she will be disturbed by witches, they put a dagger or a knife over the bed or cradle; if they fall upon the woman or the child, they will be impaled on this." In the Saxon Upper Erzgebirge, the woman just delivered may not wear a black vest, otherwise the child will be timid; also she is not to go over the beds in the garden or nothing will growin them (e.g., in Zwickau) and she must not look at a funeral procession or her husband will die in the following In the Bavarian Upper Palatinate, the lying-in vear. woman is said to be exposed to constant attacks during the first fourteen days. She may not be left alone ; after

prayers, nothing more (especially no water) is taken into the room to her because otherwise the witches will go in with it. To prevent this, they put the knife in the door and lay the rolls upside down in the drawer. There are more of these popular superstitions in many forms.

Albert Kuhn (p. 35) has told of a North German superstition. It is that the lying-in woman may not go out before going to church otherwise the dwarfs will lead her astray. With whom then, she has to suckle puppies till finally her breasts become very pendent.

In Iceland, too, we come across the belief that a lying-in woman should never be left alone, and at night a wax candle should burn in her room; for other candles have no power. If, however, the lying-in woman is a *tilberi*-mother (*tilberamodir*), *i.e.*, if she possesses a *tilberi*, then she must have very special protection. For the *tilberi* tries to get possession of her, and if he should succeed in sucking her breast, then it is all over with her for he will suck her to death. The *tilberi* (*informer*) is a magic being which the woman has made from a human rib pilfered from a church-yard which she has wrapped in wool and on which she has spat communion wine. It assumes the shape of a worm or a grey bird and sucks the milk from the udders of strange cows and sheep, in order to bring it to the *tilberi*-mother. Certain affections of the udders of milch cows are connected with the sucking of the *tilberi* (Max Bartels ¹²).

Among the Hindus in the Punjab (according to Rose ⁴) a number of preventive measures are suggested; above all, in no circumstances may a cat go into the lyingin woman, the word cat may not even be mentioned; otherwise at the next pregnancy there will certainly be a premature birth in the eighth month.

The Battak in Sumatra give their lying-in women a very peculiar implement which they use as a fan. One of these, reproduced in Fig. 851, is in the Ethnological Museum in Berlin. According to Müller, it was made on Tula Toba from the shoulder-blade of an enemy killed in battle.

"The piece of bone, not of uniform thickness (1-2 mm.) has the form of a sector of a circle, the radius of which is $18\cdot8$ cm., and the arc $8\cdot5$ cm. At the point it is furnished with a ring. The inscription is now difficult to decipher as the piece of bone has now become brown, and on the back almost black."

The instrument, which also gives protection in battle, bears the name *Hadjima* which, according to Müller, is a misrepresentation of the Arabic *azimat*, talisman. Besides the inscription, there are ornaments on it, reproduced in Fig. 852 from an exact copy of the original. The written characters themselves state the days which are most suitable for any purpose; also there are directions for using this charm. Certainly then, in the case of this fan also, the warding off of demons from the lying-in woman is involved. The young Masai mother smears her brow with white

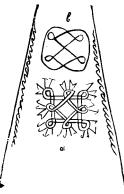


FIG. 852. — Ornamental pattern on the talisman illustrated in Fig. 851.

clay in the first four days after delivery; here too is the superstition that neither fire nor household objects must be taken out of the hut during this period (Merker).

8. CEREMONIAL AMONG PRIMITIVE PEOPLES DURING THE PUERPERIUM

Among all the peoples where we saw the lying-in woman looked upon as unclean, a more or less ceremonial act of purification is, of course, necessary in order to permit of the young mother's return to human society. We have already become acquainted with some examples of this. Substantially, these purifications consist in baths, washings, pourings of water, fumigations and similar processes.

Among the ancient Hindus there was prescribed for the puerpera a purification ceremony similar to that undertaken by women at the end of menstruation. This was described in the first volume on p. 647.

The act of purification for the lying-in woman which is required among the Akamba in Central Africa is very peculiar. Here, on the third day after delivery, the husband has to have sexual intercourse once with the lying-in woman : then only is she "clean." As a sign that this custom has been fulfilled, the child gets an armband called *ida*.

In Egypt the middle-class puerpera is obliged to prepare on the fourth or fifth

day dishes of food which she sends to her acquaintances. On the seventh day she sits down, supported by the midwife, on the *parturition chair*, which is decorated with flowers, and thus receives her women friends who congratulate her and have to go through a number of ceremonial observances with the child.

The Ewe woman in Africa may not leave the hut of her parents for seven days without serious risk to herself or her new-born child. On the eighth day, however, she puts on her best clothes, makes a thank offering to the fetish and visits her friends.

Viehe describes the conclusion of the puerperal period among the Ovaherero as follows :— $\!\!\!\!\!\!$

"When the period of residence in the hut is up, the lying in woman leaves it by the door looking towards the okurno and goes to the okurno in order to present the child to the omukuru (ancestors), so that she with her child can get access to the okurno again and can resume her position in society. In this walk to the okurno, she carries her child in a skin on her back as is the custom in the country. The ondangere (woman guardian of the sacred fire) follows her there and sprinkles mother and child with water till they arrive at the okurno. Here at the okurno an ox skin is spread out for her. She sits down on it, takes the child off her back and puts it on her right knee. The head of the family, along with other men, is also present. Beside him stand two vessels, one filled with fat, the other with water. He fills his mouth with water and squirts it over mother and child. Then he addresses the ancestors as follows : 'A child is born to you in your onganda, may it never die out.' Then he takes some fat from the vessel in a spoon, spits on it and rubs it in his hands, then fills his mouth again with water and squirts it on the fat in his hands. Now he crosses his arms and, in this way, passes across to the mother, then takes the child on his lap and repeats the same ceremonies on it. In addition, he rubs his forehead on the child's hand and, at the same time, gives it its name, which is very often derived from some incident at its birth. The ceremonies with the child are accustomed to be repeated by other men present, when one or other of them also adds a name. Finally, the head of the family has a calf brought up and they touch its forehead with that of the child, thus making it the child's property."

Alexandrow records of lying-in women among the Ostiaks that in order to purify themselves, they light a fire, throw strong-smelling substances into it and then jump through it three times, thus fumigating themselves ; after this they return to the family yurt. Another record adds that before entering the common dwelling they have to lie down in the entrance, whereupon a number of members of the household step over them ; this custom, too, is looked upon as a kind of purification ceremony.

Among the disciples of John the Baptist or Mandaeans in the neighbourhood of Bagdad, the lying-in woman is baptised anew forty days after delivery (A. H. Petermann).

The acts of purification of the Hindu tribes have already been discussed to some extent; here a few more are added. Among the Santal the lying-in woman has to eat on the fifth or eighth day a dish of rice and milk specially prepared for this occasion. This she has to eat along with her husband who thus likewise undergoes the necessary purification.

Among some of the South African tribes the neighbours come at the end of a month and bring the lying-in woman presents. The husband kills an animal for sacrifice without the help of a priest; the lying-in woman is smeared with fat and red pigment and after this ceremony her purification is complete (Maclean).

Lying-in women among the Pueblo Indians are left lying for four days without being washed; on the fifth day they are washed and dressed. Then they go in the retinue of a priest to see the sunrise and to give thanks for a successful delivery. Whilst the lying-in woman is walking along behind the priest she throws cornflowers into the air and blows them about as thank offerings. Thirty days after the birth of the child she is clean, and then her husband returns to her, though some people prefer to wait for from 36 to 40 days.

As regards the ceremonial conclusion of the puerperium in Annam, we have information from Cadière :—

"Un mois après l'accouchement ont lieu les relevailles : la femme va au marché pour la première fois et ses amis, ses conaissances, lui font de petits présents, fruits, gâteaux, etc. De retour à la maison, elle offre ces présents en sacrifice aux sages-femmes et l'on termine par un petit festin. Les offrandes sont ordinairement : douze bouchées d'arec, douze crabes ou douze crevettes, ou morceaux de poisson. La sage-femme qui a opéré la délivrance offre ellemême le sacrifice."

The midwives to whom the sacrifice is brought are the "divine midwives" whose acquaintance we made in an earlier chapter. Only after the puerpera has gone through these ceremonies do they believe that she and her house are free of the power of the Phon Long, already mentioned in an earlier section. They say then that she has gone to "sell the Phon Long."

In the South of China the ceremonial conclusion of the puerperium is actually divided into two parts separated by a long interval. We have seen from Katscher's records that all the occupants of the house share the uncleanness of the lying-in woman for a whole month. At the end of the month, the lying-in woman washes her body in a decoction of *pomeloe* leaves. The father prays to the tablets of his ancestors and then betakes himself with one of his wife's maids to a temple—the temple of long life is very often chosen—to thank the gods for having given him a son, *i.e.*, if this has been the case. The Chinese woman may not go out for 100 days after delivery, for during this interval she is regarded as unclean. At the end of the 100 days she visits a temple with her child. Usually she chooses that of the goddess Kum-Fa, to whom the child is dedicated. If the woman has ever prayed to other gods for offspring then she offers her thanks in the appropriate temple.

Among the Nuforese, when a woman has had her first confinement and the delivery has proceeded successfully, then a festival is held after a few weeks, and at this the young mother lays aside or, as they say there, "throws away" her maiden name; for this she gets the title *insoes* which, translated literally, means *milkwoman*, and this, as with us, has the significance of Mrs., but, if her child has died, her name is also changed, but she is then called *insos*. At this naming ceremony of a young mother, she is concealed behind an upright mat, to keep her away from the eyes of the onlookers. Also she may not speak. She is handed food and drink and should she desire anything further, she knocks on her mat and it is at once handed to her. Whilst she eats and drinks, cooking is done on the *tifal*; then she gets her name and is now freed from her imprisonment (J. B. van Hasselt, p. 183).

On the Watubela islands, when a woman feels her confinement is near, she has the contents of ten *kalapa* nuts dried, because she will need them later for the ceremony of her purification. On the day when the remains of the umbilical cord fall off, from eight to ten children are invited to accompany the lying-in woman to the sea to bathe. If she is still too weak for this, then another woman has to take her place. On the way to the beach as well as on the way back, the children have to cry incessantly: *Uwoi*! *uwoi*! to draw attention of the evil spirits away from the new-born child. When they have returned, the dried *kalapa* nuts are shared among them and then they go home again (Riedel¹). Of the conclusion of the puerperium of the Israelite woman, Buxtorf writes that "when the forty days or six weeks of their cleansing are over, the women, before they sleep with their husbands again or have any intercourse with them, have to bathe in cold water and cleanse themselves ; they put on clean white clothes and thus rejoin their husbands. They bathe, however, in a common or public piece of water or, where they cannot have this, in special boxes, wells or holes in their houses, yards or streets where they dwell and which are convenient, prepared, dug and equipped, then filled deep with water so that they are up to the neck in it when standing. If there is deep mud below the water, they lay a wide stone or something else under their feet so that these are in absolutely pure water, and the water can get between their toes and everywhere. For otherwise the bathing is considered of no use, if any part of their body remains covered so that no water can reach it.



FIG. 853.—A French lying-in woman of the fourteenth century going to church. From a MS. of Terentius. (After Lacroix.)

Therefore, the first thing they have to do is to let down their hair, take off their ribbon, chains, beads or what they usually wear on their necks; also take the ring off their finger, clean their teeth well so that nothing is left sticking between them and, in short, leave not a hair's breadth on their body covered and unwashed. Thus they must dive right under the water so that not a hair is left outside, spread out the arms and fingers. let the evelids and the mouth stay a little open when they can; under the water they must bend and twist so that the breasts hang away from the body and do not cover the body anywhere, etc., and so that the water may come into contact with all parts of the body and clean it. If a woman should get weak in the water, she must not touch anybody with unwashed hands, otherwise the whole bath would be in vain. There must always be somebody by, a maid who is twelve years and a day old, or, if this is not possible, her husband may be near and

see and witness that she bathes properly. No Christian women at all may be taken for this, for they cannot be trusted. In winter, although it freezes, nevertheless they must bathe in cold water. However, when the custom exists of adding a little warm water, this may be permitted, as also where there are warm natural baths and springs, as is the case in some places, it is also permitted to bathe in them, etc."

After this, as everybody knows, the Israelite woman had to give the priest in the temple a yearling lamb as a burnt offering and as expiatory offering a young dove to complete her purification after confinement.

9. CEREMONIAL OF THE PUERPERIUM AMONG CIVILISED PEOPLES

The Christian Church devoted special attention to the conclusion of the puerperium; it introduced the blessing of the lying-in woman and her first ceremonial attendance at church. The priests were certainly not without blame in the matter of the many superstitions which encompassed with dangers the omission of this custom. If the lying-in woman left the house previously, then the devil and all the elementary spirits had unlimited power over her.

In Hungary the puerperium was usually ended on the twelfth or fourteenth day by the blessing of the woman in church. Among the Ruthenians in Hungary, however, it was not till the fortieth day. Until then the lying-in woman might not let herself be seen out of the house; for it is said that the woman who went out too soon could not escape the temptation of the devil. Then when the Hungarian has been blessed in church, a great feast concludes the ceremony (Csaplovics II., 303). The blessing of the lying-in woman gradually became mixed up with all sorts of coarse abuses. On the day of the blessing in South Germany, the godmother and the lying-in woman went into the inn where, of course, there was a certain amount of



FIG. 854.—A Wend at her first church-going after child-birth. (After Leonhardt, Dresden.)

intemperance (Birlinger ²). In several parts of Swabia, immediately after the baptism in the house of the young mother, a christening or childbed soup is eaten, *i.e.*, a feast is held at which people must formerly have made very merry for, in the Ravensburg statutes and ordinances of the fourteenth century, it is forbidden to hold a feast " and moreover to go to wine on this day."

The lying-in woman's first outing is to the church. The husband goes first to the clergyman and asks him when his wife may come for the blessing; at the same time he takes to the priest the "benediction bread," a round half cake of bread brushed with egg. The wife has to take with her to the ceremony seven skeins of yarn and a little wax candle; these are laid on the altar. The skeins of yarn belong to the saint and are sold annually; the money goes into the saint's box. A six pfennig piece is pushed into the candle and is divided between the priest and the sacristan. As early as the sixteenth century this offering of yarn was forbidden; however, it is still customary on the borders of Baden (Birlinger ³). A miniature of the end of the fourteenth century (Fig. 853) shows a young mother's ceremonial walk to church. This is in a Latin manuscript of Terentius which formerly belonged to King Charles VI. of France. According to Lacroix,¹ we have in this the costume and customs of the bourgeoise of Paris of that period.

Last century many doctors made an outcry against the abuse of having the blessing in the church too soon. Thus, in a work of Hoffmann,² it runs :

"In certain circumstances, the going to church can be no less harmful to lying-in women, especially if they stay too long in it. Now it is a traditional custom for the first outing to be to the church. In this there is rarely any attention paid to the season or weather, and many a woman in childbed has had to pay for the observance of this custom with her health or even with her life."

Peter Frank also calls the blessing ceremonies an important cause of illnesses and dangerous accidents to lying-in women, a "constant source of debauchery among womenfolk, and the ruin of midwives." A. Martin,¹ who has made the whole existence of baths the subject of a very interesting description relating to the history of civilisation, records in detail how the custom of these ceremonial baths connected with woman's life, like the bridal bath (for the discussion of which, however, as a wedding custom, there is no room in this work) and, above all, the baths of the puerperal period, gradually developed into an abuse.

"The puerperium," he states, "not less than marriage gave occasion for several feasts which, however, were held only among women. They took place at the christening, at the first outing to church and at the woman's first bath after the puerperium (Fig. 854 shows the churching of a Wend woman). Here too the number of guests and the expenditure had to be restricted. At the meal, sweets were to the fore. In Frankfurt, they could consist only of gingerbread and confectionery."

The christenings also were a common cause of disturbances of the puerperal period : "The incessant noise of the mostly tipsy guests," says Frank, "especially the chattering women and, what is still worse, the drunkenness of the midwives themselves, has the worst effect on inner tranquillity and the fate of the weakened lying-in woman, whilst after this feasting the midwife is rarely in a condition to treat any mischances sensibly, and she very easily acquires the habit of getting drunk on all such occasions " (cf. Kniphof).

CHAPTER X

LACTATION

1. PHYSIOLOGY OF LACTATION

THE purpose of the breasts is well known. They serve mainly to feed the But there is no doubt they are to be reckoned also among a group of organs child. from which sexual excitability is strongly aroused, and touching them may cause sexual excitement. These parts, the clitoris, labia minora and vulva generally as well as occasionally the perineal and anal regions, etc., are sometimes designated The female breasts undoubtedly belong to this class, and especially erogenous zones. They stand in quite a peculiar relationship to the sexual functions and the nipples. are in direct connection with the nervous system of the sexual organs. Physiology has given evidence that touching them and the gentle irritation of their nerves can by a reflex process produce contractions of the muscular apparatus of the uterus and from here to voluptuous sensations in the female organism. Thus, under sexual excitement the breasts swell and the nipples become erect and stiffen.

The breasts, however, have a very different significance when impregnation has taken place in the woman who has reached the age of puberty. Very considerable changes, not only in the finer structure of these organs but also in their shape and size, begin as early as the second month of conception. They develop gradually, so that, little by little, they are transformed into the very important organs of nourishment for the child which, so far, is still concealed in the uterus. Sellheim¹ has described the whole process very clearly. The mammary glands decrease at the periphery. All the vital functions decline. A kind of dejection affects body and This, however, is only a preparation of the ground for the arrangement of soul. the new dominating influence now approaching. The first step is to annihilate everything which recalls the former organisation, so that fresh life may at once spring from the ruins. Thus, the "change of dominance from one follicular influence which has remained sterile to the next," is always going on till either impregnation interrupts the regular course by the period of gestation, labour and the nursing period, or the end of puberty arrives. . . . The "change of ovarian domination" follows speedily. And quickly, too, but with perhaps a certain, though uniform, hesitation, follows the revolution which spreads over the whole of the genital tract and over the whole organism. Menstruation, decrease in the breasts, the decline in the curves of all functions like the hands of a watch announce the revolution outwardly. It may be assumed that the exciting stimuli are all guided along paths prepared for them; and the revolution, which takes place mainly as a circulatory, secretory and neuro-muscular relaxation with only very slight alterations in tissue, subsides at the call of the stimuli and therefore always takes the same time.

With its increasing power, the ovum is admitted to domination. The time when it enters into its kingdom, *i.e.*, is released in the genital tract for the opportunity for fertilisation, depends on the resistance of the tissue, varying in every case, which has to be overcome on the way from its place in the ovary to the Fallopian tube.

To the change in ovarian dominance every four weeks in the case of nonfertilisation is to be added, as a complementary insight into the manner of carrying on this dominance when won, the development of the "conduct of the government in the case of impregnation" in which the ovum leaves the ovary and moves to the uterus, and in which, after delivery, its fruit tarries for months longer on the outside of the mother, *i.e.*, at the breast (Figs. 855, 856 and 857).

We see in this case that the seat of government, to all appearance, does not remain entirely in the ovary, but that, during the period of fertile functional movement, the governing influence migrates more or less with the ovum, and its seat is always moved to the place at which essential matters of control are to be attended

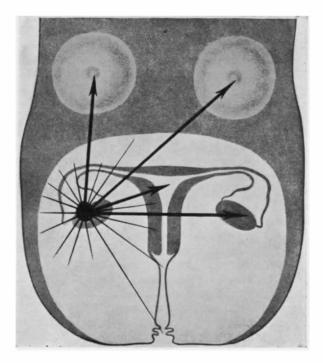


FIG. 855.—The influence of the ovaries on the breasts. (After Sellheim.)

to. It wanders "with the big headquarters" from the place of the ovum in the ovary, when the ovum has once got a firm footing in the uterus, to the uterus itself, and passes with the child at birth, for a time, to the mammary glands.

In this "migration of the seat of government in the case of impregnation," the same principles of administration are to be discovered as in the rise of dominion in the conditions in the ovary. There is an assurance of existence by provision for the future, and covering of the retreat against the premature advance of possible competitive functional actions which may disturb the issue of the incipient development. These tendencies can be shown by the position of the ovum in each of the three conditions (Figs. 855, 856 and 857). So long as the ovum remains in the ovary (Fig. 855), there occurs only the preliminary care for the preparation of the passage for the ovum and for the semen, the opportunity for settling down in the uterus, drawing the attention of the mammary glands, the beginning of the growth

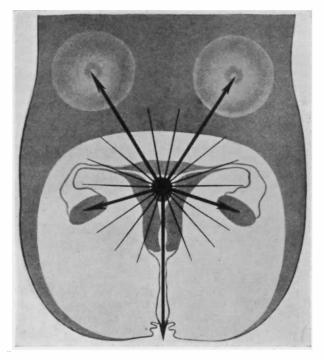


FIG. 856.—The influence of the pregnant uterus on the breasts. (After Sellheim.)

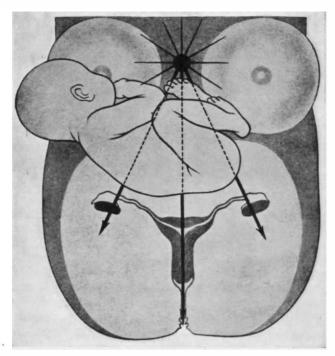


FIG. 857.—The influence of the foctus on the breasts. (After Sellheim.)

of all vital processes as well as "covering its rear" against the premature advance of further follicles which have come to maturity.

When the ovum has done its part in the ovary and Fallopian tube and has established itself in the uterus, the seat of government is moved to the uterus. The preliminary care extends itself to the power of quick expansion of the way out from the mother; preparing the mammary glands for their later function, and adapting the woman herself both body and soul for the maternal state. The explanation of "mother love" clearly makes its beginning as soon as the child stirs in the womb.

As soon as the child is applied to the breast (Fig. 857), it again carries through,



FIG. 858.—An Araucanian woman suckling her child. (After P. Petit.)

first of all, the conditions of nourishment suitable to it. The whole system of nourishment at the breast, as everybody knows, is set going only by the demand for it. The care then extends backwards only to keeping back further competition in order to make a proper suckling period possible. But now that the functional action is successfully terminated, its power of government from the mammary gland centre over the disposition to further future fertility is now no longer absolute.

The "migration of the seat of government" of the ovum in power during the journey made in the period of development of the embryo from the first centre in the ovary, past the uterus centre, which was the main stopping place, to the terminus of the mammary glands, is represented in three pictures (Figs. 855, 856, 857). The ovum and the child respectively (or perhaps it is more correct to say the proper

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glandular portions of the ovum each time), sends out its power in all directions like the rays of the sun. The directions of the local influences on the ovary and genital tract, as well as of a general kind on the whole organism, are shown by the arrows placed on the rays. Thus the power from the ovarian centre passes by the uterus centre to the mammary glands.

These changes, which are perceptible to the naked eye even during pregnancy,



FIG. 859.—Negrito, from N. Luzon, suckling her child. (After Schadenberg, Mus. f. Völkerk., Dresden.)

consist firstly in a more or less obvious swelling, in an increase in the size of the breasts as a whole. In this, the skin covering the breasts very often has to increase in extent at very short intervals. In doing so the cutis vera reveals the subcutaneous tissue beneath and regular streaks can be seen like rays round the areola of the nipple which look like scars and which closely resemble the striæ on the abdominal walls after pregnancy.

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The nipples become enlarged and the areola increases in circumference and in intensity of colour. In fair women, it generally becomes pale red; in brunettes, very often a deep brown to almost black. The actual secretion of milk begins in the second or third day after delivery, and then gradually assumes such dimensions that every few hours the breasts fill up till they are distended (Figs. 858, 859), and at a comparatively slight compression of the nipple and areola, the milk in a great



FIG. 860.—A Slave Coast negress. The little figure shows the peculiar teat-like breasts. Mus. f. Völkerk., Berlin. (Photo: M. Bartels.)

number of fine sprays can be squirted several feet away.

H. Blanc records of the breasts of the Abyssinian women that they are filled so tightly in the first few days after delivery that it is quite impossible for the child to take them. Likewise, among the negresses of Old Calabar, the breasts are so distended with milk in the first days that it drops out of itself.

In the formation of the breasts, not inconsiderable changes are introduced by the suckling itself. In particular, by the sucking motions of the child, the nipples are considerably drawn out of the mounds of the breasts, are lengthened and by repeated pressure of the child's mouth, made thicker. The increase in the size of the breasts themselves is chiefly caused by the expansion of the lactiferous ducts, whilst the supporting connective tissue and the subcutaneous fat are stretched, torn, and to some extent destroyed. In this way, it is comprehensible that, owing to the weight of the milk, the longitudinal diameter of the breasts is not inconsiderably increased and the breasts are forced to hang down to a greater or less degree.

We find among primitive peoples a very wellexpressed gift of observation of all these larger anatomical changes in form, and this gift is reflected in their plastic representations. Fig. 860 may serve as a proof of this statement. It shows a little bronze figure executed by the negroes of the Slave Coast which is in the Ethnological Museum in Berlin. Here the great increase in the longitudinal diameter and the inclination to hang downwards is very clearly and plainly represented so far as the

want of flexibility of the material permitted. It may also be mentioned, that in accordance with African custom, the woman carries her nursling about with her on her back. These figures are used as censers.

Now, when the secretion has come to an end after the suckling period is over, the supporting tissue of the breasts never again attains its virgin stiffness and firmness, and as at the same time the glandular parts and the lactiferous ducts, which are no longer filled with milk, relax and sink down, hence the breasts only too often retain a withered, slack, and, owing to the unequal involution of the gland nodules, knotty appearance and hang down more or less considerably on the upper abdominal region in accordance with their earlier condition of dilatation. This, too, is shown clearly in a little wooden figure (Fig. 861), likewise to be found in the Ethnological Museum in Berlin. This figure was made by the Nootka Indians in Vancouver as a plaything for their children. It is apparently a fairly young woman with smoothly parted hair who is sitting on the ground with her knees drawn up close to the thorax and her hands clasping her ankles. In this position she would of necessity have to press the hanging breasts with her thighs, and to avoid this inconvenience she has laid each breast on a knee.

Blyth says of the Fiji island women :

The breasts of the Fiji women who have nursed children are considerably pendent, in which state the actual mammary gland is contained in the cul-de-sac of the distended skin.

Such mothers as have these relaxed breasts have the custom of throwing them over their shoulders to give them to the child when they are carrying it on their backs.

We shall hear the like, too, of other peoples (cf. v. Reitzenstein,¹⁷ p. 345).

As the striæ mentioned at the beginning remain permanent in many cases, so with the cessation of the turgescence of the breasts, the impression of wrinkles and unevenness of the surface is also considerably increased. Very often then a fresh pregnancy and confinement cannot restore the distended fullness to the breasts. Fig. 862 shows this condition in an Abyssinian woman from Eritrea.

The breast which reaches furthest back is to be found most frequently among the negro tribes of Equatorial Africa after the nursing period is over.

Also the Hottentot woman from Windhoek in the former German South-west Africa, who is depicted in Fig. 863, might be included here. We see that in the somewhat bent forward position in which she is sitting, the left breast reaches to the thigh.

In other cases, the tissue of the breast where it joins the thorax has shrunk so much that its skin seems to be flat on the thorax, but the mammary gland shows as a roundish lump in the lowest part of the pendent breast.

It appears as if a roundish object had been put into an empty purse. Very many adult women have in front, at the part between the thorax and the armpit, a pronounced roundish pad which Baelz³ designates as the *supramamma*. In this he starts with the assumption that this pad is analogous to a breast, the rudimentary nipple of which can be shown in almost every case. This hypothesis is not yet ripe for discussion.

As regards the form of the breasts two factors generally are decisive, viz., racial and individual constitutional characteristics; the same is also true of the forms the breasts assume after the conclusion of lactation. So far as formation due to the influence of race is concerned, the reader will find confirmation in the illustrations included in this chapter, especially if he compares the women depicted here with their fellow tribeswomen, pictures of whom are given in the other sections of this work. In order to be able to judge the differences in form, in so far as they produce individual characteristics in the breasts, one must, of course.



FIG. 861.—Carved wooden figure from the Nootka Indians, Vancouver. with withered, flaccid breasts. Mus. f. Völkerk., Berlin. (Photo: M. Bartels.)

make comparisons with other women of the same race who have already suckled children.

Among European nations, too, the same could be observed if our women did not keep their breasts covered and change their shape as they like with all kinds of supporting apparatus. The more high-bosomed a woman seems, the more her ample breasts, if left to themselves, usually hang down.

As savage peoples in warmer climates usually go about with the upper part of



FIG. 862.—Abyssinian women. (Photo: G. Schweinfurth.)

the body bare, these disfiguring skin-sacks, when women are working in a bent position, naturally hang clear from the thorax, and thus not infrequently hinder the free movement of the arms. This is shown very well in Fig. 864, where a Samoan woman of Valealili is busy at the cotton harvest. This is a reproduction of a photograph taken by Riemer. Among African tribes, it often happens that they fasten these excessively long, pendulous breasts to their body with a string because they get in the way when at work.

The peculiar relationship of the breasts with the genital apparatus is also

noticeable during suckling, and one can convince oneself particularly of this in the first part of the puerperium, because each time the child is put to the breast, contractions of the uterus are started which bring about an abundant discharge of

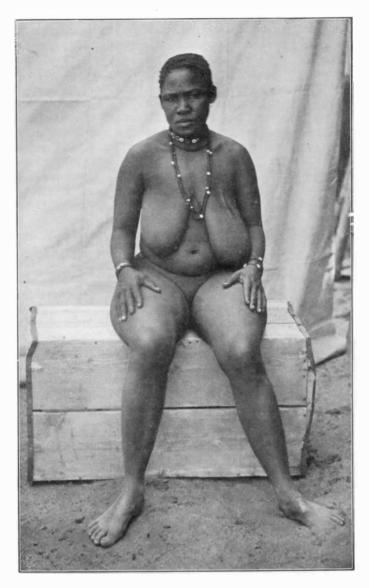


FIG. 863.—Hottentot woman from Windhoek, showing heavy, pendent breasts.

lochia. Sometimes, too, there is an opportunity for learning from intelligent women that suckling gives them sensations of sexual satisfaction which sometimes far surpasses in comfort the feelings caused by coitus. There is certainly an admirable provision of nature at the root of this.

2. THE SECRETION OF MILK IN ITS RELATION TO FERTILISATION AND MENSTRUATION

It is sufficiently well known, even to laymen, that usually there is a lacteal secretion in the breasts only when a pregnancy and confinement have occurred. A woman must have carried and given birth to a child if her breasts are to secrete milk. Although this holds good as a general rule, nevertheless, there are sometimes exceptions to it.

Thus, for example, there is often in the new-born child an accumulation of secretion in the mammary glands which causes these to swell hemispherically. If pressure is applied to the swollen breasts a milky fluid issues which, in Germany, is



FIG. 864.—Samoan woman, illustrating form of pendent breasts when free from the support of the body. (Photo: G. Riemer.)

fairly commonly called *witch milk*. It must be emphasised here that this circumstance is not by any means confined to the female sex, but that witch milk can also be found in new-born boys.

The exceptional occurrence of a milk secretion in the breasts in old women and even in men will have to be discussed in detail in a later section. However, there is undoubted evidence also of the occurrence of a secretion of milk in the mammary glands of individuals of the female sex who have reached puberty, but who are not in a condition for fertilisation. These too, however, are only exceptional cases.

Thus Mascarel tells of a 35-year-old woman who had been married and childless for 18 years, and for some years had noticed a painful stiffness of the breasts before each menstruation. On pressure being applied a fluid resembling colostrum issued.

It has not yet been established whether a secretion of colostrum can occur by the influence of menstruation, nevertheless, it is certain that even without there having been conception, there is a secretion of very small quantities of a colostrum-like fluid. In the clinic at Berne it was observed in no less than 14 cases : in no case had a pregnancy preceded, but there existed in most cases a gynæco-

logical illness. This striking phenomenon is here quoted because it would seem to follow that this secretion proves especially abundant at the menstrual period.

Also Dietrich Wilhelm Busch said :

"Indeed even women who were not pregnant suckled children whom they loved. Examples of this are not uncommon. Thus, the milk secretion can be excited without pregnancy. By so doing, however, the relation to sexual desire is not done away with, as the cases in which nonpregnant women suckled children merely prove that pregnancy is certainly the usual cause of the milk secretion, but not an absolutely necessary one."

Menstruation, as we have seen, ceases when impregnation sets in and does not reappear during pregnancy. Also, after confinement, some time elapses before menstruation is re-established, but this interval varies in different women. Sometimes menstruation reappears as early as four to six weeks after confinement, in other cases several months pass before menstruation returns after delivery.

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This reciprocal relationship between menstruation and pregnancy did not escape the notice of the old Rabbis. In the Midrash Wayyiqrā Rabba it is said :

"Rabbi Meir has said: During the nine months (of pregnancy) a woman does not see the blood which she should as a rule see monthly. What does God do with this? He has it ascend to her breasts and makes it into milk so that the child, when it comes into the world, may find nourishment, and especially if it is a boy" (Wünsche ³).

It seems as if lactation were able to put off the return of menstruation, as if those women who do not give their children the breast would menstruate again sooner than nursing mothers. Moreover, in the lower classes, people do not like to see menstrual blood reappear in a nursing mother, and especially in a wet nurse, for they believe that the child is endangered by it and that the milk no longer agrees with it. As in most popular observations, there is a spark of truth in this too. The first menstruation after a confinement is usually specially profuse, and as, owing to the great loss of blood, a great quantity of fluid is withdrawn from the body, the milk in the days of menstruation is usually secreted in somewhat smaller quantity than in the days of normal health. This lack of quantity (and, no doubt because of the indisposition of the woman, less good quality of the milk) are no doubt what makes the little one restless and causes its apparently unreasonable crying. Thus it has come about that people have condemned the milk at this time as positively harmful to the child. There is, however, no actual ground for those views.

As regards the reappearance of menstruation during the nursing period, as well as the quantity of the milk when lactation is continued for several years, we know practically nothing at all in the case of foreign peoples. However, in this connection, we have to thank A. Wernich² (p. 576) for a statement about Japanese women which may be introduced at this point.

"If a Japanese woman does not become pregnant again, lactation may last for five years; till the fourth year of the child's life the mother's breast is used as the normal, if not the sole source of nourishment. Nevertheless, the milk is present in abundance only for three years. With such a long period of lactation, menstruation normally sets in again during this time; yet it is considered unusual for menstruation to begin again before the lapse of three months after delivery. They do not recognise any influence of the recommencement of the menses on the quantity or quality of the milk. If menstruation has recommenced and then does not return, and if the lactation gradually ceases from two to three months later, then it is assumed, unmistakably, that there is a fresh conception. This always causes the milk secretion to dry up after the interval mentioned (two to three months)."

We have to mention briefly a second popular superstition which, as it seems, has spread not only over Europe but over the whole world. This is the assumption that sexual intercourse with a suckling mother is without result, *i.e.*, that a suckling mother cannot be impregnated. How erroneous this superstition is we shall learn from several examples in a later section. For in many tribes the mother feeds two children of different ages at the same time.

But here, again, it is true that impregnation is less certain to occur than in the case of a woman who is not nursing a child.

Mayet recommended most highly the lengthening of the period of lactation as the only way to restrict conception. In doing so, he refers above all to the proof furnished by Weinberg that in the first six months after confinement, conception among women nursing their children is 50 times rarer than among non-nursing women.

3. LACTATION BY THE MOTHER

That a mother gives her new-born child the necessary food by giving it her breasts is so completely in the natural order of things that it would be superfluous to compile a list of the peoples where the children are suckled by the mother. Among quite primitive or half-civilised nations this is quite the usual custom, and, unfortunately, we have to state that where mothers refrain from this duty, owing to physical conditions or from choice, in every case the most highly civilised nations are involved, especially the ancient Hindus, the Japanese and Chinese, but, most of all, the European nations, and, in this case, most especially the Germans and French. We cannot here go thoroughly into the harm done to the coming generation, especially by the various kinds of artificial feeding.

However, if we devote a special section to the consideration of lactation by the mother, the reason is that we can find in this many kinds of remarkable usages and customs which are well worthy of detailed discussion. Whilst with us, for instance, in the higher classes where the suckling baby is fed either by the mother or a wet nurse, the greatest care is taken that no other food is given to the child along with this, yet we find among a few extra European peoples the custom of giving the suckling child some other food besides, and this at a very early stage.

Thus, in Old Calabar, suckling babies are given a great deal of water; among the Akikuyu, in East Africa, mothers give them bananas mixed with their saliva. Also in the Aru islands and among the Galelarese and Tobelorese, the mother chews plantain and gives it to the child; among the latter from the tenth day, but among the former not till after a month. Among the Roucouvenne Indians, in South America, they get cooked bananas, and among the Caribs other fruit as well. The milk of the coconut diluted with water is given to babies in the Caroline islands, and in East Africa certain tribes suck even *Pombé*, an intoxicating drink. Among the Votiaks the child gets the breast only in the first two or three months, then it begins soon to get other food, bread, meat, etc. The little ones begin especially early to get used to kumyska. Buch saw a mother give her three-months-old baby at least a tablespoonful of 30 per cent. brandy which seemed to cause the child no discomfort. He also saw a child of two years hold out both hands crying when it caught sight of a brandy bottle, and it was given some and swallowed it with real avidity. Likewise among the Wolof in Africa and the Russian women in Astrakhan the suckling baby is very early accustomed to other food.

Two further matters which merit full attention are the time among various peoples when the young mother begins to suckle her child, and the length of time breast feeding is continued. To begin with the first point, it may at once be said that only in the case of a very few peoples could it be ascertained that the newborn child is applied to the breast on the very first day. Most savage peoples let several days pass before this application takes place.

We find immediate application of the child to the breast on the Luang and Sermata islands, in Burma, among the Kanikar in India, among American Indians in Alaska, in Massaua, among the Madi negresses and among Esthonian women. Also Demosthenes, in opposition to Soranus, recommended immediate application to the breast. In Dalmatia, according to v. Hovorka, there is a rule that in the case of the birth of twins the first-born is to be applied to the mother's breast before the second is born.

Certainly nature has not so arranged it that the child can at once draw any considerable quantity of milk from the breast by its sucking movements. Only gradually, and with the essential help of sucking, does the milk secretion come properly into action, and what issues from the breast in the first few days is still not properly constituted milk, but a thicker yellowish fluid with a rich fatty content to which the name colostrum is applied. On the third or fourth day, sometimes earlier, but often somewhat later, the marked swelling of the breast sets in, with great strain and irritation of the vascular system, sometimes even with a rise in temperature, and this introduces the real secretion of milk. This state of irritation is popularly called *milk fever*.

Now when we find in a very great number of the most distinct peoples the custom of not allowing the mother to put her child to the breast until several days have passed, we are able to trace their process of thought and ideas. They let pass just that time in which, instead of the bluish-white mother's milk, colostrum is secreted, the viscid consistency and doubtful colour of which making them think it is an unsuitable and indigestible food for such young and tender children. That this conception of their thinking and feeling is not mere theoretical speculation is incontestably evident from the fact that individual tribes undertake a methodical examination of the milk before the mother is allowed to give her child the breast (M. Bartels).

Krämer reports from Samoa that there the mother used not to be allowed to apply her child to the breast without further ceremony. That is to say, the woman "milk tester" appeared. "She put some milk from the mother in a dish, added a little water and then threw two small hot stones into the mixture. If any traces of curdling showed, the old woman used to say the milk was bitter and poisonous, and this happened until, after a few days, the demands of the cunning woman were satisfied, which was not to her disadvantage. That in this way many children died may well be imagined."

In Samoa a priestess has to examine the milk repeatedly and declare it nonpoisonous. With this people two or three days usually pass before the favourable (for the mother) decision is given. The matter is no doubt preceded by similar deliberations among the Basutos. The missionary Grützner related that they bring the child to the mother after three days and say : "Let us cleanse the mother's breasts with medicine, for the breasts are painful so that the pain may go away." And then the breasts are scratched and rubbed with medicine, *i.e.*, with previously pounded herbs which are good for this malady : then only may the child be applied to them.

The Tlinkit Indians believe that the mother should not give the child the breast till all impurity has been removed from her body. This is regarded as an important source of all later maladies and it is removed by pressing the patient's stomach till they make her vomit.

M. Bartels thought that the moment at which the actual milk secretion begins can be decided. As in by far the majority of peoples the new-born child is withheld from the breast for three days, it may be assumed that this physiological phenomenon, *i.e.*, the transition from the colostrum to the milk secretion, takes place in all races within the same number of days. However, here too we find isolated exceptions.

Thus in the Aru islands the mother does not apply the child to the breast for nine days; on Keisar island for five days; among the Sulanese for four days; and on Eetar for three or four days.

Also in ancient Rome, Soranus recommended that the child be given the breast only after four days. On the other hand, we find the previously mentioned interval of three days among the Central Australians of Finke Creek; in Samoa; the Watubela islands; in Djailólo; in Japan; among the Ainu; in Siam; among the Kalmucks; the Persians; the Armenians; in Southern India and in the Nayar caste; and finally among the Basutos and in Old Calabar; however, with the last-named people, the mother is permitted to apply the child to the breast after two days. About the Babar island women and the negresses of the Loango Coast, we know only that "for the first days" they are not allowed to give the child the breast. And in Saterland, in Oldenburg, and in Little Russia the child must first be baptised, otherwise it cannot thrive. Of the Fiji islanders we learn through Blyth: "After delivery the child is taken right away from the mother till the breasts secrete milk and, as a rule, the breasts contain an excessive supply of milk as early as the second day after delivery. This may delay for four, five, six or even as long as ten days."

We must now put the question as to what happens to the child in the first days ? Is it left without any food at all till the mother is allowed to suckle it ? With most peoples this is by no means the case. But the procedure which we see followed by the various peoples is not at all the same. For whilst some feed the child in the first days with every possible thing and, to some extent, with very unsuitable foods and in a very stupid manner, elsewhere there are always to be found other women ready to take the mother's place with the child till these, in accordance with the custom of the country, are themselves able to undertake the duties of suckling. Such feeding took place among the ancient Romans and also the ancient Hindus. It still exists in Southern India as well as among the Somali, the Swahili and in Abysinnia, among the Basutos and the Makalaka, and finally among the Kalmucks also. The last-named are the only people where, with this temporary feeding, is observed the intention of preparing the child for its later work of sucking; for, according to Meyerson, they make it suck at a boiled sheep's tail. We cannot go further into the methods of other peoples here, and those cases where other women give the child the breast for the first days we shall discuss in one of the following sections.

As to the differences between savage and civilised peoples, Külz says :

"In one respect, where there is a difference, the child of the primitive peoples has an advantage which cannot be too highly esteemed and which makes up for a great deal; this is the universal and long-continued suckling by the mother which is done quite as a matter of course and is the best conceivable way of preserving health. The wife of primitive man has here no feeling of duty or merit, but does, as in all her other conduct to the child, what she cannot help doing. If, for any reason, this way of feeding the child fails, this is almost without exception as good as a sentence of death. Even with the most carefully conducted European nursing, it is hardly ever possible to preserve the life of a suckling child deprived of its mother. This possibility, however, does exist for somewhat older children afflicted with lingering maladies who have become burdens to their parents. Not a few of these child patients have been saved by the intervention of the missionary. In general, the rule holds that the younger the child the more disastrous is the failure of the mother's milk. The duration of suckling, even where it is shortest, exceeds the longest period it lasts with us; it generally lasts for a few years, not infrequently three or even four years. In tribes where the children use tobacco at a very early age, one may often see a sturdy four-year-old boy exchange the breast for a cigar. For our part, we have to retain this preservation of health by all the means in our power. It is endangered by our civilisation for many reasons. It will be most difficult to reconcile this long period of suckling with Christian monogamy for, in many savage tribes, the woman is regarded as untouchable sexually during lactation, and this is one of the main reasons why the husband, in such a case, tries to acquire another wife as a substitute, thus leading to polygamy. The result of monogamy would be that the woman would become pregnant again more quickly and thus

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lose the capability of feeding a child and so endanger its health. Hence, in theory, the birth-rate would be raised by monogamy in the case of healthy parents, but, at the same time, the risk to health would increase considerably. Therefore, it is questionable whether the rise in the birthrate would not be more than equalised by the increase in child mortality. Apart from this long duration, the ideal of breast feeding is, unfortunately, not untarnished everywhere, for very early the natural food is supplemented more or less by other foods, which are not only given to, but stuffed into the child. . . . The original aim at the root of this supplementary feeding was, without doubt, that of getting the child gradually accustomed to the food on which it had to depend later; in other words: the weaning of the primitive child from its mother's breast is not, as with us, confined to a short space of time, but is spread over the whole period of suckling. . . . Because of its peculiarity and, at the same time, its serious nature from a hygienic point of view, the 'foster-brotherhood' may be mentioned which I observed in Africa, as well as in New Guinea, where, in the South Cameroons, e.g., nursing mothers gave their breasts to young dogs which are liked beyond everything and treasured to be killed for food in the end whilst, in this case, the tenderly nursed young pigs shared the same distinction. As these very domestic animals are especially fond of rolling in all dirty places and their muzzles are anything but clean, this curious fact also comes among the hygienic abuses."

4. DURATION OF LACTATION

We have already come across many differences with regard to the beginning of suckling as observed by savage peoples, but the differences in the length of the suckling period are still greater. In normal, physical conditions, and in strong constitutions among the women in our race, the quantity as well as the quality of the milk declines considerably after eight months, and it is a rarity if a German child is fed at the breast for a full year. Among the rural population, to be sure, and no doubt also among the proletariat in the towns, suckling is sometimes continued for two years, and probably even longer. Of course, the children are given other food as well, for the milk secretion would scarcely be sufficient for the complete nourishment of the child.

It is to be regretted that in very many cases suckling is stopped after a few weeks or even after a few days. Often premature inability for the business of suckling is to blame for this; but very often there exists want of good intentions on the part of the young mother or the people about her. G. v. Bunge blames the changes in the organism caused by the abuse of alcohol. The harm thus done to the succeeding generation has been written about by many well-meaning people. Here we shall only draw attention to the work of Georg Hirth,² in which, among other things, a good survey of the pertinent literature is given.

Now, if we examine how the extra-European peoples behave in this respect, we find that a period of lactation of less than one year is very exceptional, and that among many peoples lactation is continued for an astonishingly long time. The following compilation will give the reader the desired survey of these circumstances :

CHILDREN ARE SUCKLED:

Under One year among the Samoar

From One to One and a

One to Two years among

Half years among

- Samoans; in New Ireland; Tlinkit Indians; in Mayna (Ecuador); Hottentots; Bugi and Macassars (Celebes); in Gilan; in Massaua.
- Dakota; Sioux; Loango Negroes; Tenimber and Timor Laut Islanders; Parsees.
- Armenians and Tatars in Ekrivan; Esthonians; ancient Romans; mediæval Germans; Karagasses; Swahili.

Under Two years among	Persians; Nayar; Tchoud; Æta (Philippines); Roti islanders; Ruck islanders; Solomon islanders; Russians in Astrakhan; Turks; in Fezzan; Morocco; Egypt; Nilelands; among the Madi; Masai; Baganda; Wakymby; Wanyamwezi; ancient Derwinner, else areaited by the Kenen and by Aviannes)
Two to Three years among	Peruvians; (also appointed by the Koran and by Avicenna). Australian natives; China; Japan; Laos; Siam; Sumatra; Armenia; Kalmucks; Tatars; Kirghiz; Syria; Palestine; Abyssinia; Canary islands; Cameroons; Mandingo Negroes; Old Calabar; Wanyamwezi; Basutos; Makalaka; Tlinkit; Apache; Abipones (Uruguay); Swedes; Norwegians; in Styria.
Three years among the	Luang and Sermata islanders; Todas; Fiji islanders; among the ancient Jews; on Gold Coast.
Two to Four years among	Indians of Pennsylvania; Lapland.
Three to Four years among	Greenlanders; Iroquois; Warrau-Indians; Kamchatka; in Madras; Kabyles; in Naples.
Two to Five years among	Nauru islanders.
Three to Five years among	Kanikar; in Japan; many Brazilian Indians; Ostiaks; Samoa; Palestine.
Four to Five years among	Indians in Oregon, California and Canada; Maravi; Australian natives; New Caledonians; Hawaiians; Kalmucks; on the Guinea Coast; Serbia.
Five to Six years among	Samoyedcs; Toda; Greeks.
Six years among	Australian natives; New Zealand Maori.
Six to Seven years among	North American and Canadian Indians; Armenians (Kuban).
Seven years among	Eskimos (Smith Sound).
Ten years among	China; Japan; Carolines.
Twelve years among	North American Indians.
Fourteen to Fifteen year	'S
among	Eskimos (King William's Land).

A glance at this table* which, in the form given, will give the reader a better survey than if the peoples were arranged in geographical order, shows us that sometimes the same people appear under different headings. In these cases we have different statements from different travellers, and, naturally, it is not possible to decide which of them has given the correct information. Very often all of them are right, and it is only the customs of various grades of the population, or the extremes of the customs, which they record.

Further, it must strike us that, among the majority of peoples, the period of lactation is very long. Only isolated tribes cease suckling their children before the end of the first year; and the number of those which keep the child on the breast only to the end of the first year is also very small. The Mayna in Ecuador and the Tlinkit Indians suckle their children for at least half a year; whilst some state that the latter stop sometimes as early as 10 weeks, but at latest 30 weeks. Among the Hottentots and the Samoans four months are given as the usual duration of lactation. Among the latter, however, suckling is sometimes continued for a considerably longer period but, in such cases, the father has to dedicate the child to the family god, and as the child meanwhile usually gets very round and fat it is called "God's banana," as we learn from an account of the voyage of the "Novara." Our table shows that the most usual length of the suckling period is from one to four years, and within this period the period of from two to three years easily takes the first place.

* [The table is an interesting example of what can be drawn from the anthropological material of the traveller's reports.]

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FIG. 865.—Woman from Central Java carrying a suckling of four years of age, who smokes a cigarette. (Photo : F. Schulze, Batavia.)



How are we to explain why so many natives continue lactation for such a long time ? It can hardly be supposed that several years after confinement the mother's milk should have such a good chemical constitution that it can supply the child with a really beneficial food. And we have already seen above that along with the breast, the child is given at a fairly early period all kinds of other food, some vegetable, some animal.

Now, when we find that the breast is not withdrawn from them, there are, no doubt, several reasons which contribute to this. Sometimes it may be the maternal softness and weakness towards her children which, among uncivilised peoples, just as with ourselves, can deny them nothing which gives them pleasure. Thus, the

reports of some peoples directly state that the children are breast-fed for a very long time, and, indeed, as long as they themselves want it. Some weight also may be given to the fact that the mother's milk, however bad and imperfect, yet gives a certain amount of help in feeding, and thus is a pecuniary saving.

If we have recognised the convenience of the child as a reason for this custom, then that of the mother also plays a not unimportant part. We have seen that by suckling, decided voluptuous sensations are aroused in the woman. The most important motive, however, is the extraordinarily widespread supposition that so long as a mother is suckling her child, she can practise coitus with impunity, that is to say, without any impregnation being possible. This belief has become deeply rooted in Germany. especially in rural districts, and not infrequently causes the most bitter disillusionment. Unfortunately, it is always gaining fresh strength owing to a certain kind of trashy literature. We come across it, however, also in Galicia, among the Serbians, the Esthonians, the Tatars, and, besides in New Zealand, in Keisar, Luang and Sermata islands. It has already been discussed above.

Now, since on the one hand lactation, as we have seen, is frequently continued for a number of years, and on the other it by no means makes a fresh conception impossible, it sometimes happens that the mother is feeding two children of quite different ages at her breast at the same time. This is



FIG. 867.—Niam-Niam mother and child. (After Buchta.)

recorded of various peoples, and in the islands of Samoa, one mother even suckling three consecutive children at the same time has been reported.

Isolated peoples continue lactation for sometimes an inconceivably long time. Thus, Oganisjanz was shown among the Armenians in the Kuban district in the Caucasus, a boy of six or seven who went to school but, nevertheless, had not yet been weaned from the breast. In this respect, the Eskimo women in King William's Land go furthest of all. Bessels records of them that it is by no means rare for a youth of 14 or 15, who has just returned home from a hunting expedition, to drink at his mother's breast. In Fig. 865, we see an already fairly big Javanese suckling child said to be four years of age, who is holding a cigarette in his mouth; the mother is carrying the heavy child in her sarong in a way to be described later. Java also belongs to the countries where lactation is usually continued for a very long time. Also one of the women from Sintadjo (Sumatra) depicted in Fig. 866, herself still almost a child, is carrying rather a big suckling child.

We shall speak later of the difference according to sex which some peoples make in the duration of lactation.

Mention must be made of a peculiar custom which exists according to Schinz



FIG. 868.—Carved wooden figure of the Kwakiutl Indians (British Columbia) representing a woman suckling an infant. Mus. f. Völkerk., Berlin.



FIG. 869.—Carved wooden figure of the Kwakiutl Indians (British Columbia) representing a woman suckling an infant. Mus. f. Völkerk., Berlin.

in a Bushmen tribe of the Kalahari Desert. There, women suckle their children for three years. If, in this period, a second child is born, then it is abandoned, as, according to their belief, a woman cannot feed two children at the same time (cf. Schapera, 116).

It is much to be regretted that in Upper Bavaria, suckling the child is not only not customary but is even regarded as immoral. At a meeting of the German Anthropological Society at Salzburg in the year 1905, Waldeyer, after information given by H. v. Ranke, endeavoured to direct the attention of the anthropologists to this.

As an addition to Waldeyer's remarks, Toldt informed the meeting that it used to be a fairly common custom in his native land, Tyrol, among peasant women as

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well as in the middle classes, for the child not to be breast fed but to be fed on milk food from the day of birth. Toldt is inclined to regard as one of the contributory causes of the women's inability to suckle their children, the deformity of the breasts owing to the stiff clothing which, often hard as a board, compresses the thoracic region, and is customary in many parts of Tyrol.

5. POSITIONS WHILE SUCKLING

We are so much accustomed to regard the position customary with us in suckling as the only natural one, viz., the mother sitting and the child lying hori-



FIG. 870.-An Armenian suckling her child. (Lipperheide Coll., Berlin.)

zontally on her lap, that it is most surprising to learn of different positions among other nations. Among the Kwakiutl Indians in British Columbia, as we learn from two small figures carved in wood in the Ethnological Museum at Berlin, the customary position is also approximately ours. But even these two tiny carvings, made as toys, show small variations.

The cruder group (Fig. 868) shows the Indian woman sitting on the ground with her knees drawn close up to her body, but with the legs rather far apart so that the genitals can be seen. To the child lying in her arms, she is giving the left breast whilst, with her left arm, she supports \overline{w} .—vol. III.

POSITIONS WHILE SUCKLING

the head and back and with her right arm the sacral region of the infant. The child, which, very true to nature, lays its hand on the mound of the left breast, is held in such a way that the buttocks lie rather lower than the shoulders. Thus we have no longer an exactly horizontal position of the child.

The execution in the case of the second figure (Fig. 869) is much finer and more careful. This woman also sits in a similar way on the ground and has her knees drawn up symmetrically to her thorax in which, moreover, we have to observe a variation from the position in suckling among other Indian tribes. Compare the Araucanian woman (Fig. 858) in this respect. The hair of our Kwakiutl Indian is parted smoothly and hangs in two carefully twisted plaits. The



FIG. 871.—A Hottentot throws her breast over her shoulder in order to suckle her child. (After Kolben.)

child lies in her arms in an absolutely horizontal position, and sucks with far outstretched lips at her left breast, whilst its left hand plays with the nipple of the right breast. The breasts are very pendulous and run downwards to a point.

Pechuel-Loesche says of the negresses of the Loango Coast :

"The position in suckling is the one customary with us; even the mother's fingers are used in the well-known way (to make the nipples go into the child's mouth more comfortably and, at the same time, by gentle rhythmic pressure, to help the issue of the milk). The mother is said, however, sometimes to lie over the child to make the drinking more comfortable, but she probably does this only at night."

Among several peoples of Western Asia, the Georgians, the Armenians (see Fig. 870), the Maronites in Lebanon, the Tatars and even as far as Kashgar, the

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FIG. 872.—A Hottentot throws her breast over her shoulder in order to suckle her child. (After Kolben.)

mother in suckling hangs over the child, which meanwhile remains lying undisturbed in its cradle. On this, somewhat farther over to the left side, a staff is fixed lengthwise, and rests on the raised head part and on the foot part of the cradle. The mother kneels down beside the cradle, lays her arm on this staff so as to be firmly supported at the armpit, and, in this position puts the breast into the child's mouth. The staff, however, also gives a degree of certainty that the mother, if she falls asleep while suckling, cannot sink down on the child when she might, of course, suffocate it.

In Bosnia, M. Bartels found cradles of similar construction. They are also used in the Caucasus.

Among the African tribes, it is a common custom for mothers to carry their young children tied in a cloth on their backs, as is shown in the case of a Dahomey



FIG. 873.—A Siamese woman suckling her baby.

negress in Fig. 253. Of the Hottentot women, it is well known that they give the child the breast without removing it from its place on their backs; the child is only turned a little to the side. At a somewhat advanced age and particularly when they have given birth to several children, their breasts become so slack that they can extend the breast to the child fastened on their backs, either through under their arms, or even over their shoulders.

This was recorded of the Hottentot women by Kolben as early as the beginning of the eighteenth century, and an illustration of it was given which is reproduced in Fig. 871. He says :

"But if they have little children not yet able to walk, then the pouch has to give place and be put at the side instead of the back; inasmuch as then the child is held fast on the back by the kaross (mantle of animal's skin with hair on used by Hottentots), so that the child is sheltered from the wind and the rain; then one sees of the child nothing but the head which protrudes over the shoulder so that the mother, if it cries or is thirsty, can take the long hanging breast,

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throw it over her shoulder and put it in the child's mouth ; and then the pouch also lies above the karosses so that it can be seen by everyone."

In the Dutch edition of the same work, the illustration is similar to that in the German edition. The mother, in this case, sits on a stone, and the child, sitting on her back under her kaross, has taken the breast into its mouth over the mother's left shoulder. Here, too, the mother is smoking her pipe (see Fig. 872; and *cf.* v. Reitzenstein,¹⁷ p. 345).

On the same matter, Germann states that : "Not once were the children taken down in order to get the breast, but it was thrown over the shoulder to them, the nipple put in their mouth, and they were left to suck as long as they liked. They

were able to do this 'as they have very long breasts hanging down as far as the navel.' During this business, the mother had to 'have refreshment again quickly and try to strengthen herself elsewhere. Now, for this, there is no more convenient, pleasanter and better method than a pipe of tobacco which she smokes during this time ; and the smoke is blown towards the poor child by the wind. And when the child is six months old, as soon as it lets the breast fall, she puts the pipe into its mouth and lets it smoke the rest.'"

The same is reported of other African tribes.

According to Demersay, the breasts of the Toba women in Paraguay grow so long that they are able to reach them over the shoulder to their children which they carry on their backs. As we saw above, Blyth reports the same of the Fiji women.

Paulitschke wrote of the Somali:

"Not infrequently, I saw women put the long hanging breast backwards over the shoulder to the child so as not to have to get the child out of the position which was comfortable both for herself and the child."



Fie. 874. — Ancient Peruvian vase from Pumacayan, representing a woman suckling her child. Mus. f. Völkerk., Berlin. (Photo: M. Bartels.)

Wolff¹ says of the Quango tribes that "little children are commonly carried by their mothers riding on their mother's hips, held by a wide strip of cowhide hanging across the shoulders. If the child is hungry, it draws the breast through under the mother's arm and, in this position, sucks quite happily. Till about their third year, the children have the breast along with other food."

This riding of children on their mother's hips is very common in South and, in particular, in Central Africa. Buchta took a photograph of a Niam-Niam woman suckling her child, who was certainly several years old, in this way; its mouth is almost in her armpit. He has lifted up her breast to this position and seems to be drinking vigorously (Fig. 867).

The seated position on the ground with one leg underneath and the other stretched out in front whilst suckling, is to be found among the Araucanian women in Chile (Fig. 858). Similarly, with the Siamese woman (Fig. 873) and among the Kaibab tribes belonging to the Paiute Indians in North Arizona. The baby is in a half-sitting position and its buttocks and thighs rest on the mother's crossed thighs.

An ancient Peruvian burial urn in clay (Macedo collection) of the Berlin Ethnological Museum which was found in Pumacayan, represents a female figure, seated on the ground, with breasts hanging a long way down (Fig. 874). On her



FIG. 875.—A Japanese woman dreams when suckling her child. Mus. f. Völkerk., Berlin. (From a Japanese woodcut.)

knee, which is almost touching the ground, a child is sitting upright, trying to put the nipple into its mouth with its hands, but the mother not helping it in any way. She seems to want to squirt milk out of the other breast, for which purpose she is holding the nipple between her thumb and forefinger. In this case also, the colossal dimensions to which the breasts have developed show that this is a multiparæ.

This picture does not entirely agree with what Baumgarten recorded of the ancient Peruvians. He states that as soon as a child could keep upright, it had to take the breast, kneeling as well as it could, without the mother's taking it in her lap. If it wanted the other breast, this was held out to it and it had to take it itself without being taken into its mother's arms.

The Fiji women have a very strange custom in suckling, as Buchner records from his own observation. While he was visiting a chief, the latter's wife took her baby from the nursemaid, warmed her hands at a firebrand, rubbed her breasts



FIG. 876.—A Japanese suckles her child. (From a Japanese woodcut from Bijutsu Sakai or the World of Arts.)

warm with them, and then lay down on the ground and gave the child her breast as a suckling lioness does. Another lady of high rank came on a visit with her child, and also lay down to suckle her child in the same way.

In Japan, too, suckling seems to be done lying down in certain circumstances. A Japanese colour print portrays a scene of this kind (Fig. 875). The mother has lain down on a kind of mattress; her head is supported on her right hand and elbow, probably so as not to spoil her carefully dressed hair. With her left hand she presses

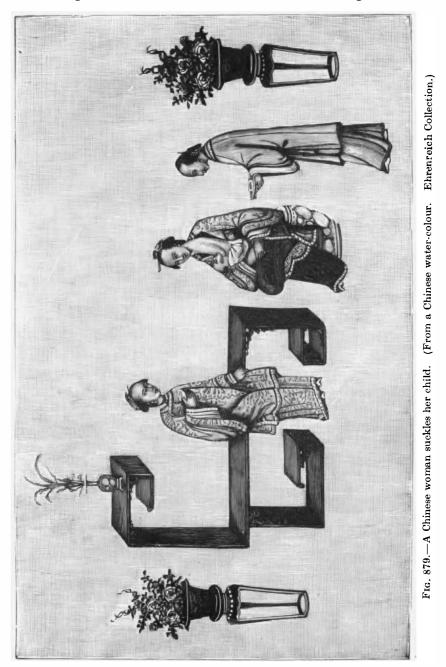


FIG. 877.----A Japanese woman suckling her child. (From a Japanese woodcut from Ehon Onna Imagawa, 1820.)



FIG. 878.—A Japanese peasant suckles her child. (From a Japanese woodcut.)

a little boy close to her; he lies on her abdomen and drinks avidly at her breast. The mother has her eyes shut; a snake-like creature approaching her face would appear to represent a dream image. The boy, moreover, gives the impression that he is already over a year old.



This, however, is not the only way in which Japanese women suckle their children. A Japanese woodcut shows us the mother kneeling on both knees with

her dress open in front (Fig. 876). On her thighs sits the already rather big child, who is just at his meal. In a woodcut of Hokusai of the year 1820, the mother rests



FIG. 880.—A Chinese woman suckles her child. (From a Chinese water-colour in the Museum für Völkerk., Berlin.)

on her left knee supporting herself on her left hand. Her right knee is raised, and on the thigh of the right leg rests her right elbow, and on this the head of the feeding child. In this case we have very probably a lying-in woman. For in the background there is a peculiar object standing on the floor, which has the form of a flat rectangular box. Presumably we are supposed to recognise this as the lying-in

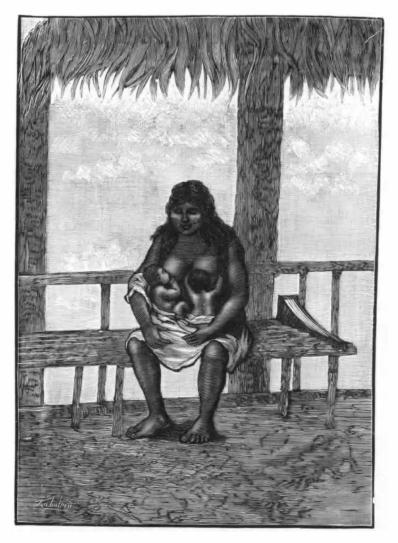


FIG. 881.-Twins being suckled, San Pablo, Colombia. (After André.)

bedstead. A few other women in the same room are busy folding clothes and putting them in order (Fig. 877).

However, among Japanese women, as their illustrations show, there are still other positions among the nursing mothers as well as with the children themselves. In Fig. 878 we reproduce one more example. In this case, the subject is a woman of the peasant class. She is sitting on a wide bamboo bench in the open air, in the European way. The baby, which is probably over a year old, is kneeling on the bench with its body against its mother in such a way that it can comfortably take the breast in its mouth.

A peculiar position in suckling seems to be customary in parts of China. This we learn from a Chinese water-colour drawing which shows an upper-class nursery. It forms one page in a cycle illustrating the life of a Chinese. The page of interest to us here is reproduced in Fig. 879. A lady of high rank (as the small feet show), probably the mother, is sitting on a peculiar bench. Near her, the suckling woman is sitting on a porcelain seat. She is probably a wet nurse, for her bare feet appear not stunted. A third female person in simple clothing is bringing up a shallow little dish. The child which is taking the right breast, is in a half sitting position. The nurse supports it with her right arm.

Crossing one leg over the other while suckling a child seems to be the usual position in China, for it is repeated in another Chinese drawing, which is reproduced in Fig. 880.

Exceptional circumstances, of course, also bring about unusual modes of procedure. This also holds good if a woman is obliged to feed twins. In many tribes, this is considered quite impossible, and in that case, as we have seen, one child is given to other people to rear if they do not kill it. If the mother wishes to suckle both children at once, she has to have one child on each knee. The woman, as we have seen in Fig. 881, has to bend over a little while doing this.

When, as we have learnt in the case of many peoples, children continue to suckle to a very respectable age, naturally they are obliged to assume, while at the breast, special positions suitable to the size of their bodies. Thus, Schomburgk saw not infrequently among the Warrau Indians in British Guiana, a threeor four-year-old child standing still before the mother and drinking at one breast whilst she had the youngest born in her arms giving it the other breast.

FIG. 882.—A Sioux Indian woman suckles a child. (Fom a drawing by Catlin, Mus. f. Völkerk., Berlin.

In a collection of pen drawings by George Catlin, which are in the possession of the Ethnological Museum in Berlin, there is a picture of a standing Sioux Indian woman in the act of giving the breast to the child just stepping up to her. This drawing is reproduced in Fig. 882.

In Fig. 883, from a photograph by Neuhauss which has been taken with his kind permission from his book on New Guinea, is shown how a Kai woman gives the breast to a fairly big child standing before her on a little bench.

In Japan also, it often happens that a child suddenly runs away from the circle of playmates and hastens to its mother to take a few pulls at her breast either standing or kneeling.

6. LACTATION BY PROXY AND BY WET NURSES

We have already seen that among many peoples, the mother is prohibited from applying her new-born child to the breast in the first days after delivery. Now many peoples have the curious custom of having other women give the breast during this period, when the mother is not yet allowed to suckle her child. This temporary replacement of the mother lasts with the Nayar in India for two days, in China (South Shantung), with the Armenians of Erivan, with the Galelarese and Tobelorese, and in Djailolo and in the Watubela islands for three days; in Eetar three or four days; in the Aru islands nine days; in the Babar islands 10 days; and in Little Russia until the baptism has taken place. The Nayar women get, when possible, a relative; in the Babar islands, a different woman undertakes the suckling for each five days, and they have also a similar way of choosing the name for the child in the Aru islands, as we learnt in an earlier chapter.



FIG. 883.—A Kai woman suckles a child in New Guinea. (After Neuhauss.) Among the Annamites, according to Cadière, the child has also to be applied first to the breast of another woman to ensure a good appetite for the child. This is done immediately after the birth of the child after a magic ceremony has taken place. He says :

"Cependent on est allé chercher dans le village une femme qui ait un enfant en bas âge. On la fait asseoir sur un grand pot en terre. châu, renversé, et elle présente le sein à l'enfant pour la première fois, au moment où la marée descend. Ces formalités sont destinées à donner bon appetit à l'enfant : de même que le vase renversé est vide de tout, de même que la marée descendant, le fleuve est vidé de son eau, de même l'estomac réclamera souvent de la nourriture."

Among the Cheyenne Indians, too, according to Grinnell, the mother is not allowed to apply her child to the breast at once, but other women who have a young child, suckle it. After four days, the medicine woman rids the mother's breasts of the first secretion, and then the mother is allowed to feed the child herself. In the interval, she receives gifts of $m \bar{o}t s \bar{s} h \bar{s} y \bar{u}n$, "milk medicine " (Actwa arguta Nutt.) to bring about the free flow of the milk.

The death or illness of the mother may be the cause of a permanent substitute being got for the child. Also the birth of twins in many s this obligatory. It is true that Goldhammer *

islands of the Moluccan Sea makes this obligatory. It is true that Goldhammer * says :

"So the all-wise Creator gave women two breasts so that they might either give the child one after the other, or, in the case of twins, give each child one."

Nevertheless, it is the custom there to give one of the twins to a woman friend and for the mother to bring up only one herself. Among the Indians in Paraguay, if a baby loses its mother, there are showers of requests from women whose breasts are available for the child to be handed over to them. The woman to whom it is given brings it up as her own. The Nayar in India try, if possible, to get a relative for this permanent substitution for the mother (Jagor). Among the Fellaheen in Palestine a neighbour is found ready for this (Klein).

* [No reference is given in which of Goldhammer's works these and some later passages occur.]

If a Madi negress has not sufficient milk in her breasts, then it is easy to find another woman to help with her breast (Felkin).

But, besides this, we see that in isolated cases the child is fed by several mothers. Thus among the Arabs in Algiers, besides the mother, the first best servant maid or a visitor who happens to be present also gives the child the breast, and the children of Circassian princes are not seldom fed by all the women in the tribe capable of doing so.

We must designate the hired nurse as an ancient institution. She is mentioned by Homer and also in the Bible. In ancient Babylon, too, wet nurses were known. § 194 of the famous code of Hammurabi is to the effect that when anyone gives his child to a wet nurse and the child dies in her hands, but the nurse, without the knowledge of the father and mother, suckles another child in its place, then she shall be convicted of having suckled another child in its place without the knowledge of the father and mother, and her breasts shall be cut off.

As Winckler remarks, the usual way of having children brought up by wet nurses was to give the child to the nurse in her house. Otherwise it would not be possible to understand how the nurse could conceal the death of the child from the parents and substitute another for it.

But with the ancient Hindus also it appears that the children were almost always handed over to wet nurses. Susruta orders that the wet nurse must not apply the child to her breast until the tenth day after its birth, and, to be precise, at the naming ceremony. He says :

"Let the wet nurse with washed head and clean clothes on a lucky moon day be placed with her face towards the east, and apply the child with its face turned towards the north, to the right breast, and let it drink, after the breast has been washed and some drops of milk expressed from it have been consecrated with the following words: 'May four oceans bearing milk, Oh ! fortunate woman, be continually in both thy breasts, to increase the strength of the child : may thy child, Oh ! beautiful one, having drunk the milky nectar, have a long life, like the gods after they tasted ambrosia '" (see Vullers).

Precise instructions were given as to the conditions which were to decide the choice of a wet nurse. We have instructions of this kind also from the physicians of the Greeks and Romans, with whom the institution of wet nurses was also wide-spread. Here we find interest in the desire of Soranus that the wet nurse should already have given birth to two or three children. However, he disapproves of the idea, generally prevalent at that time, that her last child must be of the same sex as the one she is to feed. Oribasius required that she should not be under 25 and not over 35 years of age. Mnesitheus gives 32 as the utmost limit; while Soranus extends the admissible time from 20 to 40.

Likewise among the Aztecs in ancient Mexico, foster mothers were admissible in exceptional cases.

In the house of a Mohammedan the wet nurse enjoys a position of great respect. In the Koran it is said :

"It is also permitted to you to take a wet nurse if you give her the full wages according to law."

In Turkey, according to Eram, it is very common for upper-class women of the big towns to hand over their children to wet nurses. Hence young mothers in the provinces hand over their offspring to relatives very early and hasten to the big towns in order to lead a life of ease as wet nurses in wealthy homes. According to other information, the wet nurse is kept by well-to-do mothers so that the lady may not lose her beautiful figure. Oppenheim, on the other hand, states that in Turkey suckling by the mother is quite a general custom.

Among the modern Greeks the keeping of wet nurses is very common among people of high rank in order to preserve their health and the beauty of their breasts.

Although the Persian woman is authorised to take a wet nurse for her child, yet it is very exceptional if she does not nurse her own child. A mother who suckles her own child there, as Polak records, claims the wet nurse fee from her husband.

The engagement of wet nurses for new-born infants is mentioned in the old mythological writings in Japan. However, along with the wet nurse, were a number of other women with quite definite functions in the care of the child, and Florenz, who translated this information, expresses the supposition that the narrator, in this case, is describing the Imperial nursery in his time. The passage treats of the god Hiko-ho-ho demi-no-Mikoto, to whom three children had just been born.

"Hiko-ho-ho demi-no-Mikoto took (a number of women) and made them wet nurses, hot water women as well as chewers of the boiled pap and preparers of the bath. All these different occupations were organised to bring up (the child) honourably: the fact that at that time people called in strange women temporarily to rear the illustrious child with milk was the origin of the custom now existing of employing wet nurses to rear children."

In China also, where, moreover, wet nurses are mentioned at a very early date, these are to be found only in the houses of the wealthy. We find the same thing with Malays of high rank in Borneo.

Blyth makes a similar report from the Fiji islands. He says that formerly women of high rank, like the wives of the late King Thacombau or of the chiefs of Fiji, never fed their offspring themselves, but handed over their children to women of a lower class to be suckled. Now, however, since the introduction of Christianity, the women of the highest classes also are beginning to nurse their children themselves."

Among German people, rich Anglo-Saxons, as early as the sixth century, liked to have their children fed by wet nurses, and in the fifteenth century this was the common custom in the whole of Germany.

A special development of the institution of wet nurses prevails in Paris. Here very often the wet nurse is not taken into the house but the child is handed over to the wet nurse who brings it up in her home. Now it must not be supposed that this is always done by giving the breast; on the contrary, by no means seldom a system of artificial feeding is used; the institution of foster mothers, popularly called "baby farming." And the *maire* of a little French village was no doubt right to a certain extent when he said : "The churchyard in my district is dotted with little Parisians."

In every place where wet nurses are in fairly frequent demand, some particular district or a particular nationality usually acquires an outstanding reputation for supplying good wetnurses. These "Wetnurse factories," as such places are called in jest, are, as is well known, Spreewald and Oderbruch for Berlin. For Paris, in those cases where with us the wet nurse is taken into the house (called *nourrice sur lieu*), Normandy and the Département de Nièvre in Burgundy. In the Slave States of America, people had negresses as wet nurses; Persian women of high rank chose nomad women; the Malays in Borneo, Chinese women from the wives of the Chinese hill people who are settled there. With the ancient Athenians, Spartan women had a special renown as wet nurses; but Roman women were recommended, Greek women were preferred by Soranus, but Egyptian and Thracian women by Mnesitheus.

We cannot conclude without referring briefly to the idea that something might be "absorbed with mother's milk," *i.e.*, that the characteristics of the suckling women might be transmitted to the child by the agency of the milk. Tacitus lamented that in Rome there were no longer such distinguished men as in former times, because the children were no longer nursed by their mothers, but by foreigners bought as slaves. In the century before last, Goldhammer wrote :

"Besides, the children sometimes take after their wet nurses from whom they suck both good and evil, hence the proverb: 'He sucked his wickedness from his wet nurse.' And Erasmus says in his colloquies that he is quite of the opinion that the character and nobility of the child, tainted by the milk, become weak and corrupt, because through the milk of their wet nurses, children absorb into themselves diseases, virtues and vices, of which we have as an example Emperor Tiberius who inherited drunkenness from his tipsy wet nurse; the Emperor Caligula, however, had tyranny instilled into him by the bitter and wicked milk of his utterly evil wet nurse so that he then became a very cruel tyrant."

, Viardel, the appointed surgeon of the Queen of France in the seventeenth century, believed in the probable harmfulness of the wet nurse's milk. He shows himself a decided enemy of the institution of wet nurses, for he considered that no woman is worthy of the name of mother, but is rather to be regarded as a cruel stepmother, who hands over her poor innocent child to a loose hag or, it is better to say, to the lions and tigers as a sacrifice, who have no aim but their own benefit. Thus the morals and temperament of the children are quite reversed, so that it seems as if they have sucked into themselves with the milk the vices of the wet nurses, because they received food which does not accord with their nature.

That even at the present day in our population, especially in the country, the same idea is prevalent ought to be sufficiently well known.

Likewise in Africa we come across a similar idea. Gutmann records of the Wachaga in East Africa that, according to their belief, nothing is worse for the child than if another woman suckles it. Sometimes an attempt is said to be made by a jealous wife, by secretly applying the child of a fellow wife to her breast, to do harm thus both to the child and to the mother. This idea explains why a suckling child, whose mother dies, perishes in most cases unless it can be saved by some other means, as no other woman would be willing to put it to her breast. Thus we see that there are ideas also which directly preclude feeding by substitutes for the mother.

7. LACTATION BY ANIMALS

We have had various accounts of animals being made wet nurses to little children in place of the mother. We are going to go into this briefly here, as in a later chapter we shall come across the reverse, that is, the suckling of young animals at women's breasts. Cases of animals being compelled to act as wet nurses to human babies play a prominent part in ancient mythology. The case of Telephus may be recalled. He was the son of Heracles and was, when new born, abandoned and suckled by a hind ($\delta a \phi os$); also Romulus and Remus, the babies suckled by a she-wolf; and the goat Amaltheia, which fed the young Zeus in Crete with her udder; and, finally, the child figures which, in the various Bacchic pageants, quench their thirst at goat mothers. Possibly the last-named representations are to be regarded as a copy of real circumstances, as they actually happened among the Greek and Italian pastoral population.

In the Middle Ages there were many tales of children who had been left in woods and suckled by bears. In consequence they had, besides their rough and animal habits, a thick growth of hair all over their bodies so that they were called w.-vol. 111.

wood or bear men. In hunting expeditions of princes they are said to have been tracked by chance, and were gazed at as great wonders of nature and described in scientific works.

However, even as late as last century, in very rare cases it is true, such rearing of children took place. For example, as Klein learnt, sometimes the fellaheen children in Palestine were reared in this way at a goat. This calls to mind similar circumstances which must have prevailed in Egypt in the so-called Old Empire. A pictorial representation has been preserved which Witkowski copied and which is

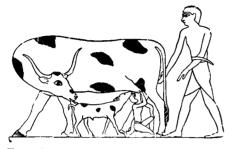


FIG. 884.—A child and a calf are suckled by a cow. Ancient Egypt. (After Witkowski.)

reproduced in Fig. 884. We see here a little boy squatting under a cow's belly and drinking at its udder, whilst a calf is appeasing its hunger at the same time at another teat.

MacGregor reports of the Canary Islands that when a woman dies in childbed there, the child feeding is continued by goats or sheep. It is held under the udder till it has drunk its fill.

A Government architect, H. Weissstein, gave M. Bartels the following information :

"Nowadays, too, feeding children by animals still takes place, and this occurs in Paris in the big

Foundling and Children's Hospital (Hôpital des enfants assistés). Children suspected of having infectious diseases are not fed by wet nurses, but are applied to asses' udders. A special pavilion has been built for this in the garden of the great institution. There are stalls attached to two sides of the actual ward where the children are, and in each of these stalls four asses are kept permanently for this purpose alone."

8. LACTATION BY THE GRANDMOTHER

We have grown up so confirmed in the idea that, if a breast is to provide milk, a confinement must have preceded not too long before and the nursing woman must be comparatively young, that we are extremely surprised when we are told the contrary. And yet the reports that grandmothers, or other women of matronly age, know how to induce their old breasts to produce a renewed milk secretion sufficient for the nourishment of a baby, which have been published, are not just isolated cases. Also in this matter it is not a question of one isolated tribe in which this apparent miracle of nature has become possible as an exceptional case, but from all quarters of the globe examples have been cited. Thus it has been recorded of the Armenians of the Kuban district in the Caucasus, that sometimes the grandmother, a woman of perhaps fifty years of age, in order to give her daughter some rest, takes the new-born child and gives it her breast, and that a lacteal secretion is really established.

Of the Iroquois, Lafitau, who lived among them as a missionary, relates that if a baby loses its mother, miraculous as it may sound, its grandmother, whose years of fertility are already behind her, knows how to make her breasts produce milk for the child (Baumgarten). We hear the same thing also of the Indians of South America. According to Quandt, among the Arawak in British Guiana, when a mother, after several years of suckling, has given birth to another baby, the grandmother steps in for the elder suckling child and feeds it at her breast for some time longer. Appun often saw children standing near their mother and grandmother and sucking now at the one and now at the other.

Among the Bechuana tribes in South Africa, Livingstone saw in several cases that the grandmother had undertaken to suckle her grandchild. One woman had fed her last child at least fifteen years before, but she applied her grandchild to her breast and was able to give it quite sufficient milk. When a grandmother of forty or so is left at home with a little baby, she applies the child to her withered breast and suckles it, and thus it happens here also that sometimes a child is suckled both by its mother and by its grandmother. Likewise, among the Egba, a Yoruba tribe on the Niger, it happens sometimes, as Burton learnt, that old widowed matrons suckle little children, although usually the breasts of elderly women are like loose and empty purses of skin. So here also the grandmother often acts as wet nurse to her grandchild. Also Fülleborn 2 was told by the Wandonde that a certain medicine was so efficacious in promoting the secretion of milk that even the grandmother was able to suckle a child after taking it if the mother happened to die. Emma v. Rose, who used to visit the Arabs in Algeria, knew an old wrinkled negress, a slave of the Cadi of Biskra, who had given birth to her last child thirty years before. She had been the Cadi's wet nurse and was now performing the same service for his children. She had never ceased suckling and had still an excessive supply of milk. When the informant expressed her doubt as to whether the milk of this matron was sufficiently nourishing for the babies, the wife of the Cadi expressed her opinion that milk was milk, and she knew no difference.

Tuke maintained even that in New Zealand sometimes women who had never borne children at all suckle little children (pp. 725–726).

That South American Indian women can keep their breasts secreting milk for many years by letting animals of all kinds feed at them is to be discussed later. It is doubtful, according to von Reitzenstein, if this is the reason for the suckling of animals. D. W. H. Busch formerly laid especial emphasis on this influence, although perhaps from an erroneous point of view. He says :

"When a woman acts as wet nurse to a strange child, the quantity of her milk decreases at first and only becomes more abundant when she feels more love for the child. Thus, this secretion, like the sexual impulse, depends on a psychic affection, *i.e.*, on the love for the child, and can, on the other hand, also increase that love."

For this peculiar lactation by old women, M. Bartels has proposed the name He was able to lay before the Berlin Anthropological Society lactatio serotina. records which had reached him from the Mission Superintendent, Kropf, who had lived for 42 years among the Ama-Xosa in Cape Colony as a missionary. Lactatio serotina is so common among these people that Mr. Kropf came across "innumerable cases " of it. The women concerned were between 60 and 80 years of age. He remembered with particular vividness one woman, who on his arrival in Africa in 1845 already had grown up children in the twenties, and who, in the year 1887, suckled a great-grandson. In this case, therefore, we have lactation by the great-grandmother. Old women are able to undertake this business of lactation not only once, but as often as they like, *i.e.*, as often as a grandchild or a great-grandchild was born. In this way there was an interval of from two to four years between each period of lactation. The old woman then continued lactation for successive years, according to when the mother of the child returned. That is to say, the mothers go to the towns soon after confinement to look for work and the rearing of the child then devolves upon the grandmother or great-grandmother.

Unfortunately, no information has yet been given as regards the appearance, kind and quantity of the lacteal secretion in the withered breasts of these old women; nevertheless, in reply to questions, Kropf stated that the women used both breasts, but that, at least from the outward appearance, no very abundant secretion of milk could have taken place, as the breasts never got that distended look which appears in the case of young nursing mothers. Moreover, these grandmother's babies are given cow's milk as well.

In the debate which followed M. Bartels' information, W. Reiss pointed out that in Java also it was very common for old women to apply babies to their breasts. The young mother goes to work and the child is taken to her three times a day to be fed. In the interval it is left in the care of the grandmother or an old neighbour. "So as to be bothered as little as possible by the child in the housework, the old woman ties it to her naked body. Seeking for food, or merely from boredom, the child sucks at the withered breast of its nurse in whom, in consequence of the continued stimulus, a milk-like secretion begins gradually to establish itself. The very scantily developed fluid is yellowish and in no way corresponds to mother's milk. In this case also the children get other food as well. The Javanese have a special name for this kind of feeding. Kassi-tetek is, in the Malay language, the name for lactation at the mother's breast, and *mpeng* for sucking at the breast of old women. So common is the custom in Java that European doctors, when employing old nurses for the children of white mothers, always expressly forbid the practice of mpeng, as, in their opinion, it might have bad results for the child. The word mpeng has many more figurative meanings (see Max Bartels¹⁰).

M. Bartels pursued this question further, and, owing to the kindness of Dr. Glogner in Samarang, in Java, he succeeded in obtaining detailed information about five cases observed by him (Max Bartels⁹). Of these women at least four were already grandmothers. They were between 37 and 50 years old, at which age, in Javanese women, the end of their capability of reproduction is long past. In the case of the three youngest women, menstruation was still present; one of 45 was in the climacteric and one of 50 had already passed it. In the women who had not reached the change of life the milk secretion was abundant, whilst the two older women undoubtedly secreted milk, but not in sufficient quantity for the children to be satisfied with it alone; they had to get rice boiled in milk as well.

The breasts of these suckling grandmothers are described as little developed. The milk secreted by them was very watery. The time required to stir the breasts to renewed secretion of milk is stated to have varied in length. Once this is said to have taken place "soon," another time "gradually"; in one case it took 10 days; in the youngest of the five women the activity of the breast began after only three days.

A further case of this kind was mentioned in Roemer ; it concerns the Battak in Sumatra :

"I was assured by a very credible witness that an old grandmother in whom the milk secretion had been dried up for years, saved the life of her grandchild by being able to make her breasts secrete milk again by heating and massage (see M. Joustra, *Med. Ned. Zendelinggenootschap*, 49, 240)."

Jacobs ² records of the Achinese, that if a mother for convenience or some other reason is prevented from feeding her child herself, then the grandmother undertakes the function, and that it is usually the maternal grandmother. In Achin it is nothing unusual to see an old woman with a child at her breast. People assured

Jacobs² that it was only necessary to apply the child to the breast for a few times daily to bring about the secretion of milk. Meanwhile, to make the child hold fast to the empty breast, milk is trickled continually on to the breast near the nipple. Jacobs knew a sturdy child, nine months old, who had been suckled by his grandmother from birth. Her youngest child was a girl of 14. She herself was 38 and she still menstruated.

Cases of this kind have been found in Europe. One is to be found under the superscription "Naturwunder. Die säugende Grossmutter" in the Berlin Wochenblatt für den gebildeten Bürger und denkenden Landmann of the year 1812 (Wadzeck).

"Marguerite Francesca Laloitette, the wife of a Parisian water-carrier, had had two children and was confined with the third, a son, in the year 1730; she had nursed all three children herself. Twenty-four years after her last confinement, in 1754, the son married, and his wife was to be confined in February of the year 1756. The grandmother, now 71 years old, did not want to employ a wet nurse for the expected grandchild because of her daughter-in-law's weakness, and she came to the strange decision to feed it herself if need be. She hit upon the idea of enticing the milk, which had already been lost to her for 25 years, and started off her attempts by having her breasts sucked amid great pain before the fire. At the end of four days, the old heroine of mother love saw her hope fulfilled. To make the milk, which had already appeared, both better and more abundant, she applied to her breasts alternately young dogs and the children of her neighbours during the last two months of her daughter-in-law's pregnancy, and was able as soon as her grand-daughter was born to feed her entirely with her milk. The grandmother and grand-daughter were in very good health in the period of lactation ; the child teethed at the proper time and without trouble and was, as observation showed, very lively." *

We have here an interesting analogy with the facts reported from Africa, Asia and America.

9. LACTATION BY THE FATHER

It has already been pointed out by Charles Darwin that in the mammary glands of men we have not really rudimentary, but merely not fully developed, or functionally active organs. As we have seen in the previous section that, even without a preceding confinement, a secretion of milk can be developed in the female breasts, it will not appear incredible that in rare cases a secretion of milk has been observed in the mammary glands of men. Indeed, in male children in the first days of life, a swelling of the breasts and the formation of a milk-like fluid in them, the so-called "witch milk," is no less common than in female infants. And also, at the time of puberty, one sees not infrequently the mammary glands of youths enlarge and swell considerably. Indeed, actual "breasts" may develop (usually, however, only on one side) and cases of this kind are called gynecomasty (cf. E. Laurent, and Fig. 48). Quite a number of such observations have been described recently, and microscopic investigations are being conducted. According to these, there can no longer be any doubt of the formation of this kind of enlargement of the mammary glands by the increase of true mammary gland tissue. Hirschfeld ("Sexualpathologie," Vol. II., p. 117) says: "True gynecomasty in men is comparatively rare; at least not nearly so common as might be supposed from the predilection of the Greeks for portraying women's breasts in their Hermaphrodites in conjunction with male genitals. However, that it actually occurs even to the secretion of milk, I can prove not only from statements by Humboldt, Krafft-Ebing, and others, but also from my own observations. We see in feminine men approximations to the female type in an unusually large areola of the nipple, distinct

^{* [}For other cases, see Gould and Pyle, p. 393.]

development of the Montgomery glands, and polymasty. We may divide gynecomasty in man just as andromasty in women into unilateral and bilateral, temporary and permanent, partial and total." Also the secretion of such a male breast has been examined; according to Kammler, in one case (cf. Schmetzer), actual true milk was secreted as the chemical examination showed; in most cases, certainly it is only a question of a milk-like product. In any case, according to this there is no *a priori* reason for denying in advance the possibility of suckling by the father.

We shall now examine the records of such cases which are to hand :

The fact that the breasts of men have really given milk has been stated earlier by a number of observers (see Gould and Pyle, p. 395). Schenk knew a man who had an abundant secretion of milk from his youth up to his fiftieth year. Cardanus records that he saw a man from whose breasts so much milk flowed that it would have been sufficient to feed a child (*De Subtilitate*, c. 12, fol. m. 366). M. Schurig ⁴ quotes many other cases (see *Syllepsilogia*, pp. 406 ff.).

An anatomist, Alexander Benedictus, living in Verona at the end of the fifteenth century, relates :

"Maripetrus sacri ordinis equestris tradidit, Syrum quendam, cui filius infans mortua conjuge supererat, ubera sæpius admovisse, ut famem filii vagientis frustraret, continuatoque suctu lacte manasse papillam, quo exinde nutritus est, magno totius urbis miraculo" (p. 1214).

The case observed by Schmetzer merits being rescued from the oblivion in which it is beginning to be buried because it was very well observed and vouched for. Schmetzer, in his position as a military doctor, observed it in a strong young soldier of 22 in the military hospital (1837). The breasts were not unusually large, but in the nineteenth year they began to swell. "If a nipple was taken between two fingers and pressed a little, from three or four orifices of the milk ducts spurted milk in jets as fine as hair to a distance of 2 or 3 ft. Examined immediately, the milk appeared bluish white, flowed off slowly and had a very sweet taste. This secretion never quite ceased ; there were always a few drops present ; the largest quantity the man had ever observed was a wineglassful. Within 24 hours in the garrison hospital, $\frac{1}{2}$ to almost 2 oz. (about 50 g.) were observed. The milk collected in a glass seemed of good quality, and when standing cream separated very soon. It also became sour quickly. After standing for several hours, butter separated which stood on the top in yellow blobs." In two weeks about 10 or 11 oz. were secreted. The chemical examination was made by the apothecary Mayer.

In the Icelandic Flóamanna Saga, the story is told how Thorgils, a chief, went to Greenland in the tenth century, whither Eirik the Red, the discoverer of Greenland, had summoned him. There his wife Thórey died in strange circumstances a short time after her son Thorsinur was born. At night, Thorgils wanted to look after the child and said : "I do not see how he can live long and it grieves me much that I cannot help him. First I will try the expedient of cutting off my nipples." And this he did. First blood came out, then watery whey, and this did not cease until milk issued, and with this the boy was fed (Asmundarson²).

As M. Weinberg states, a case of this kind is recorded in the Talmud (Sabbath 53), and S. Singer also cites this tale :

"A man's wife died leaving him a young baby; he, however, could not afford to pay a wet nurse. Then a miracle happened to him: his breasts expanded like the two breasts of a woman and he suckled his son."

Chinese legendary literature also has similar cases to which H. Mueller¹¹ first drew attention. In the new edition, published in 1856, of the *Sheng-yü*, the "Sacred Edict" originally written by the Emperor K'ang-hi (1662–1722), and added to as "Sheng-yü-Lsiang-chieh" in 1728 by the Emperor Yung-ching and furnished with illustrations, H. Mueller¹¹ found three stories appropriate to this subject.

In one case copied by Mueller, it is a faithful manservant, in the second a near male relative who rears a child with his milk.

The third picture, not reproduced by H. Mueller, but which, thanks to his kindness, is reproduced in Fig. 885, shows a man sitting on the edge of a bed suckling



F16. 885.—The Chinese legend of Pi-Kou, who suckled his two sisters. (From the new edition of Sheng-yü-Lsiang-chieh, 1856.)

a child whilst the second child lies in bed, and by its gestures shows its desire for the breast. This is Pi-Kou, who after the death of his adopted parents thus kept alive their two little daughters.

Whether these tales are really more credible than many other miraculous tales in the legendary literature of the various religions, is difficult to decide. Similar tales are well known both in China and Japan.

We have to thank Alexander von Humboldt for a record from modern times. The subject is a country peasant from the village of Arenas in New Andalusia (Cumana).

"This man had suckled a son with his own milk. When the mother fell ill, the father took the child to comfort it and pressed it to his breast. Lozano was 32 years old, and had till then seen no trace of milk in his breast, but the stimulation of the nipples brought about the accumulation of this liquid. The milk was thick and very sweet. The father, astonished at the swelling of his breast, gave it to the child and nursed it thus for five months two or three times daily.

"He drew the attention of his neighbours, but did not think, as would have happened in Europe, of profiting by people's curiosity. We saw then that, for the preservation of this remarkable fact, a verbal examination was made on the spot, and the eye witnesses who were still living assured us that the boy, so long as he was fed at the breast, had no food other than the father's milk. Lozano, who during our journey to the missions was not in Arenas, afterwards visited us in Cumana. His 13 or 14-year-old son accompanied him. Mr. Bonpland, who examined the father's breasts carefully, found them, as in women who have nursed children, wrinkled. He noticed that the left breast in particular was much expanded, and this Lozano explained was due to the fact that the two breasts did not give milk in equal quantity."

The following case is told by Wetzel Gruber, according to John Franklin.

A Chippewa Indian had separated from his troop to trench beaver. His wife was his sole companion. She was in her first pregnancy, was overtaken by labour pains and gave birth to a boy. On the third day after delivery she died. To keep his son alive, he fed him with venison broth, and to quiet his crying he applied him to his breast The result of this was that milk flowed from the breast by which he could suckle his child. His son thrived, took him a wife of his own tribe and begot children. In his old age his left breast with which he had suckled his son had still kept unusually big (cf. Gould and Pyle, p. 397).

In spite of the fact that there is no reason to question the reliability of the witnesses at Arenas or of Franklin's informant, yet neither Humboldt nor Bonpland was an eye witness of the actual fact. Hence all the more important is a record which the well-known Greek anthropologist Bernhard Ornstein gave to the Berlin Anthropological Society :

"In the year 1846 I was living in the little seaside town of Galaxidi on a bay of the Gulf of Amphissa with the shipbuilder Elias Kanada, a man of such colossal build as I have not seen equalled in Greece. As often as his little delicate and, at the same time, tuberculous wife lacked milk (and her nearly two-year-old offspring expressed his displeasure at this by incessant whining and complaining), the father, with true maternal tenderness, gave him one of his strongly developed breasts, and the little howler sucked to his heart's content till he was satisfied. I have often seen how the man was obliged to dry his breast which had become wet with milk."

Therefore, this interesting anthropological fact also has been authenticated by scientific observation.

CHAPTER XI

THE FEMALE BREAST IN CUSTOM AND TRADITION

1. CULTURAL SIGNIFICANCE

WE will here devote at least a few words to the importance of the maternal breast in the history of civilisation. It cannot have escaped the observation even of peoples at a low stage of civilisation how very much importance for the preservation and propagation of the whole human race must be ascribed to the female breast which dispenses nourishment. And, for this reason, it is quite comprehensible that they should conceive of the breasts as the distinguishing characteristic of the female sex. We therefore find in their crude and primitive artistic attempts at reproducing the human form, whether in painting or in plastic work, that, whenever their figures are meant to be women, the breasts are always more or less successfully indicated or formed. We can see this in the works of art of the primitive peoples of Equatorial Africa as well as among the Easter Islanders ; we find it in the rock drawings in Bohuslaen in Sweden (Brunius), as well as in the carvings of walrus-bones among the Eskimo tribes, etc.

In this connection a number of vases brought to light by Schliemann's excavations in Hissarlik (Troy) are very interesting. On them we find very clearly formed breasts. There can be no doubt as to their significance, as some of these vases, by their lids ornamented with faces, give evidence that they belong to the widespread groups of so-called "face urns" which reproduce more or less perfectly the human form. It happens, in addition, that on the majority of the specimens discovered by Schliemann, right in the middle between the two breasts, but a little way below them, is a little flat circular elevation like a bud, which, from its position and shape, must quite certainly be regarded as the navel.

The passive female productive principle is very often represented by a female figure holding her breasts with her hands, or with one hand on a breast and the other on her genitals. Similar figures are known by almost all nations. Our Fig. 886 shows such a female figure, which serves as a bow holder from Uguha, south-west of Lake Tanganyika, whence it was brought to the Ethnological Museum in Berlin by Wissmann. "It is very carefully carved in dark brown wood and is unclothed except for a pearl necklace. On the abdomen and on the lower part of the back as far as the sacral region, some ornamental scars are indicated in very high relief. The hands are on the two turgescent breasts, and the navel in this case, too, as so often in African figures, is very prominent and arched outwards as in umbilical hernia" (cf. Fig. 774).

Figures formed on the same principle have been found in Cyprus, in Asia Minor, and even in Greece archæologists have been able to prove from a number of transitional forms that the well-known position of the hands in the Venus de Medici, usually regarded as the highest expression of female "modesty," had originally exactly the opposite significance, since its artistic precursors (and one might say ancestors), were at pains, not by any means to hide the parts in question with this position of the hands but, on the contrary, to draw attention to them. The maternal breast as the symbol of the Goddess of Nature also played its part in archæology, which was reflected even as late as in the allegorical representations of the last hundred years. However, for such a busy mother as Mother Nature in the conception of mankind, two breasts only, as in an ordinary human woman, are not enough; the number had to be increased considerably. Best known in this respect is the statue, larger than life size, which is in the *Museo nazionale*, the former *Museo Borbonico*, in Naples, under the name of the Diana of Ephesus, who,



FIG. 886.—Carved wooden bow handle from Uguha. Mus. f. Völkerk., Berlin. (Photo: M. Bartels.)

as everybody knows, was worshipped as the goddess of Nature. This peculiar figure, a replica of which is kept in the Vatican, has the whole thorax studded with breasts of various sizes in a regular arrangement.*

2. DIETETICS OF THE LACTATION PERIOD

In civilised nations the nursing mother is given a special diet with the intention on the one hand of preventing irritant substances from passing into the milk, and, on the other, of increasing the production of milk as much as possible. In savage peoples, similar facts may come into consideration, but it is mostly superstitious ideas which give rise to prohibitions (taboo laws). Thus, in the Babar islands, a nursing mother may not eat fish or sucking pig. Likewise in Eetar, she must not eat *kalapa* nuts or sucking pig "because, otherwise, the child will fall ill"; and in Keisar she has to avoid, among other things, mutton and fowl and sour fruit; on the other hand, however, she has to eat boiled rice and dried fish.

In Guatemala, as Stoll records, a woman, so long as she was nursing a baby, had to live exclusively on maize.

The Ceram Laut and Gorong island women try to increase their milk by taking for 40 days an extract of the leaves of two medicinal plants (*Gogita ruor* and *Oidanwanar*). In Japan the flesh of the owl enjoys a great reputation in this connection. Moschion records that Roman women, to produce an abundant supply of milk, ate the udders of various animals; they also had as milk promoting specifics, wood worms and bats burnt to ashes and taken in wine, a diet he himself condemns.

Likewise, the ancient Israelites had special rules for nursing mothers. In the Midrash Ékāh Rabbathi, it runs : "And then it is taught also : 'When a woman suckles, the work of her hands shall be lessened and her food increased.' Rabbi Josua ben Levi declared : She shall be given more wine because this increases the milk " (see Wünsche ⁴).

The widespread belief that lactation prevents a fresh pregnancy we have already learnt to be untrue. Naturally, there is no renewed pregnancy if coitus does not take place, and we find this prohibited in a great many peoples. It is certainly a fact that among many, and, indeed, just among the extremely barbarous peoples,

* [Cf. M. Meurer. For actual cases of polymastia, see Goldberger, who cites over 250 cases.]

the husband is not allowed to have sexual intercourse with his wife during the period of lactation. Now, as mothers in these tribes not infrequently continue lactation for several years, the consequence is naturally that the husband must remain sexually apart from his wife throughout the whole period.

This keeping aloof from the suckling woman is very widespread, especially among African tribes. But also the Druses and certain tribes in India and America have the same custom. It has also been maintained to be customary among the Fuegians. Deniker and Hyades, however, gave the following report of these people :

"La durée de la période d'allaitement est en général de trois ans ; mais les Fuégiennes



FIG. 887.—The nursery. Painting by H. Oldenburg, 1541. (Germanic Museum, Nuremberg.)

commencent de bonne heure à donner à leurs nourissons, sans les sevrer complètement, des aliments solides, tels que moules cuites, poissons, etc. On a prétendu que, pendant tout le temps où elle allaite, la Fuégienne n'avait aucune communication avec son mari : un Fuégien de la mission d'Ouchouaya nous a dit que d'après le conseil des missionnaires, les femmes devaient s'abstinir de cohabiter avec leur mari avant qu'une année fut écoulée depuis l'accouchement ; mais il s'est démenti ensuite et les autres Fuégiens des deux sexes que nous avons interrogé sur cette question ont été unanimes à nous déclarer que, des le deuxième mois après l'accouchement, les rapports recommençaient entre les époux. Nous avons vu des jeunes mères dont les enfants n'avaient pas un an et qui ne se privaient pas des relations sexuelles. Nous ne pensons pas par conséquent qu'il existe chez les Fuégiens comme peut-être chez d'autres peuplades d'Amérique, d'après d'Orbigny, l'usage d'allaiter trois années pendant lesquelles la femme n'aurait aucune communication avec son mari dans la crainte qu'une nouvelle grossesse l'oblige au sevrage."

RULES AND CUSTOMS DURING LACTATION

Among the inhabitants of Morocco the husband is allowed to have intercourse with his wife again when she has had three periods after her confinement; nevertheless, the wife lives alone during the two years when she is nursing the child. Among the ancient Peruvians also the husband did not cohabit with his wife so long as she was nursing a baby, for they believed that the mother's milk would be spoiled by this and the child become unhealthy or even consumptive. On the other hand, it was an important reason for the growth of pederasty. Peru has portrayed in its vases every cultural fact, even those of sexual life. Thus we see on the vessels from Chimbote (cf. Fig. 888) the performance of coitus per anum in two positions, and in both a child in swaddling clothes is lying in a very conspicuous position in front of



FIG. 888.—Coitus per anum feminæ. (Mus. f. Völkerk., Berlin.)

the woman. That is to say, the woman is represented as a mother who has been recently confined. In ancient Peru the lactation period lasted for two years and, for this time, sexual intercourse was barred to the couple. Polygamy for a man of the common people incurred the death penalty. Adultery was strictly forbidden; so the husband had really nothing left during the period of lactation but anal or oral coitus. The wives themselves desired this from jealousy of homosexual intercourse, and actually procured a law by which the active party was cruelly condemned to death, so that really the husband had no alternative but pederastic intercourse with his wife. (For further details, see v. Reitzenstein.²³)

3. RULES AND CUSTOMS DURING LACTATION

We have seen that all the sexual functions of woman which have so far been discussed are hedged about with all kinds of superstitious rules and regulations, so that we might expect at the outset to come across the same thing in the very important process of lactation. Only a few examples will be cited.

In the Watubela islands the mother is not allowed to suckle her new-born child for the first three days. For this period a wet nurse is sought, but only when the child is a girl. Yet not every woman in the village is suitable for the office of wet nurse, but only a woman who has herself had a daughter can be employed. If this condition is not fulfilled, then the babe will be barren later (Riedel ¹).

Likewise, in the time of Soranus, a wet nurse was considered fit for service only if the child which she had borne was of the same sex as the one handed over to her. Soranus endeavoured to eradicate this superstition.

In the Aru islands the mother may not apply her child to her breasts for the first nine days, but she has to let the milk drop on its umbilical wound daily. On the day when it is given its name the child is applied to her breast, and when this is being done several names are mentioned, and the one said as it begins to suck is regarded as that chosen by it, and is given it for life (Riedel ¹).

We have seen in earlier chapters that among many peoples the young mother is not permitted to apply the child to her breasts on the first day after delivery. A prescribed time must pass before she gives the child her breast. On the Samoan islands the priestess has first to examine the milk, and only when she declares that the milk is not poisonous may the child be applied to the breast.

Houel records a strange custom among Sicilian women. He maintains that they give the child only one breast and leave the other unused.

With the Finns the mother may not nurse her child on all three days of Shrovetide, otherwise it will get a squint and also the evil eye, a glance from which inflicts injury.

A nursing mother in Transylvania may not spin because her breasts would suffer from this, and her child would get vertigo.

In Württemberg the child must get the right breast when it is fed for the first time, otherwise it will be left handed (Höhn 1).

In Upper Austria and in Salzburg, two nursing mothers must not drink together at the same time, because people believe that then one will drink away the other's milk (Pachinger).

Among many peoples a fresh pregnancy, or sometimes even the reappearance of menstruation, is regarded as a decision that lactation must be stopped. Thus Eetar islanders nurse their babies until they are impregnated again ; likewise Sula islanders, Tungus, Serbian and Dalmatian women. The last named, however, are also made to wean their babies by the return of menstruation, because it is believed that the reappearance of the menses as well as a new pregnancy has a bad effect on the milk.

In Old Calabar, on the other hand, women continue feeding their babies for a few months into the next pregnancy. This is done also among the Swahili in East Africa; the latter call a baby thus suckled, *Patchajan'ye*, which means "external twin."

Among the Topantunuasu in Celebes, as Riedel¹¹ records, a mother may continue nursing her child only till the four median incisors have been cut. Possibly the pain caused the mother when the sharp teeth bite her nipples has something to do with this prohibition.

According to Maass,¹ the abundantly supplied breasts of the Mentawai islanders are tied above the nipples with a rattan thread to make sucking easier for the child.

It is interesting to find that we have to point out in a few cases a sex differen-

tiation even in the lactation period. In this case the girls always go short. Thus, according to Morier, Persian mothers nurse their male babies for two years and two months, whilst a girl has to be satisfied with two years. According to du Perron, among the Parsees, boys are breast fed for 17 months, but girls only for 16.

The Masai mother makes a certain difference, according to sex, inasmuch as she is supposed to suckle a male child till the third, but a female child till the fourth or fifth month of the new pregnancy (Merker).

4. DANGERS TO NURSING WOMEN

One of the most common dangers to which the young mother is exposed consists in affections of the breast which manifest themselves first by the onset of violent pains which make nursing impossible.

The causes of these pains are fissures in the nipples, and in particular inflammatory processes in the glandular tissue of the breast leading to suppuration. This latter affection in its early stages is popularly called in Germany "Milchknoten," and, in its more advanced stages, is an inflammatory swelling. All sorts of "solvent remedies" are used for it, but, in particular, aromatic and mucilaginous poultices of as high a temperature as possible, and very irritant sticking plasters.

In Styria, according to Fossel, the old *Unguentum Althæae* enjoys a special renown. The Russians, as Krebel records, try to get rid of this condition as follows :

"The patient sits in front of the stove and warms the affected breast; another person at the same time warms a cloth rag or woollen stocking which has been moistened with the patient's urine and puts it on as hot as it can be borne, and then tries to keep the breast and the rag hot and moist with urine. In the interval, some iron object, a knife or a horse-shoe, is made cold on ice and then, when the breast has become very hot, all the sore places on it are touched with the cold object. The hotter and wetter the breast is and the colder the iron, the more certain is a favourable result supposed to be."

The White Russian woman cures abscess of the breast by rubbing this with a whetstone or a crumbly stone and saying meanwhile : "Crumble away pain as this stone crumbles !" (Paul Bartels ³).

For fissures in the nipples, in North Germany, water in which a red-hot iron has been cooled, or the so-called "Window sweat," the moisture from the air of the room which condenses on the window panes, is supposed to be of use. In Styria, on the other hand, a salve is used, the main constituent of which is a butter made from mother's milk. This salve is known there as "human fat."

Osiander's statement that in Göttingen the inflammation is sometimes dispersed by having young dogs suck at the nipples, we shall quote in a later place.

The tent gipsies of Transylvania smear the painful nipples with hare fat.

To prevent pain in the breast while nursing, among the Serbians, the bride does not allow the bridegroom to touch her breasts the first evening after the wedding (Petrowitsch). In some parts of Mecklenburg people rub the breast with the placenta to keep it sound, and sometimes the patient's face is included, and, moreover, they do not dry these parts afterwards (Bartsch).

A further danger to nursing women lies in the various puerperal psychoses into which question it is not proposed to enter here. Psychic disturbances during lactation are to be feared as, for example, the dread of a fright which might "spoil" the milk, an idea which is still very active among the common people. Hence, in Brandenburg, belemnites (so-called "thunderbolts") which are frequently found there in the gravelly sand, are called "fright stones" by nursing mothers and worn as amulets, so that the milk may not harm the child if the mother gets a fright. Also a little powder grated off the stone is given to the nursling. Pieces of belemnite used to be on sale under the name of "fright stones" in many chemists' shops even in Berlin at the price of five pfennigs each. "Fright stones" of bits of serpentine used to be worn also as amulets for the same purpose (E. Krause).

Also Goldhammer (1737) considered a fright harmful, and in such cases advises the nursing woman thus :

"In such a case for the health and well-being of her child she is to see that she does not immediately afterwards eat or drink much less apply her child to her breast unless she has had her milk drawn off beforehand."

Further, she is recommended "mother of pearl" crayfish eyes, etc.

We will mention one more special danger to nursing mothers : that is, bites in the nipples which are, in many cases, caused by the little nurslings. Among the Annamites these are particularly dreaded, but only in the morning hour. Landes gives the following explanation of this remarkable superstition :

" Il y a un moment de la journée ou la morsure de l'homme est vénimeuse, c'est le moment de son réveil, quand les vapeurs (khi) se sont amassées dans sa bouche pendant tout son sommeil et qu'elles ne sont pas encore été dissipées par la parole. C'est pour éviter une morsure de ce genre que les mères ne donnent pas à téter le matin à leurs enfants avant qu'ils aient crié."

Among the Washambaa (Usambara), Karasek heard that "children who run about in the rain and then come to the mother's breast to be fed will cause her to become emaciated; to prevent this, the husband who is careful of his wife, ties the child by the leg to the bedstead when it rains."

5. DANGERS TO SUCKLINGS

It is not possible here to go into all the dangers which threaten the suckling's health and life. We shall only discuss briefly the dangers which attend it from the mother's breast.

We saw that there prevails in many peoples a belief that it is fatal for the child to be applied at once to its mother's breast. That the reappearance of menstruation or even a fresh pregnancy is regarded as a cause of spoiling the milk and doing harm to the child has already been discussed.

The Annamites have a children's disease which they call *Cam tich*. Landes records of this:

"L'on désigne par ces mots la grosseur anormale du ventre chez les jeunes enfants. On attribue cette maladie au fait d'avoir tété le lait d'une femme enceinte ; ce lait que l'on appelle lait vivant ou plutôt crû, qui n'est pas arrivé à la maturité, $s\tilde{u}a \ song$, par opposition a $s\tilde{u}a \ chin$ empêche la digestion des autres aliments non digérés s'amoncellant et causant ces grosseurs de ventre. Les enfants ainsi frappés ont la tête énorme, les yeux endormis, les membres inférieurs grêles et le ventre sillonné de veines apparentes."

A further danger attends the little one if the mother has taken it off the breast but then decides to give it the breast for some time longer. This procedure is regarded as harmful among the Lithuanians, for instance. Bezzenberger records of this:

"If a mother takes her child off the breast for a few days and then applies it again, she will thus do harm, as when one rejoices over a living being and thus harm comes to it. A man



FIG. 889.-Woman praying for a good supply of milk. Japanese votive picture, painted on wood.

known to the narrator in this way rejoiced over the child at its baptism, and the child became ill in consequence. When the child's mother and some other women were very hard on this man, he kissed the child which then became well again."

Similarly, the White Russians (Smolensk) say that by reapplying the child to the breast after it has been weaned from it, the child will get bad qualities; such children get the evil eye (Paul Bartels³).

Among the Serbians, they become witches and have such power that with a single glance they can make a rider fall from his horse (F. S. Krauss¹)

6. DEFICIENCY OF MILK

Nothing can be more inconvenient for a woman who has to nurse a child than having too little milk in her breasts for this purpose. The special diet which has been prescribed by popular custom among many peoples is supposed to produce a more abundant supply of milk in the breasts. However, we come across special remedies, some mechanical, some medicinal, and some mystic in their nature, for the treatment and prevention of this evil state.

Walbaum records a peculiar procedure which Chinese women in Java employ in nursing their children.

"Before they apply the child to the breast, they take a hoop from a little cask, or, failing this, strong tree fibre, and with this force the upper part of the breasts together so that the milk may not run away again while they nurse their children."

The Japanese obstetrician Kangawa says:

"If the milk does not arise immediately after the birth, then one can wait for 30 days till the old bad blood is replaced by new; then it will come. The reason for this is either worry or congestion. The blood must first be replaced by Ses-shio-in and then Niu-sei-toh (i.e., a milkproducing drink) given; this consists of such ingredients as Pæonia albiflora Pall., Levisticum offic. Koch., Euonymus japonica Linn. f., and Glycyrrhiza Linn."

Max Bartels received from the late Professor Wilhelm Joest two little Japanese votive pictures painted on wood which doubtless form a pair. They are reproduced in Figs. 889 and 890. In the first (Fig. 889), we see a Japanese woman kneeling before the altar in earnest prayer. What she is praying for we understand from the second picture, of which we are just going to speak. According to F. W. K. Müller, the votive pictures of the Japanese are of two kinds. First a picture is hung up in the temple, by means of which the desire is expressed; and then later follows the second picture, which shows the fulfilment of the desire.

After Max Bartels ¹³ had shown these votive pictures to the Berlin Anthropological Society, C. Strauch² related that he had come across in Japan many dealers with such votive pictures before the most popular temples, and that in the temples there is a special room in which these pictures are hung. He also stated that two pictures, the "petition" picture and the "thanksgiving" picture, always go together.

The Japanese woman in Fig. 889 seems to have had insufficient milk for her baby or perhaps none at all. She seeks the help of the gods in her need by means of her ex voto in earnest prayer in the temple. That her prayer has been answered the second votive picture proves (Fig. 890). The woman is again kneeling on the ground. She has one of her breasts bared and is pressing it with her hands so that her milk is squirted in long thick sprays into a dish standing on the ground (M. W.--VOL. III. Q



Bartels). A similar votive picture, but larger and better in execution and also from Japan, is to be seen in the Ethnological Museum in Stockholm. In this case, too, the Japanese woman is kneeling on the ground beside a low staircase leading to a platform with a door shutting it off. The woman has her garment quite opened in front, so that both of her enormously big and engorged breasts are entirely exposed to view. On each breast she has placed a hand, with which she presses it so that the milk squirts out in thick sprays. Here, too, the milk is received in a dish placed underneath.

Women in the Fiji islands lay the warmed leaves of a red-leaved fig tree on their breasts to evoke the secretion of milk (Blyth).

Among the Maori (in New Zealand), the woman betakes herself with her child to the witch priest, who, after long incantations, immerses the child in holy water, and the woman then remains first of all alone. As she goes away, he says : "When the nipples begin to irritate, take off your clothes and lie naked." Then, when the woman has been alone for some time, she soon cries out : "My breasts are swelling and painful." Then the child is brought to her and she can apply it to her breast (Goldie).

Among the Javanese there are, according to the records of the missionary Kreemer in Kendal pajag, which were sent to M. Bartels, various drinks which are known for stimulating the secretion of milk. These are prepared from a great number of different plants; they have to be drunk for 14 days. Also the milkless mother is advised to sit down half undressed at one end of the rice block with her legs inwards. The healer then smears her back and breast with a salve as is done with brides, and then makes both husband and wife to vie with each other in stamping on the rice block in order to achieve the desired result.

To stimulate the secretion of milk, the crown of the young woman's head has water poured over it three times daily as is done with a newly delivered woman. A magic formula is uttered meanwhile, which, however, is never to be heard by a Mohammedan Javanese. It begins with the curtailed and not understood opening formula of the Mohammedan prayer :

" In the name of God, gracious and merciful."

Then it goes on :

"I pray to Allah, after I have blown against dry wood and struck it without water coming forth, that Allah may help me ! I pray for water ! I knock on this dry wood so that it may come forth at the top !"

After this the husband may not set foot in his house for 24 hours, and has to fast completely for seven days; then, however, he may have himself looked after (Max Bartels ¹⁰).

In premature drying up of the milk, the Masai woman tries to establish the secretion again by taking a great deal of liquid mutton fat (Merker).

The Russian women on the Caspian Sea have, according to Krebel, a curious method of procedure. A nutshell or a quill is filled with mercury and the opening closed with wax. Then it is sewn into silk or woollen material or into glove kid, and put on a ribbon round the neck so that it hangs on the breast. In this way they think they can promote the secretion of milk.

Among the White Russians (Smolensk), if a nursing woman has lost her milk, she dips the wooden carrier on which the pail hangs into the well, and drinks the drops which fall from the carrier when it is taken out. In the evening, she cuts a piece from a whole loaf of bread without speaking, carries it to the well or spring, puts it in and lets it lie there overnight. Next morning, she has to be the first at the well before daylight and eat the bread. If the milk still does not return, then somebody has been to the well before her and made the remedy ineffective (Paul Bartels³).

In the neighbourhood of Perugia, many nursing mothers wear a special pin in their hair to get an adequate supply of milk. M. Bartels owed not only the knowledge of this fact but also a specimen head of one such pin (and this is the effective thing) to the kindness of Professor Giuseppe Bellucci in Perugia. The pin head, called *pietra del latte* or *palla lattea*, "milk-stone" or "milk-ball," or also *pietra latterbola*, "milk-food stone," is reproduced in Fig. 891 in its natural size. In a few other parts of Italy, these "milk-stones" are worn not as pin heads but as pendants, and then, for this purpose, they are provided with a silver ring. The pin attached to the head is of silver; it is generally a single prong of the length of an ordinary

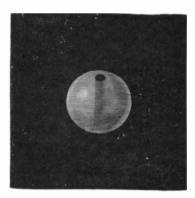


FIG. 891.—*Palla lattea*, used as the head of a needle and worn in the hair as an amulet for increasing the supply of milk. Perugia, Italy.

writing pencil, *i.e.*, about 16 or 17 cm. long, and of the thickness of a fine knitting needle. For a head it has, in proportion to its slenderness, a thick ball of opaque agate. The nursing woman puts this pin in her hair.

The stone from which the head is made is, as we have said, of agate. This is called *agató* in Italian, and this word the popular mind transferred to Saint Agatha, whose martyrdom, as mentioned earlier, consisted in her having had her breasts cut off; and now, in consequence of this, she is the patron saint of everything connected with the breasts. The similarity in sound of her name to that of the stone and the milky colour of agate are enough to make the stone a helpful and effective amulet for the secretion of milk.

In North Italy, the woman whose breasts are deficient in milk has to make a pilgrimage to the

little church of St. Mammante in Belluno, and there gives 2 lire and has a mass read. Then she has to drink of a water which flows there (Bastanzi). Obviously in this case, too, the sound of the name plays a part.

Hervé records of the district of Morvan in France, the following superstition :

"A un kilomètre de Moulins-Engilbert, la fontaine de Chaume a pour vertu de donner du lait aux nourrices. La nourrice qui craint de perdre son lait et que l'éloignement empêche de se transporter en personne au lieu de la cave, peut se contenter d'envoyer pour y être trempée, une chemise de son nourrisson. C'est comme on voit, le traitement par correspondance."

If the child will not take the breast, gipsy women believe that some *Phuvusch*woman (a kind of demon) has secretly nursed it. In such cases, the mother puts onion poultices between her breasts, meanwhile reciting the incantation :

> "Phuvusch-wife, Phuvusch-wife, May disease ravage thy body ! Thy milk to fire shall turn ! In the earth shalt thou burn. Flow as long as I require— To satisfy my child's desire."

The same remedy is used when a mother's milk dries up, in which case they believe that a *Phuvusch*-woman has made her own child feed at the breast of the woman concerned. Likewise, it is good if she touches her breasts with a coffin nail, then stands before a willow and drives the nail into the tree just above her head (v. Wlislocki).

We have to thank F. S. Krauss ⁶ for some information of great cultural interest relating to our subject :

"The Southern Slav saga, in all its variations, has for its main theme the story of the young wife who has been walled in. The saga mostly appears in those localities where remarkably old buildings exist. At Tesany in Bosnia, a peasant, my guide, showed me a spot on the old castle where milk from the breasts of a Gojkovica who was walled up as a building sacrifice issued from the walls. Thither come Mohammedan women whose milk had dried up in their breasts. They scrape off a little of the snowy cement and take the dust in milk. They think that by so doing, their milk must come back. The peasant told me how the walled-up woman implored the masons to leave her as much free space as her breasts could occupy so that she might feed her babies."

Also Bulgarian variations of this saga are known to Krauss, and Strauss also quotes some of them. One concerns the building of a bridge, another the building of "Smilens high fortress." The latter is being built by three brothers; it falls down, however, again in time for the wife of the youngest to be walled up in the foundation.

Then she says, *aman* (word without meaning), and weeping, lamenting, she repeats :

"Master, listen, *aman*, Manuel, my master : 'O set free, *aman*, my left breast for me, That I may suckle, *aman*, my son, my baby.' They set free now, *aman*, her left breast, For her to suckle, *aman*, her son, her baby. There where once was, *aman*, her breast, the left one, Has sprung forth, *aman*, a cool, fresh spring, A fresh cool spring, *aman*, containing pure milk."

These last words suggest that nursing mothers whose milk threatens to cease find help at this spring.

In Herzegovina, a woman, in order to get sufficient milk, is supposed to catch a fish alive, squirt a little milk into its mouth, and then let it go again (Grgjič-Bjelokosič).

Grube learnt from one of his medical friends in Peking that a lying-in woman's milk goes away if she receives a lying-in visit from someone who has not visited her within the first three days after delivery. The harm done, however, can be made good by such a visitor sending the woman a dish of rice and milk afterwards. When she has eaten it, the milk re-establishes itself.

However, it is worse if such a forbidden visitor should be a "four-eyed person," *i.e.*, a pregnant woman or her husband. If the latter is the visitor, then the milk is irrevocably lost; but if, on the other hand, it was a pregnant women, then the puerpera can certainly re-establish the milk, but not before this pregnant woman has been delivered of the fruit of her body.

According to Gutmann, jealousy often leads Wachaga women in East Africa to injure their fellow wives by bewitching their breasts so that they dry up. This is done by means of certain magic specifics known to the medicine men, about which unfortunately no further information is given.

Sometimes the deficiency of milk may have quite powerful results for the whole of the woman's life. For an example of this our thanks are due to Brehm :

"In Massaua, if the mother cannot nurse her child, she applies it to the breast of another woman; but she then loses the respect of her husband, and it happens not infrequently that she is put away whilst her substitute takes her place in this respect also."

7. THE WEANING OF THE CHILD

Divers causes make it necessary to wean the child from its mother's breast and stop further nursing. The chief are the cessation of milk, the growing up of the child, a fresh pregnancy, or finally, the death of the child. When the death of the child puts an end to the nursing, all sorts of laxatives are used among the common people to prevent the milk from "settling internally."

In Herzgovina, if a baby dies, then, according to Grgjič-Bjelokosič, at the moment when the corpse is carried out of the house, the mother must squirt milk from her breast three times over the threshold and say: "Son (daughter), take thy food with thee also." Then the milk will give the nursing woman no trouble.

Stoll reports a curious custom of the ancient inhabitants of Guatemala :

"When a woman's baby died, she kept the milk back in her breast for four days and gave none to any other suckling because she believed that otherwise the dead child would inflict some injury or disease on the living one. This kind of sacrifice to the dead is called *navitia*, which means approximately 'the four days' (from *nahui* = four) stoppage."

That a fresh pregnancy is, among many peoples, the reason for weaning the child we have already seen. If a Serbian gives birth to a second child while she is still nursing the first, she has to wean the latter in any circumstances, even if the new-born child should have been born dead. For the child must not get two kinds of milk, otherwise it would become a wizard or a witch.

Where the weaning of the child has not to be done suddenly, the usual procedure is gradually to give the child the breast less and less, whilst to replace it all sorts of other foods are given. Now this does not take place without many troubled hours for the child, and especially also for the mother, and therefore this difficult period of transition has to be made easier by all sorts of expedients. Moreover, according to popular belief, every time is not suitable for this, but certain times must be chosen and others again carefully avoided.

In East Prussia weaning must not take place with a waning moon, and should only be done when the migratory birds are settled, *i.e.*, neither arriving nor departing. In Hesse they prefer the time when roses are in flower; and in Vogtland when the trees are in blossom. In Upper Austria and in Salzburg a child may not be weaned when the field is full of corn in summer or covered with snow in winter (Pachinger²). In Austrian Silesia the time of sowing, and in Hesse the time of stubble, may not be chosen, otherwise the child will be insatiable. In German Switzerland weaning is supposed to take place on Good Friday under a walnut tree, but never in the short days, for the former protects the child from toothache, while the latter would make it asthmatic. The weaning of the child is easier at a cross-road. The young mother among the White Russians shows symbolically that the time for weaning has come; she sews up the opening in the breast of her chemise, cooks some groats for the child, makes the sign of the cross over it and says: "Now thou hast salt and bread; eat what we eat; thy time is up!" (Paul Bartels³). A similar custom among the Southern Slavs, but with a different reason for it, is described by F. S. Krauss¹: the mother has to put a needle in her stomach from above downwards, so that the milk also must run downwards. Then she mixes a cake with her own milk, bakes it and gives it to the child to eat.

If the baby is already weaned, but the mammary glands are still secreting milk, then the milk has to be "driven away" by prescribed specifics, and the further secretion of it prevented.

Now to make the milk dry up in Entre Rios in the Argentine, according to Mantegazza, the woman dips three little linen rags in her milk and sticks them on the walls towards the different direction from which the wind blows.

The Maori woman gets a maceration of the leaves and the bark of the native cedar *Kohekohe* (*Dysoxylum spectabile* Hook. f.) to drive away her milk (Goldie).

For the Russian woman on the Caspian Sea the matter is simple. She need only wear on her back the nut or quill filled with mercury, which she has hitherto worn on her breast to promote the milk secretion; then the secretion of milk ceases.

Among Georgian women for the same purpose there prevails the custom of covering the breasts with cold loam, a procedure which sometimes causes them to give trouble (Krebel).

In Fezzan the nursing woman expresses the milk into a hot porcelain dish, and if it hisses in this then it is certain that the secretion of milk in the breasts will cease (Nachtigal).

Similarly, the East Frisian mother who does not want to nurse her baby any longer has to let her milk run into the fire.

In Modena, as Riccardi reports, the following custom is prevalent. In order to wean a child so that the mother has no further trouble from it, one must throw a handful of salt into the well and hasten away from it, so that one does not hear the noise of the salt falling into the water.

In Styria (at Grösming) if a mother wants to wean her child, she covers her breast with flannel which is filled with the smoke from burnt sugar, or she wears a lead bullet on her bare back. This, however, should not either be done in Lent or under a waning moon, otherwise the child gets consumption. Neither must it be done in the months when the cuckoo calls, otherwise the child gets "cuckoospots," as liver spots are called there. The wearing of the lead ball recalls the abovequoted custom of the dwellers on the Caspian Sea. There is no doubt that here we have analogous processes of thought.

In an old German pamphlet it is said also of the eagle-stone mentioned earlier (Fig. 789), and of the lodestone as well, that "worn between the shoulders it makes the milk of women die away when they have weaned their children."

In Württemberg, according to Höhn, the milk is driven away by wearing a so-called "milk-stone" (Oberamt Blanbeuren), by wearing a toad stone on the bare back (from Albertus Magnus: OA. Saulgau), or by applying walnut leaves and uncombed hemp (OA. Heilbronn), or blue sugar-loaf paper smeared with fat and hemp-tow to the breast (OA. Crailsheim). The following expedient is often employed: "A brick is made red hot and held under the breast whilst a towel is hung over the head, so that the heat of the brick is directed to the breast. Then the milk drops of itself on to the brick, where it is burnt. In this proceeding the three highest names are uttered."

According to popular belief, in Bosnia and Herzegovina children can sometimes suck at the maternal breast even after death. Lilek says of this : "If a very young child becomes a vampire, then it comes to the mother at night to suck. In such a case she has to ward it off with the words : 'Go into the mountains and seek thy food there.'"

CHAPTER XII

UNUSUAL USE OF WOMAN'S MILK

1. WOMAN'S MILK AS A MEDICINE AND A MAGICAL AGENCY

WE have already seen that among the medicines and spells in which the common people have special confidence, the most varied secretions and excretions of the human body play a prominent part. For instance, perspiration, urine, fæces, blood, and especially menstrual blood, are used, and thus it will not surprise us to find that woman's milk is also employed in various ways.

We have already come across it once when used in Styria as a healing salve in the form of human fat for fissures of the nipple. This human fat is a butter made from woman's milk. In Kainacht-Thal in Styria, deafness, which is, of course, not infrequently caused by catarrhal conditions, is not seldom cured by dropping human fat into the external auditory canal (Fossel). So-called "painting" with woman's milk is also used in Styria as a cure for red eyes, *i.e.*, for inflammation of the rims of the eyelids.

Among the White Russians (Smolensk) mother's milk is given internally or smeared externally on the temple if a child gets fever; we also saw that the navel of the new-born child, for the purpose of helping it to heal, is often moistened with the mother's milk (Paul Bartels³).

In Treviso and Belluno it is regarded as an excellent remedy for violent earache, in which case a nursing woman introduces her nipple directly into the external auditory canal and allows her milk to run into it. For this, however, it is absolutely necessary that the child which is being nursed is a boy (Bastanzi).

Sicilians try to cure deafness in the same way. In this case, too, the woman must have given birth to a boy; he, however, must be her first child (Pitrè).

Among the Roumanians in Bukovina, a bad cough is cured by sucking at the breast of a primipara; the cough then disappears at once (Kaindl).

In the fifteenth century, mother's milk was recommended to be taken internally to promote the expulsion of a child which had died in the womb. We learn this from the Wolfsthurn manuscript published by Oswald von Zingerle. There it runs :

"To women. If a woman is carrying a dead child, then she shall drink the milk of another woman and have the Greek names Urium, Burium, Pliaten, and thus she will be delivered. Then, when she is delivered, put the names in the fire."

In Vol. II. (p. 509), we heard of a woman's milk being used as an abortifacient in Germany in the sixteenth century.

In Upper Austria and in Salzburg, to make delivery easier, the patient is given, without her knowledge, the sweet milk of another woman to drink (Pachinger²).

The milk of a woman who has given birth to a male child was, moreover, used even in ancient Egypt as a cure in inflammatory conditions (Wiedemann).

In Alsace, woman's milk is said often to be given internally as a remedy for consumption.

The association of ideas in the Swahili prescription of how woman's milk is to be used as arsenic is very clear. The acid milky sap of the Candelaber *Euphorbia candelabrum* Trémaut is very obvious; if it is introduced into an eye injured by this sap, the pain ceases (H. Krauss¹¹).

The Indians of South America also recognise woman's milk as an important remedy, and indeed for one of the most dangerous accidents, that is to say, in the case of rattlesnake bite. Schomburgk was able to be convinced of this, for one of the Indians accompanying him had the misfortune to be bitten by such a snake. Schomburgk was told that he had had this ill-luck once before, and told him that he was saved by drinking woman's milk. This was given him in the second case also.

In Transylvanian Saxony, a certain spell, or a kind of atonement, has to be performed with woman's milk. In this case, the lying-in woman must not be visited by a woman who is herself nursing a baby, for she might take the milk away from a young mother. She can, however, prevent this evil by squirting a few drops of milk from her breasts on the lying-in woman's bed.

The Southern Slavs know how to perform a dangerous spell with woman's milk. They believe, as F. S. Krauss ⁵ records, that plague can be produced with it by means of magical arts. He states that "this is a survival of German belief in witches' kitchens transferred to Slav soil. Whoever wants to produce plague must try to get milk from two sisters and betake himself with it on Midsummer night at 12 o'clock to the churchyard, throw the milk into a grave and then listen. He will hear cries of distress of many people. It is mostly the common people of Croatia-Slavonia, steeped in the ideas of mediæval Germany, who cling to this belief. Among the Serbians and Bulgarians there is so far no evidence of this particular art of magic."

Among the Kai (New Guinea), women's milk is used for hunting. The missionary Keysser states that, "in order, when hunting, to attract pigs with nets, a few drops of women's milk are put into a little bamboo cane. When the net is set up, the cane is put into the ground near it. The idea of the spell is this: The great power of attraction, which the milk exercises on little children, is supposed not to be without influence on pigs, but attracts the animals powerfully so that they run into the net."

From an old Chinese book of magic, *Wan-fa-kuei-tsung* (*i.e.*, "Collection of the 10,000 Feats"), von der Goltz tells of a method of changing oneself into a crane or mushroom. For this, two particular tablets have to be inscribed with mystic signs, whilst on the other side the picture of a crane or a mushroom has to be painted. For the latter, however, the black Indian ink which is required has to have women's milk rubbed on it. The spell is then described in detail.

A peculiar form of coercive request is described by Gutmann as occurring among the Wachaga in East Africa. "If a woman is determined to have her request fulfilled, she takes her breasts into her mouth and sucks at them. This request no husband dare refuse for, in this way, she reminds him of her position as a mother."

Among the Jabim (North-East New Guinea), according to the missionary Zahn, a girl swears by her swelling breast. By this gesture, as with the Wachaga, womanhood is obviously meant to be stressed. The fact that a man swears by his beard or by his procreative faculty also argues in favour of this.

2. THE FEEDING OF ADULTS WITH WOMAN'S MILK

In ancient times, a story is told, as an example of true filial love, that Peronea, the daughter of Cimon, who had been cast into prison and condemned to death by starvation, saved her father's life by visiting him in prison every day and letting him suck at her breasts to appease his hunger. In the pictorial art of the last century, this well-known tale has been depicted very often under the Italian title of Carità greca. A wall painting from Pompeii portrays the same scene.

It sometimes happens, even at the present day, that woman's milk is used to feed adults. Thus, Polak relates of the wives of the nomadic Persians that they come into town and there in the public market, sell their milk for weak and old people. To be sure, these people do not suck at their breasts, but the women have their milk expressed into cups, and in this form the buyer receives the strange food.

In the records of the voyage of the "Novara," it is said of Chinese women that "it is a fact that Chinese women not only nurse their children for several years, but also try to keep themselves constantly able to produce milk in order to make good the deficiency which, with the insufficient quantity of cow's milk, exists between the market demand and the actual supply of animal milk. A Chinaman who, besides his legitimate wife, often has five or six concubines, can keep a veritable dairy. Since seafarers, when they arrive at a port, are generally passionately fond



FIG. 892.—Japanese woman suckling an adult. Mus. f. Völkerk., Berlin. (From a Japanese woodcut.)

of drinking milk, we were not a little astonished to learn from a doctor in Hong Kong the probable source of the milk which we had enjoyed in so much abundance."

In a Japanese picture book in the possession of the Berlin Ethnological Museum, M. Bartels found a little illustration (Fig. 892) which depicts a woman sitting on the ground, at whose breast another adult human being (judging by the style of hairdressing also a woman), appears to be sucking with avidity. From behind, a child pushes the nursing woman towards the drinking woman. As this picture book also contains all sorts of scenes of everyday life, one must assume that the subject presented is something quite ordinary in Japanese eyes and intelligible without further explanation.

The Éthnological Museum in Munich also has in its possession, in the Japanese section, a specimen which has reference to our subject. This is a pretty little group in ivory brought from Japan by v. Siebold. It belongs to those objects of Japanese miniature art well known under the name of *netsuke*. "Les Netzkés," says Louis Gonse, "sont de petites breloques attachées à un cordonnet de soie, qui servaient à retenir à la ceinture la bôite de médecine, la blague à tabac, l'étui à pipe."

"The netsuke in Munich, reproduced in Fig. 893, is a group consisting of three figures. A young woman is standing fully dressed in the Japanese fashion but her dress is open at the top exposing her big swelling breasts. A child stands behind her holding fast to her hips, with his left cheek leaning on the right hip. In front of the woman, with the right side touching her, an adult woman, evidently an old person, sits on the ground with her knees drawn up; she has her left hand on the right wrist of the standing woman, whilst the latter has herright hand under the old woman's chin. The person sitting rests her right cheek against the left breast of the woman standing, and is sucking greedily at the right breast."

In the Museum für Kunst und Industrie in Hamburg, there is a little ivory Japanese box, the lid of which is of engraved bronze. The scene depicted on this is similar to the above. An old woman is crouching on the ground, drinking avidly at the breast of a young woman sitting in front of her; but there is no child present in this case.

F. W. K. Müller has ascertained that in this case an occurrence certainly well



FIG. 893.—A woman gives an old woman the breast. Ivory Japanese *netsuke*. Ethnogr. Mus., Munich. (Photo: M. Bartels.)

known to the Japanese is involved. A virtuous woman is feeding her great-grand-aunt who is toothless, and hence liable to starve to death. It is an old Chinese story which they have borrowed.

In the rich collection which W. Grube brought back from his journey in North China for the Ethnological Museum in Berlin, there is a number of little red flags, on the sides of which are depicted some scenes of daily life which illustrate some well-known Chinese tales of examples of childish devotion. The flags belong to a funeral procession. On one of these flags is the story which interests us here. This painting has been reproduced (Cf. Fig. 894) with the kind permission of Mr. Grube.

The story itself is to be found in the Chinese work Urhsheihsze Heaou, or "Four and twenty examples of Family Devotion." It runs:

"She suckles her mother-in-law indefatigably. During the Tang dynasty, the grandmother of Tsuy Shannan. Mrs. Tang. lived with her mother-in-law Changsun, who was so old that she had lost all her teeth. This honourable woman carefully made her toilet every day and betook herself to the room of her aged relative and gave her the breast, by which means the life and health of the old woman were prolonged for many years, as she was no longer able to eat even a little grain of rice. One day, she fell ill and summoned all her descendants about her and said: 'Listen, I have no means of rewarding the virtue of my daughter-in-law. I request that the wives of all my children serve her with the same love and respect as she has shown me.'"

The picture on the flag shows us Changsun's room, in which her grandson is playing gaily. Mrs. Tang, her daughter-in-law, has sat down on a chair and pulled her breast out from her garment. The old woman sits before her and sucks avidly at it.

In Grube's collection of Chinese objects in the Berlin Ethnological Museum there is, however, another interesting piece. It is a group about 20 cm. high in coloured pottery which portrays the same scene. Fig. 895 is a reproduction of this group from a photograph by Max Bartels.

In Germany, too, it is said that adults take woman's milk, and W. G. records this in the Anthropophyteia of Alsace. It sometimes happens that in the interests



FIG. 894,—A Chinese woman suckles her mother-in-law. Painted on a banner used in a funeral procession. Mus. f. Völkerk., Berlin. (Photo: M. Bartels.)

of a lying-in woman her milk when excessive is sucked off. This is generally done by her husband. Then, as we mentioned briefly in the foregoing chapter, woman's



FIG. 895.—A Chinese woman suckles her mother-in-law. Coloured terra-cotta group. Mus. f. Völkerk., Berlin. (Photo: M. Bartels.)

 ${\rm milk}\, {\rm is}\, {\rm regarded}\, {\rm as}\, {\rm a}\, {\rm medicine}\, {\rm especially}\, {\rm for}\, {\rm consumption}.$ The informant mentioned states that :

"Woman's milk is regarded as the most certain cure for consumption. A young Catholic priest, as I myself can bear witness, was advised by an elderly lady who was sorry for the sufferer, to drink tea from Iceland moss along with tea from ground-ivy (*Glechoma hederacea* Linn.) and twice to drink the milk of a young woman direct from the breast. Whether this particular specific was the cause of the arrest of the disease, I dare not assert. It is certain that mother's milk is used in very many cases of consumption."

In one of the Mordvin songs, translated by Paasonen, the husband makes the following strange request to his wife :

"Wifekin, wifekin, Anastasia ! My wife, my wife Anastasia ! Bake first sweet pirogues, Bake first sweet cakes, In butter from thyself In milk from thyself ! Bake them in thy bosom, Bake them with thy breath ! Let their outside be smooth, Their inside be soft ! "

It must, however, remain open to doubt whether we are justified in concluding from these verses that the Mordvins have actually used woman's milk for such a purpose.

In the cases hitherto mentioned, the object was for the adult who took the breast actually to get the milk. However, there are also cases where sucking at the breast has a symbolical significance, and in this case it is of no consequence whether milk is really secreted or not. Very interesting and deserving of mention, in the first place, is an interpretation which Armin Ehrenzweig and J. Kohler have given of certain antique representations.

According to tradition, for instance, Heracles was suckled by Hera. As Kohler, whose arguments I am following here, states, there is in Eratosthenes ($Ka\tau a \sigma \tau \epsilon \rho \iota \sigma \mu o i$, 14) a passage in which this tradition is traced back to a kind of lawful custom : the sons of Zeus could not participate in divine worship until they had fed at Hera's breast. In the ancient tale, it is represented that Hera gave the breast only because she made a mistake in his identity. Now there are scenes in Etruscan art where Heracles is represented as a bearded man feeding at Hera's breast, hence there can be no question of mistaken identity. But Ehrenzweig explains the proceeding (and Kohler agrees with him) as a form of adoption, as was the custom with the Etruscans. By mother's milk and the symbolised action of sucking the breast the person involved became a son.

The most beautiful and the best of these pictures is reproduced in Fig. 896. It is engraved on an Etruscan mirror which was found in the ancient Etruscan city Volterra, and is preserved in the Museo Archeologico in Florence. It is illustrated and described by Könte, in Gerhard's great work on Etruscan mirrors, which was continued by Klügmann and completed by Körte.

We see in the middle Uni (Hera) giving the bearded Hercle (Heracles) the breast; on the right, beside him, stands Tinia (Zeus) with the sceptre; he is making a gesture with his hand to the god standing opposite him on the extreme left, who is supposed to represent Apollo; in the background are two female figures, one of whom with a remarkably fine necklace has, like Zeus, two leaves in her hair, an ornament not seen elsewhere; the other one has, like Hera, drawn her upper garment over her head. Behind Hera's throne is a pillar (or column) on which is a square tablet with an inscription.

Also, on two other mirrors, this proceeding is depicted, but in these Heracles is not bearded. (Cf. also Paul Bartels,⁴ Fig. 20.)

The interpretation now given by Ehrenzweig and Kohler is obviously much more probable. This gains considerably in probability from a parallel from the Caucasus about the Ossetes which Kohler quotes from Kovalewski. The passage states that

" Si c'est un membre quelconque de la famille du meurtrier qui est adopté, c'est

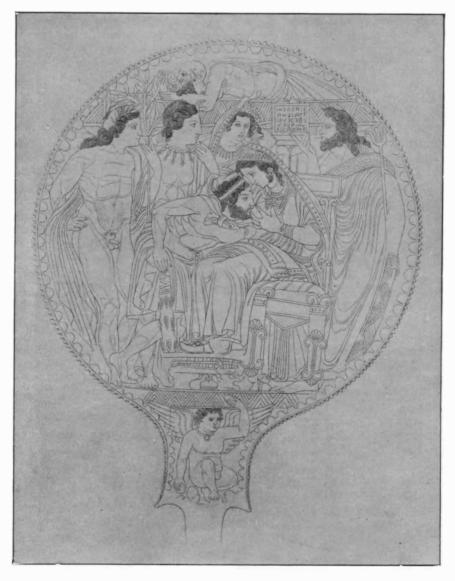


FIG. 896.—Heracles is suckled by Hera. Scene on an Etruscan mirror from Volterra. (After Gerhard and Körte.)

généralement la mère qui a perdu son enfant qui est adoptante : on simule alors, en présence des parents, l'acte d'une mère nourissant son enfant. L'adopté se serre contre le sein découvert de la femme, en prononçant ces paroles : 'à partir de ce jour, je suis ton fils et tu es ma mère '; l'adoptante repond : 'je suis ta mère et tu es mon fils.'" Thus, in this case too, adoption takes place by giving the breast. Since then, Cosquin, without knowing these works, has, in following the changes in a Javanese myth, been able to ascertain that adoption in the form of giving the breast is much more widespread than has been known hitherto.

Moreover, in this tale from Java, this form of adoption can be proved in fable or as an actual institution in the case of the Arabs (Egypt), Berber, Moroccans and Tunisians, Armenians, Turks, Albanians and in Indo-China. The information is all the more interesting since this form of adoption was known also to the Etruscans.

In D. H. Müller's ¹⁰ Sokotri texts, the motive for desiring is very peculiar. In a poem (Nr. 45) it reads :

> "O suckle me at thy two breasts Thou wouldst then be forbidden and denied me !"

The native elucidator observes on this: "A man loved a woman, but she did not love him, and he said to her: 'Since thou does not love me, then suckle me at both thy breasts and thou, as my mother, wilt be (forbidden) me.'" Thus the poem is put into the mouth of a hopeless lover.

Doubtless what Post quotes from Ujfalvy's records of Afghanistan is to be traced to the same ideas. Among the Afghans of Suat, Dir and Aswar, for instance, if an accusation of adultery comes before the judge or other authority for settlement, and proof is lacking, the accused man is required to give a guarantee that such an accusation cannot be made again. It consists in his touching the woman's breasts with his lips. From now onwards there can be no relationship between the two but that of mother and son. The bond made in this way is regarded as so sacred that it has never yet been broken.

3. THE SUCKLING OF YOUNG ANIMALS BY WOMEN

Woman's milk does not serve only as a source of nourishment for children, and in exceptional cases for adults, for women are not afraid to give their breasts sometimes to young animals.

The custom of women letting animals feed at their breasts is extraordinarily widespread, and we find it not only among very primitive peoples, but also amongst those of advanced civilisation. Among savage peoples the custom is indigenous, in particular among the Australian natives, the Polynesians, several South American Indian tribes and some Asiatic peoples.

In numerous islands in the Pacific Ocean this peculiar custom is quite common. In one of the Society islands, Georg Forster observed that women sometimes let puppies feed at their breasts, especially if they had just lost their babies. In Hawaii, as Remy records, mothers used to feed dogs and pigs at the breast along with their children. In New Zealand, v. Hochstetter found that the women suckled young pigs; Tuke also saw the Maori women in New Zealand letting sucking pigs feed at their breasts, either for love of this domestic animal or because they did not at once find a child in need of a foster-mother.

In New Ireland, Graf Pfeil records that "the custom is prevalent of women, who have lost their own children, giving the breast to their young pigs, and I myself have repeatedly seen women in whose arms a little, thin, long-legged, long-tailed, bristly, black pig, about six weeks old, lolled comfortably and reached out for the breast, grunting impatiently." Pöch and Neuhass saw the same thing often in New Guinea. The latter also saw dogs applied to the breast. Oberländer also saw this as w.-vot. III. quite an ordinary custom among the natives in the Australian colony of Victoria. He says that "one sees no woman without five or six spotty, dirty, lean, mangy dogs, the puppies of which share her milk with her own child. In the vicinity of Alberton, in Gippsland, I once saw a native woman suckling her boy and four young dogs in turn."

Also in the island of Engano, near Sumatra, a woman was seen by Modigliani² giving a little dog the breast.

Whilst among these peoples sucking at women's breasts is confined to young pigs and dogs, other people extend this custom also to various other animals. Thus the Arawak women apply not only pigs but also young captive apes to the breast so as to keep their milk as long as possible. Other South American tribes pursue the same purpose for the permanent secretion of milk. Among the Macusi Indians in British Guiana mothers retain their milk till old age ; the children remain at their breasts as long as they please. If the family meanwhile increases, then the grandmother takes over the duty of the mother towards the grandchildren. On her also the duty generally falls of rearing at her breast young mammals, an opossum, an ape, or even deer, etc. Often one sees that women give these young animals the other breast with equal tenderness when the child has just sucked the milk from one. The women's pride consists chiefly in possessing a great number of tame mammals (Schomburgk).

In Siam also, Schomburgk, as he told Ploss verbally, very often saw women letting apes drink at their breast.

It is told of the Kamchadale that they apply to their wives' breasts the young bears which they bring home. This has a double purpose, for, on the one hand, they want to have the bears grow up in order to get the benefit of their flesh; on the other hand, they want also to get their gall, which is regarded as an efficacious medicant.

It is said of the Ainu women also that they let young bears suck at their breasts. v. Krusenstern declared this to be an exaggeration, and Batchelor also maintains that nobody has ever seen this. He admits, however, that when the young captive bear cries for its mother at night the owner lets it sleep with him. He adds also that the Ainu feed him by hand or with their mouth, and he says it is possible, nevertheless, that there may sometimes be a young woman who is conscientious enough to apply the young bear to her breast for one or two days.

Mac Ritchie brought home a copy of a pen drawing by the Japanese Fayasi Sivei of the year 1785. This, according to the artist's drawing, represents "an Ainu woman of the lowest class suckling a young bear. In the background is an eagle in a cage, the feathers of which they mean to use for their arrows." The hirsute father is speaking to the child which sits by watching its quadruped foster-brother. This picture is reproduced in Fig. 897.

But the dog is, in general, the favourite foster-child with numerous peoples, e.g., with the aborigines of North America. Thus Gabriel Sagard Theodat saw that in Canada also many Indian women let dogs suck at their breasts. Indeed, the dog plays this rôle not only among uncivilised tribes, but also with civilised peoples. We know that the women of ancient Rome had the peculiar custom of having their milk drawn off by young dogs. The same custom has been reported in Naples, and Polak states that in Persia, during the first two days after the birth of a child, bazaar dogs of tender age are applied to the mother's breast. v. Wlislocki, writing of the tront gipsies of Transylvania, says :

"If a mother has too much milk in her breasts, she has them sucked by young dogs."

Finally, a similar procedure occurs even in Germany. At least, Osiander records that in Göttingen obstinate mammary lumps are sometimes dispersed by having young dogs suck at the nipples.

In myth and legend also the suckling of animals at women's breasts is sometimes mentioned. In a tale of the Grafschaft Berg, as O. Schell has somewhere recorded, a woman was kidnapped by dwarfs and had to suckle their young pigs with her breasts. On the island of Lesina, in Dalmatia, it is considered a great sin to kill a lizard. "According to popular belief, the Mother of God, whilst she was

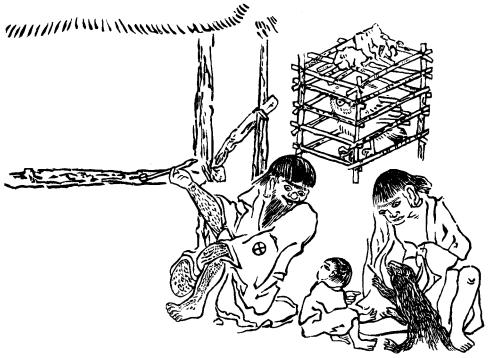


FIG. 897.—Ainu woman suckling a bear cub. (From a Japanese drawing, after Mac Ritchie.)

nursing Jesus, suffered f^rom mammary abscesses and spoiled her milk. Then a lizard sucked out the bad milk and Mary recovered " (see Carič).

According to O. Schellong,* New Guinea women are supposed to apply dogs and pigs to the breast. The following story was told him : "My greyhound had a litter of eleven puppies and, as I did not know what I should do with this blessing, I took six of them to a neighbouring village with the request that they should eat the little things; however, they refused this very indignantly as 'waste of material,' and thought that they would do better if they applied them to their wives' breasts to rear them."

A strange view of life revealed by the Jabim tribe in New Guinea on the occasion of the circumcision leads us to quite a peculiar connection between human beings and pigs, and perhaps supplies the key to the foster-relationship between pig and man. The circumcisions take place at the same time as the pig market,

and it appears that a remarkable connection exists between the two events. On the other hand, there is also a ceremonial circumcision. The candidates prepare for this for a month by a strict diet and are then, amid the howling of women, driven by the men with whips to the house of "Balum." This is understood to be the stomach of the mythical monster, which is presumably the demon of the sea and is summoned by blowing on shell horns. The demon, when it responds to the call, announces itself with special sounds. Now the men sacrifice pigs in order to save the lives of the boys. In this hut the circumcision now takes place. The women are excluded from all this; they must, in particular, not see the candidates for circumcision and are warned by flutes. Now they believe that the monster Balum must slay the boys, and when it receives a pig sacrifice it restores them as strengthened fellows. The men eat the flesh of the pig when the Balum gets only the "souls of the pigs." When the operation of circumcision has been performed the boys have to remain in the hut till they are set free by a further sacrifice of pigs. If a candidate dies at the circumcision, then they say that he has got by mistake into the pig's stomach of the Balum instead of into the human being's stomach, for only the latter gives the circumcised back again.

Similarly, in the North of Central Australia, people believe that some of the circumcision candidates are devoured and some abducted, but in both cases they are then given back metamorphosed.

CHAPTER XIII

WOMAN IN RELATION TO THE NEXT GENERATION

1. WOMAN AS MOTHER

THE true love of a mother for her children, which we find almost universal in the animal kingdom, we can show also to be a common instinctive characteristic in the women of all nations which is preserved owing to a variety of causes.

Prince Roland Bonaparte gives, for example, evidence of this maternal love

in the case of the Indians of Surinam. It would not be difficult to find similar statements for many other peoples. A glance round the world shows that innumerable women of uncivilised nations are accompanied by their children as baggage in all the duties of their daily life. They hang on their backs, ride on their shoulders or hips; they are put, as with the Eskimo, in the wide fur boots; packed in the cradle, carried in the arms, on the back or on the head. Ploss, in his book, Das kleine Kind vom Tragbett bis zum ersten Schritt, has given in more detail these methods by which mothers drag their children with them, and has given a number of illustrations. Here, too, a few characteristic examples are to be presented.

As is easy to understand, the most comfortable way is for the mother to carry her child on her back. This mode of conveyance we see, e.g., in South-West Africa (cf. Fig. 898), among the Japanese (Fig. 899), among the Chukchee (Fig. 900), among the Araucanians (Fig. 901) and the Labrador Eskimo. The last named put the child



FIG. 898.—Negresses from South-West Africa.

in the hood of their fur jacket and the "Flatheads" carry the child in a cradle which flattens its forehead.

The woman of Fernando Po carries her child astride her hips (see Fig. 902), and the Swahili women (Fig. 903) also. Among the ancient Egyptians it was carried on the shoulder in Fig. 904 and in Fig. 905 it hangs fastened in a cloth before the abdomen and breast.

Carrying the child on the shoulder, as shown in Fig. 904, in the case of the woman of ancient Egypt, is still customary to-day with Bedouin women. One of the children gives the impression of being already two years old, but the mother still drags it about with her.

We often see that mothers have to carry the hammock, cradle or bed for her child to the fields with her as well as the child itself. Fig. 906 shows women of modern Greece who carry the child with them in a hammock.



FIG. 899., Japanese woman and child.

The scientists of the *Novara* expedition alleged that, in spite of infanticide, the Australian native woman lavished touching love on those of her children which had been left alive. About the Somali women, Paulitschke says :

"It appears to me that the Somali mother lavishes all the warmth of her maternal love on her child, and the father does not trouble himself further about it."

Of the Aht (Nootka) and Makah, Indian tribes of Vancouver, Malcolm Sproat



FIG. 900. — Chukchea figure representing mother and child. Bega Collection, Stockholm. (After Woermann.)



Fig. 901.—Araucanian woman and child from Chile. (After A. Friedenthal.)

records that they love their children greatly, and, according to Krause, this is true also of the Tlinkit Indians.

N. A. E. Nordenskield cites the following of the Greenlanders :

"The Greenlanders are very fond of children. The freedom of their children is as unrestricted as possible anywhere. They are never punished, indeed not even talked to sharply. They regard as extremely barbarous the old European method of bringing up children, and in this opinion they are in agreement with the Indians in Canada who, when the missions reproached them for the cruel torture to which prisoners of war were subjected, answered: 'At least we do not, like you, torture our children.' In spite of this undisciplinary method of upbringing, one can bear witness that the Eskimo children when they have reached the age of eight or nine are as well bred as possible."

According to Amerlan, the Indians of Gran Chaco, in South America, are uncommonly fond of children. Merensky says of the Basutos :

"They love their children tenderly. The little baby is caressed, shaved, rubbed with red pomade by the mother and carried about everywhere with her in the carrying cloth so that one sees that it is the mother's greatest treasure."

The Barolong, in South Africa, by their strict bringing up of children, give clear proof of their love for them. They beat them when they deserve it. A proverb

FIG. 902.—A woman from Fernando Po with her child. (Photo: J. P. Dekker.)

says :

"Stretch the assegai-shaft, so long as it is soft."

If any parents do not punish their unruly children, the others say of them :

"They have no children, but are fathers and mothers" (Joest 2).

In spite of this strictness the mothers enjoy very great respect.

Also the Herero, in former German South-West Africa, lavish tender affection on their mother. Brinckner states of them that they swear by "their mother's tears."

Hendrich found it touching to see a young mother in South Borneo, wherever she walked or stood, holding a bundle of stunted bits of wood over her suckling in order to protect him from evil spirits.

A fine example of self-sacrificing mother love, fearless in the face of every danger, is recorded by Frh. v. Schweiger-Lerchenfeld :

"The Khonds in the hill country of Orissa still offered human sacrifices to the earth goddess at certain festivals in the middle of last century. Those destined for sacrifice were called Meriah, and were first well fed and looked after for a long time. Often they had been bought or stolen when still little children, enjoyed careful attention, and were even allowed to marry; their children, however, then became Meriah also. They were fully aware beforehand of their own and their children's fate. When the day appointed for their sacrifice arrived, they

were drowned with great ceremony in a pool of blood, squeezed to death between boards, or their living bodies dismembered.

"The English Government had repeatedly to equip military expeditions to check and suppress these atrocities. By this means, one Meriah and three of her children were rescued, and, after some time she begged that they should rescue her fourth child which had been left behind with the Khonds. This, however, was not practicable, for the season was advanced and the tribe in question very hostile to the English. They put the pitiable creature off with hopes for the following spring. Then she disappeared quite suddenly from the camp; she had left the children behind which led to the conclusion that she had undertaken the mission of rescue herself. In fact, after 40 days' absence, she returned to the camp leading her rescued boy by the hand. She had made her way right in the rainy season through primeval forests and swamps, living scantily on roots and fruit and, owing to the fear and anxiety, had scarcely slept the whole time ; *i.e.*, only when exhaustion made her sink down in the woods in which poisonous snakes



crept and tigers roared. Thus she reached the last village, and she made use of the accidental absence of the inhabitants to find and carry off her child. The return journey was beset with the same difficulties, and it is not surprising that she reached the camp ill and wasted to a skeleton. The Government found accommodation for her and her children at once."

Among the Chevsurs the love of parents for their children is very great, especially for their sons; yet the expression of this love is curious; caressing is done in secret. In the first and second year the father does not take his child in his arms, and the mothers regard it as a disgrace to treat their children tenderly in company (Radde).

Among the wandering gipsies of Transylvania, as v. Wlislocki records, a young



Fig. 903.—Swahili women and children. (After Vincenti.)

man when he marries has to enter the tribe of his wife. Thus he is often obliged to part from his nearest relatives, and has even to forsake his old mother.

> "Thy mother was thy mother Thy wife is and was thy wife,"

says the gipsy legal adage which, at the same time, explains the motive of many gipsy folksongs in which the mother expresses her longing for her lost son, *e.g.*, in this beautiful song :

"There is no bee without a sting, Ah! my son has soon forgot me! His old mother sad and weary He has left in misery ! My comfort be, whom I have still, Do not dig my grave for me Thou alone art now my joy, Art the sunshine's golden ray; With thy love come, come to me, All I do is for love of thee!" However, the children cling to their mother all their lives.

"And when her grave has long been level with the ground, the son, the daughter still think in never satisfied longing of the dead mother, and from far away yearn towards the place where, after long wandering, she has found rest at last."

The Chinese likewise honour their mother greatly; according to Voskamp, she is called "Mercy of the house."

Remarkable instances of noble sons in high positions clinging to their mother with a touching filial love and tenderness and following her advice have been given from various nations. One such story the Japanese painter Hokusai has himself illustrated.* A copy of this picture is reproduced in Fig. 907.

A famous statesman, when he paid a visit to his old and revered mother, found her always busy sticking paper on wooden frames, such as are used in houses in Japan instead of windows. As soon as she had finished the job, however, she tore it all to pieces again. When the statesman saw that his mother kept doing this he asked her for what reason she always destroyed her troublesome work again. Then she answered : "I do as you do, for you are in the habit of always destroying



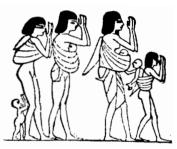


FIG. 904.—Ancient Egyptian women carrying their children. (After Champollion Figeac.)

FIG. 905. — Mourning women of ancient Egypt. (After Wilkinson.)

by a new decree the good which you have achieved by a wise and statesmanlike measure." Very grateful to his mother, he acted in accordance with her criticism and carried out his decrees consistently and with wisdom.

Hokusai's picture shows the old lady at her strange occupation. A child kneeling beside her hands her the big sheets of paper. Her distinguished son is reclining at her knees and listening attentively to her words. Four gentlemen of his retinue bow low before the old lady.

A devoted mother must not weep for her dead child, otherwise it will have no rest in the world beyond. The tale of the jug to hold tears in which the child has to catch those of its inconsolable mother, and which it is then hardly able to carry, is well known. In Masuren, among certain Slav peoples, the mother's tears soak the dead child's shroud and, dragging along in this dripping covering made heavy with the wetness, the child can only with great difficulty follow the other souls in their migration.

If a mother is heartless enough not to mourn the child in the proper way, then, as everybody knows, she is called a *raven* (unnatural) *mother*. In Raratonga, in the Pacific, in a case of this there is another strange simile. Gill says of this :

"In contrast with the care with which the mother guards the safety of the eggs,

* In Éhon Onna Imágawa = Illustrated Book of Female Virtue, printed about 1820.

the tortoise takes no interest in the young when hatched. Hence there is an old proverb of the Raratongans in regard to neglected or abandoned children: they call these children: 'Progeny of the tortoise.'"

2. WOMAN AS STEP-MOTHER AND FOSTER-PARENT

While with the conception of the foster-mother is associated the idea of disinterested attachment, which endeavours to fill the place of the real mother with poor orphaned children, yet, from childhood onwards, it is scarcely possible for us to



FIG. 906.—Modern Greek women. The child is suspended in a kind of hammock from a tree. (After Stackelberg.)

think of a step-mother without the adjective "wicked." This sad thought pervades a great many tales and sagas and European sayings.

According to Frl. v. Reinsberg-Düringsfeld, a saying in Bergamo is

"The step-mother, even if she were made of honey, is not good." And

"One's own mother, mamma, a step-mother, a bad mother," is said among the Czechs.

Even less respectful expressions are used in many parts of Germany :

"Step-mothers are best in a green dress " (i.e., under the grass of the churchyard).

But even if she is childless, the poor step-mother cannot win the love, respect and appreciation of the populace. Hence it is said in Esthonia :

"Better one's own mother's whip than a step-mother's bread and butter." And,

"The father certainly gets a wife but the children do not get a mother."

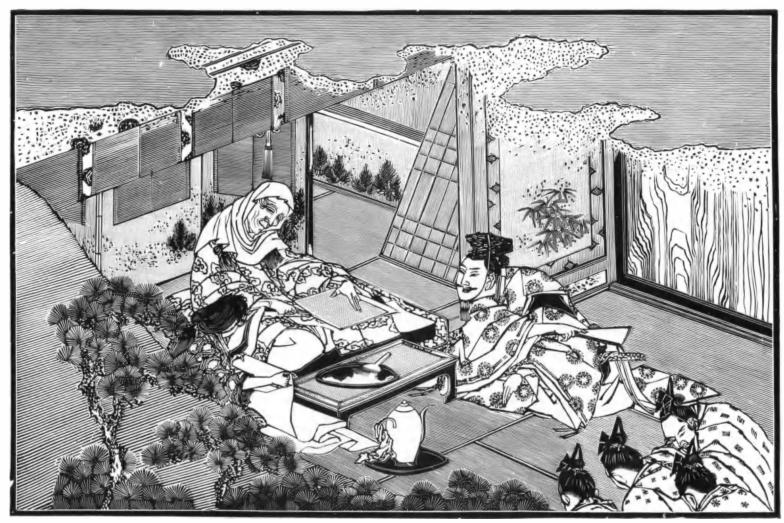


FIG. 907.—A Japanese statesman and his old mother. (From a Japanese woodcut by Hokusai.)

In a song of the Mordvins, translated by Paasonen, it runs :

"Let the step-mother perish, Let her be annihilated !
She has no love for the former wife's children, She takes no care of the former wife's children !"

Orphan children are afraid, and sometimes with a certain amount of justice, that the father's interest in and self-sacrifice for them may be considerably lessened by his love for his new wife, or may even be entirely withdrawn. The German proverb expresses this by saying :

"He who has a step-mother has probably also a step-father,"

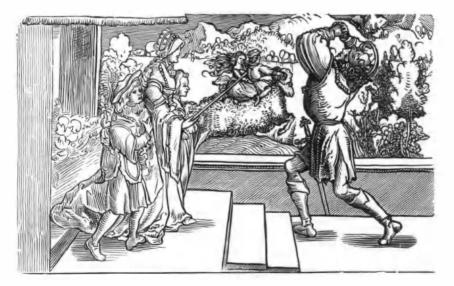


FIG. 908.—The step-mother. (From Petrarcha's Trostspiegel, 1584.)

and a similar proverb of the Lapps runs :

"When God takes the mother, he takes the father" (Poestion²).

In Petrarcha's *Trostspiegel* in the chapter "Of the Unfaithfulness of Stepmothers," the introductory verses run :

> "Step-mother is an evil root, Step-mothers are seldom any good, Yet wilt then her dear child be Patience overcomes her perfidy."

The accompanying picture, Fig. 908, shows a step-mother between her halfgrown son and daughter. In front of her runs her full-grown step-son wringing his hands. In the background one sees Phrixus and Helle in the dress of the sixteenth century escaping on the golden ram.

As consolation in this misfortune, Petrarcha gives the following advice to be taken thoroughly to heart :

"When thy step-mother begins to be unreasonable in the house, let the trouble pass; think of thy father, suffer in silence; thou canst and must not take revenge on women, simply despise her unkind treatment and leave well alone. Anyone who cannot endure a woman is no man; love thy step-mother though she hate thee," etc.

The figure of the wicked step-mother is well known to the Japanese also; she

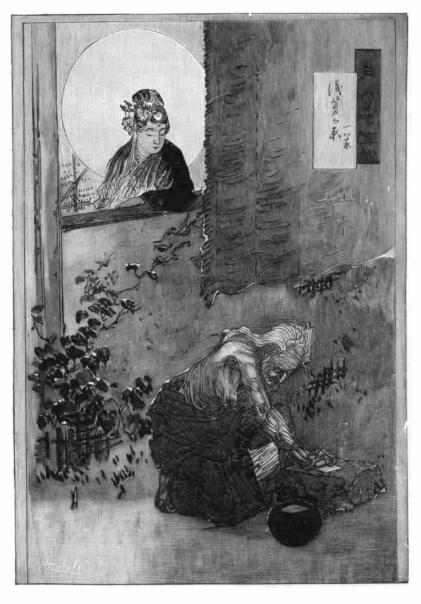


FIG. 909.—A Japanese step-mother sharpening a knife to murder her step-daughter. Kwannon, the Goddess of Mercy, is watching her. (From a Japanese coloured woodcut.)

torments her step-children in every way and sometimes even makes attempts on their lives just as in the German tales. From a Japanese series of colour prints (from M. Bartels' Collection) Fig. 909 is reproduced. This has reference to one subject. An old woman with the upper part of her body bare and covered with wrinkles, crouches on the ground sharpening a big, broad knife on a square stone. Through the window looks Kwannon, the goddess of pity, watching the old woman's movements. A Japanese explained the picture to Max Bartels as showing a stepmother sharpening the knife to kill her step-children.

In another of the above-mentioned tales, the step-daughter, suffering and enduring in silence, is at last driven to despair and suicide by the endless humours and the wicked torments of her step-mother.

That such hard judgment is very unjust to a great number of step-mothers hardly needs mention, for who has not known step-mothers who assumed the care of their husband's children with the most exemplary loyalty, and sometimes treated them more gently and carefully than their own children? Moreover, it is an interesting phenomenon that the conception of step-mother with its ugly secondary meaning, seems to exist only among really civilised peoples. At least, we do not come across anywhere among the less civilised nations the idea that when a wife is obliged to take over her husband's children with him when she marries, these would have to suffer in any way. On the contrary, we have seen how willingly women in many tribes offer, and are even eager, to act as wet nurses and foster-mothers to young children, either for a few days, or, if the real mother has died, to take them into their own families entirely and treat them like their own children. In Ceram and the Babar islands there is prevalent the custom that when twins are born to a family, the parents bring up only one of them, whilst the other is adopted by relatives or fellow villagers.

Also the peculiar arrangement of "motherhood by proxy," which we can prove to exist among many peoples, shows how the children, which the husband has begotten by another woman, are received with joy; for childlessness is a disgrace, but children are riches and blessings, and the wife is proud of them and rejoices in having them and cherishes and looks after them, although they are not her own.

Among the Chinese of the present day, if a wife bears her husband no children or suffers from a chronic disease, then he may, with her consent, take a concubine into the house.

The concubine is almost always chosen from the lower classes or from the many poor relations. Her children are regarded as the children of the legitimate wife, even if she is childless. On the other hand, they are regarded as legitimate, *i.e.*, that they have the same rights as the children born in wedlock if the legitimate wife has any. The concubine has to obey the legitimate wife and regards herself as in her service.

According to our morality, states Ching-Ke-Tung, from whose work the above is an extract, "where the fate of the child is of more interest than anything else and where the honours of the family consist in their thriving, this separate life of the children born out of wedlock would run counter to all traditional customs. For this reason, concubinage was instituted."

F. S. Krauss ¹ says of childless women in Bosnia :

"If the husband himself does not turn his barren wife out of the house, the other women in the household embitter her life till she goes away of herself; then she has to put up with it if her husband keeps a concubine; indeed, she has even to cherish and look after the illegitimate children as if they were her own. In fact, I knew some such cases of woman's self sacrifice. The peasant women spoke of their husband's children no differently than of their own."

Analogous circumstances, as everybody knows, existed among the ancient Israelites. Thus we read in Genesis xvi. 1:

"Now Sarai, Abram's wife, bare him no children : and she had an handmaid, an Egyptian,

whose name was Hagar. And Sarai said unto Abram, Behold now, the Lord hath restrained me from bearing : I pray thee, go in unto my maid ; it may be that I may obtain children by her."

The same is repeated in the House of Jacob, for his wife Rachel, likewise childless, says to him :

"Behold my maid Bilhah, go in unto her; and she shall bear upon my knees, that I may also have children by her" (Genesis xxx. 3).

As was pointed out earlier, there is some doubt in this case whether we must understand by "the bearing of the concubine on the knees of the lawful wife" an allegorical process by which the barren wife experiences delivery at the same time, and in this way wins a mother's right to her step-children.

Such an imaginary birth, as Post calls this procedure, is, according to Jukić, customary among the Turkish inhabitants of Bosnia. He says :

"The Turks are in the habit of adopting, as a rule, children of tender age and that in accordance with Oriental custom. The adopting mother puts the child into her wide trousers and lets it down on the ground as if she were giving birth to the child. The adopted son is now as if he were a legitimate child, the heir to all the possessions of its adopted parents."

In a Serbian song, it runs :

"The Empress bore him into the palace, drew him through her silken bosom, so that the child was called a love-child, bathed him and fondled him."

F. S. Krauss,¹ who gives this quotation, says that this is certainly not in accordance with the general custom.

In Germany it is said to have been possible in the Middle Ages to make children of previous free-love affairs legitimate by the wife hiding them under her wedding mantle at the marriage ceremony (Trinius).

CHAPTER XIV

THE MATURE WOMAN IN A STATE OF CELIBACY

1. THE OLD MAID

WHO does not know her, the oft-described phenomenon, the "old maid," with the sharply defined muscles in the neck, the crow's feet on the temples, and the thin, rather pale lips? An eternal, shamefaced schoolgirl smile plays about her features; she casts languishing glances at men whom she meets, but, of course, only at men of somewhat mature years and then only at the unmarried, widowed or divorced. Her clothes are often pretty and well chosen; often bright and gaudy colours play a part in them, especially such colours as, according to the usual æsthetic ideas of colour, do not go together. Striking draperies are also not lacking, such as are otherwise mostly worn by girls at the charming stage of transition from child to maiden. If fashion demands bare shoulders, then her dress is cut considerably lower than that of other unmarried ladies. For anatomical reasons she can have her dress cut lower than those of the fresh girlish forms about her without, however, revealing any more to men's glances. When there is music at parties she is the first to allow her already tinny voice to be heard. Sentimental outpourings of unsatisfied love form her repertoire. But her eternal brightness is only assumed. The lightning flashes which quiver through her miming when the elusive males turn away from her to the young ladies does not escape the close observer.

But this summer lightning becomes a frightful storm in her home; nothing is right for her, nobody understands her, she feels mortified and hurt by everybody. But she herself has a caustic remark for everybody present and tries to vilify the absent, and, if everything does not suit her fancy and humour, then at the right time tears or headache set in to complete the unpleasant picture.

She, too, however, has known better days; she, too, has known love, of course in the chaste sense, but the man who won her heart she was unable to understand; he has married another, who, she thinks, can never make him happy. Several times again, she has met men on whom she was ready to bestow her love. But though her aspirations are now so plain that nothing much is left to be desired, yet she is still left misunderstood by the unfeeling males. Then she has gradually become at variance with men and withdrawn into herself. She has only one who has her heart, whose humours she endures, into whose silent bosom she pours out all her suffering and wrongs, one just as hostile to the world as herself, that is her room and bed fellow, her lap dog. With it, the withered rose sits lonely behind her ivy-circled window and thinks with quiet melancholy of the days when she was still a fresh young bud.

And yet there is a view of life which intervenes for this lamentable state, and would like to stamp this abnormality as normality, which preaches to mankind that disease—whether voluntary or involuntary—is health. This view of life is Christianity, for it supported the remarkably queer idea of seeing merit in virginity. Ambrose extolled virginity so highly that Milanese women were obliged to forbid their daughters to go to hear him preach, for he intimated boldly that those who felt

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called to virginity should take the veil in opposition to their parents. "Would God," he said once, "I could call back and force even those who are already on their way to the marriage altar and exchange the flame-coloured wedding veil for the sacred veil of virginity." The Milanese of that period, as we have said, were still sufficiently sensible not to leave their daughters with such a man; in objection they pointed out to him that the vows were imposed at an age when reflection was still lacking, and that the poor disillusioned creatures were deprived of every possibility of making good their wasted lives! For Cyprian, virgins are the "blossoms on the tree of the Church !"" "the ornament and lustre of spiritual grace," "the image of God and the divine part of Christ's flock who were equal to the angels, who had, even in this world, the glory of those risen from the grave." Was it any wonder if an enormous number of unthinking and immature maidens were caught and their pitiable life made them extol martyrdom as a deliverance ? St. Jerome, who died in 420, had ideas which were quite unnatural. He begins with the idea that Adam and Eve were virgins in Paradise, and that procreation did not begin till after the casting out. Marriage peoples the earth, but virginity heaven. But he is still better when he says: "the animals who came to the ark in pairs are also unclean: for, of the pure animals, only seven came to the ark." This nonsense could only be surpassed by some modern moralists. This frame of mind gave rise to the demand for the celibacy of the clergy, and it was retained in later times because it was one of the most substantial means of freeing the priesthood socially and politically from its fatherland and making it independent. Under such an assumption any extramarital intercourse became a crime and the German Supreme Court is still of this opinion. It is related of Herma that he was sold as a slave to a Christian woman, Rhode, whom he soon grew to love "as a sister." Once he conducted her to the bath and when she came out of the water he thought to himself: "How happy would I be if I too had such a modest wife !" In a vision this thought was explained to him as a great sin and he was urged to repent. Clement designates bathing before strangers and the abuse of kissing as sin and includes with this a kiss exchanged by married people in the presence of servants (cf. v. Reitzenstein.²³ H. C. Lea. Ch. II., etc.).

[Even Vives, who died towards 1540, and whose instructions as to the proper education of girls is of the greatest interest, stated that many words should not be exchanged between young men and women, for some men are "soo crafty in naughtynes." Maidens should not be without love but without "this carnall and fylthy earthly Cupide and Venus."]

However, we must emphasise in praise of the female sex that a great number of these unfortunate women have understood that it is much more necessary for the happiness of women than for men to have a sphere of action and a vocation. Thus we often find them teaching children, nursing aged parents or acting as the faithful supporters in the household of married brothers and sisters. What a blessing they are ! how much self-denial they exercise, and how much love they spread around them. Physicians in particular can judge, for they have had the opportunity of seeing into the most secret places of the family. If appearances are not deceptive, the rank of old maids has increased considerably in numbers in the last few decades. The excessive increase in all the needs of life must not be held to be least responsible for this. The modern female education, which is perhaps unduly directed to external affairs and brings too late a consciousness of true domesticity, cannot be absolved completely from blame for these unnatural conditions. Our modern period, moreover, which makes marriage almost impossible for the middle classes and, on the other hand, creates absurd social customs, will, of course, see whither it is sailing. The unfortunate thing, however, is that the harm done by these experiments cannot be repaired.

2. THE ANTHROPOLOGICAL ASPECT OF THE OLD MAID

If we consider the ageing woman anatomically, we see the colour disappearing gradually from her cheeks; the skin becoming sallow and grey, the lips pale and thin; the naso-labial furrow becoming sharply and deeply defined; under the eyes come shadows, at first light then deeper; at the outer canthus, a group of shallow little folds of skin appear; the eyes have a dull lustre and a melancholy, discontented expression. The voice also has often a painful and yet sharp sound. The down of the face, especially at the lateral parts of the upper lip, and also on the chin and on the cheeks near the ears, begin to grow stronger, and fair or dark (according to the colour of the hair on the head) and short but real hair begins to develop. The cushion of fat of the subcutaneous tissue diminishes remarkably. This is most marked in the breasts, which grow smaller and often withered and pendulous, appearing, as it were, pulled down almost a hand's breadth. For the skin, poor in fat, covers the upper part of the thorax in a way which scarcely differs from that in man, whilst in the virgin in the bloom of youth the local fatty subcutaneous tissue shows greater development as the skin of the chest passes into that of the actual breasts. Thus it is that the upper margin of the breasts appears to lie much higher in the years of youth than in the later stage here described. For this state Hoerschelmann suggests the designation descensus mammae. The same cause results in the neck appearing thinner, the shoulders sharper and more angular than before, and the upper ribs and the clavicles, formerly hidden under the abundant cushion of fat, become plainly perceptible. The supra-clavicular fossæ are considerably deepened; the arms also, though in a lesser degree, become thinner, but in them the groups of muscles, as well as the bony prominences of the elbow and the wrist joint, become much more plainly marked than before. The cushion of abdominal fat also diminishes, yet without losing entirely its virgin roundness and firmness. The shape and circumference of the buttocks, the thighs and the calves are least effected, and the last in particular are accustomed to remain longest in their original state.

The time at which the decline begins in girls of our race is on the average about the twenty-seventh or twenty-eighth year, although the first traces of these states of transformation are sometimes to be found as early as the twenty-fifth year. Once begun, the process usually advances without ceasing to the formation already described. The profound mental discordance and all kinds of nervous troubles which often attend these conditions have already been mentioned in the foregoing section.

Now it is in the highest degree worthy of notice, not only for the physician but also for the anthropologist, that there is an effective remedy for not only stopping the process of decline, but also for restoring the vanished bloom, if not quite in its former splendour, yet to a not inconsiderable degree. It is a great pity that our social conditions admit and make possible its use only in the very rarest cases. This remedy consists in regular and systematic sexual intercourse. One often sees in a girl already *passée* or not far from the beginning of decline, that, if an opportunity for marriage offers, in a very short time after her marriage she becomes rounded in shape again, the roses return to her cheeks and the eyes recover their former fresh lustre. Thus love is the true source of youth for the female sex. Nature has its fixed laws, which demand their observance with inexorable severity, and any unnatural life, any attempting at accommodation to circumstances which is not in accordance with them, cannot pass without noteworthy traces of degeneration in the organism, in animals as well as human beings.

3. THE ETHNOGRAPHY OF THE OLD MAID

If we are to occupy ourselves with the old maid from the ethnographical standpoint, our work is soon done. For among uncivilised peoples it appears that this institution is almost entirely unknown. It is quite unheard of for a girl who has arrived at the age of puberty not to be the wife of some man, whether for a limited number of years or for a lifetime, and we have already seen that with many peoples it is regarded as a disgrace even for unmarried women if they have not had sexual intercourse with men, for by having had this her prospects of an actual marriage later are considerably increased.

Wherever a price has to be paid for the bride, old maids are almost non-existent, as seems a matter of course. For where girls are, to a certain extent, a commercial commodity, they form the wealth of the family, and the father will naturally make the most earnest endeavours not to keep a marriageable daughter at home.

Old maids naturally do not occur where female infanticide is the custom of the country. For by this means there must be a notable surplus of men compared with the girls who may have remained alive, and these few will certainly not lack suitors. As to the extent which this infanticide has reached in many parts of India, we read in Frh. v. Schweiger-Lerchenfeld's work :

"When in the year 1836 the first inquiry into this matter was made by the Anglo-Indian authorities, it was shown that, for example, in Western Räjputana, in a group of 10,000 of the population, there was not one girl ! In Manikpur, the Räjput nobility admitted that in their district for more than 100 years no girl baby had lived longer than one year. However, these horrors were not exhausted by a long way. About 20 years ago, investigations were again made. A government official ascertained first the existence of the practice of murder in 308 districts which he had visited ; in 26 he found not one girl under six years of age ; in 28, not one under nubile age. In a few districts no marriage had taken place within the memory of man, and in one the last marriage dated 80 years back. The most remarkable fact was encountered in a district in the Province of Benares, for there the inhabitants declared that no marriage had taken place for 200 years. Other statistical data may be summarised briefly as follows : In the year 1869, the Governor of the North-West Provinces ascertained that in seven villages there was, on an average, one girl to 100 boys ; 10 years before, the last marriage had been solemnised. In a group of 22 villages, he counted 284 boys and only 23 girls."

From Schlagintweit we have the following record :

"In India a father feels he is dishonoured if he has a marriageable daughter in the house still single; therefore, in the whole empire, only $6\frac{1}{2}$ % of all the females over 14 years of age are still unmarried. The alliance is made by the parents; the young people do not seek each other. The majority of the girls are married before they are fully developed and live as wives with their husbands. There is a great festival on reaching puberty. The two families celebrate this event together as the second marriage, and so great is the joy that at it old family quarrels yield to new friendship."

According to A. du Perron, the views of modern Parsees are very strict in this respect. For if a marriageable girl among them avoids marriage intentionally, it is considered a sin for which there can be no atonement. She is lost without hope of salvation.

Crooke says of the Kol in North-West India that the only old maids are women who are blind or leprous or suffer from some similar incurable disease. According to the same author, the census has shown the highest number of unmarried women with the Hindus among the Rājputs and Khattrīs. Among the former the great number of "dancing-girls" is made responsible for this. Among the latter, Ibbetson (quoted by Crooke) seeks the reason in the fact that the majority of the men marry girls from higher castes.

However, that old maids were not unknown in India in early times appears from a hymn of the Rigveda to the Asvins. Here it runs :

"Ye bring happy love to old maids" (cf. Geldner, p. 42).

In ancient Egypt also, old maids cannot have been unknown. M. Bartels concludes this from an inscription which Jeremias cites.

It was on the entrance of a tomb in Beni Hassan which Ameni, an official of King Usertes I., had erected in his life time. In the inscription it is said :

"There came years of famine . . . I fed his (Usertes') subjects. I provided food for them that no one among them was hungry. I gave the widows as well as those who had no husband . . ."

As in this those who have no husband are opposed to the widows, they must have been adults who had households of their own, that is, old maids.

In Java, a 14 or 15-year-old girl who is not married is, according to Walbaum, already looked on as an old maid.

In China, according to Ching-Ke-Tung, old maids are rare phenomena; celibacy is in all seriousness considered a vice, and it requires very special reasons to excuse it. In contrast with the above statement, however, another informant about the Chinese says that children's care for their parents is so great that not infrequently a girl remains unmarried for the sole reason of being able to look after her parents. Then after her death a memorial of wood or stone is erected, on which an inscription immortalises her self-sacrifice. Freiherr von d. Goltz, for instance, writes:

"Among the young girls of some districts of the Province of Kwan-Tung, especially in the neighbourhood of Canton, there is a disinclination for marriage, which finds expression in the formation of societies of virgins such as *Chin-lan-hui*, 'Society of Golden Orchids,' the members of which pledge themselves to remain unmarried."

What expedients these girls employ in order to escape a forced marriage we shall learn later.

While among the tribes of the Pacific, old maids seem not to occur, yet the Gilbert islanders must occupy an exceptional position in this. Parkinson says of them :

"In the Gilbert or Kingsmill islands, old maids cannot be lacking, as in the laws of inheritance which prevail there, the case where the testatrix is unmarried is provided for. This is probably connected with the fact that the girls are betrothed very early, often while still in the womb, but are, in many cases, not married by their fiancés. They are, of course, not prohibited from making another choice."

Nevertheless, there too, where there is no direct danger of the girl being left unmated, if she does not marry very early, a long wait is an anxiety for her.

"Every mature woman needs marriage," says the Southern Slav, and the Circassian says :

"The ripe fruit awaits the picker's hand

For her wooer waits the full-grown virgin-

The fruit which to pluck No gatherer has come, Falls at last of itself Down from the tree— The maid whom to woo No suitor has come, Flies at last of herself From her own home hearth." (Bodenstedt.)

In a Bosnian song, it runs :

"Sarajevo, thou shalt go up in fire ! For an ill custom in thee has arisen, For people take to widows, Turkish women And leave single the prettiest maidens." (F. S. Krauss.¹)

However, decline in charm comes early and, in Bosnia, people say of a girl of 22, "she is half stale"; and of one of 25 "she is long spun out" (F. S. Krauss ¹). Thus to her torment over her unsatisfied life is added the mockery of popular wit.

F. S. Krauss (1877) writes about the Southern Slavs in a letter to M. Bartels thus:

"You ask what kind of position an old maid (*cura sijeda* = a grey-haired maiden) occupies. No better than a mangy dog, for neither the girls nor the wives associate with her, least of all the men. She may neither join in dancing nor be with the spinning women. She is teased and ridiculed and neglected everywhere. She is looked on as a blot on the family escutcheon. A stereotyped curse runs : 'Thou shalt bind thy hair in thy mother's house' (be left on the shelf)."

In his great work, F. S. Krauss ¹ says :

"To remain single is reckoned almost a crime in a girl. And, as if her own suffering were not enough, the ridicule of the world is added to it. Thus, for example, in Caoovec in Murland, the custom is prevalent among young fellows of making bundles of reeds on Ash Wednesday and tying them to the house doors of unmarried girls."

Hence the answer of the Southern Slav girl when she is asked if she likes her father and mother best :

"When I long for them from my husband's home, and not sitting down with them as one of the family."

Thus the Wallachian girl, if God has denied her the happiness of marriage, wants at least to be of use to a heroic youth after her death. It runs like this in a folk song :

> "There went a maid, a young Wallachian maid, Trim, pretty maiden,
> She went alone, the pretty maid, and raised to God her prayer : Do not, Oh my God, kill me by long desire,
> My visible God !
> By longing desire slay me, not kill me with sharp arrow,
> Let me taste to the full the love of a gallant hero,
> Me, a young Wallachian.
> On my head I would bear a green garland of olive,
> On my hand I would see a ring of gold from Hellas,
> I, a pretty Wallachian.
> But rather, dear God, slay me with longing desire :
> Oh my God, change me to a slender alpine fir,

My visible God. My beautiful hair change to tender grass of the clover field; My black eyes change to cool clear springs; My visible God. Then let the lord of my heart come hunting on the Alps; Let him rest under this slender pine tree, My beloved God. Then let his horse feed on the young grass of the clover field; Let it drink at the cool clear water springs, His swift steed."

Prayed thus to God, and had her prayers fulfilled (see F. S. Krauss).

In a Mordvin song which Paasonen has translated and published, the good maiden laments the old Matjuscha, weeping :

"Though the water was good ; there is none who drinks it ;

Though the grass was excellent, there is none to mow it;

I too was good; there is none who takes me;

I too was excellent, there is no one who touches me."

Among the Mohammedans the married woman has, at best, a certain respect, but the old maid is quite without rights.

We have to thank Osman Bey for the following illuminating information :

"The necessity of marriage for women has given rise to many expedients and pious deceptions which are as strange as they are ridiculous. For example, on a pilgrimage to Mecca, the marriage certificate is a necessary condition. The single woman who takes part in the pilgrimage is, no doubt, less pleasing to God than the married. To remedy this disadvantage, they have recourse to a pious deception which consists in the so-called 'pilgrimage marriage. Every time a pilgrim caravan prepares to visit the holy place, one sees unmarried women, widows or old maids, looking for someone who will consent to play the part of a temporary husband. They make their proposals in a very naïve way by saying without hesitation or blushing, 'Will you be my pilgrimage husband ?' 'Yes, why not,' replies the pilgrim without even bothering to look at the woman who proposes to be his wife. Then the betrothed find two witnesses and the marriage is soon concluded. Then they join the caravan, both swing themselves up on the camel or join the endless procession to Mecca on foot. These pilgrimage marriages are quite compatible with the Moslem conscience; they are even regarded by the pilgrims as a good work. It is a point of honour with the men to be helpful to women to do their duty towards God even by deception. The pilgrimage marriages end on the day on which the ceremonies end with the sacrifice of the lambs on the Arafat. Whilst, on one side, the sacrifice is being made, on the other side the husbands and wives are saying the sacramental formula of divorce and the married couples separate never to meet again."

The Mohammedan girl, moreover, can make such a pilgrimage without any risk to her chastity, for Mohammed has commanded in the Koran (*Sura*, "Of the Cow"):

"Let the pilgrimage take place in the well-known months. He who will undertake the pilgrimage in these months must refrain from sexual intercourse, all wrong doing and any quarrelling during the journey."

According to a report from Bœcler, the Estonians believed, at least formerly, in the possibility of a jealous person being able to force a girl to become an old maid. In this connection, rejected suitors were very much feared, for "among some of them is the godless custom that when he has had a refusal and he, therefore, wishes evil to the girl who has rejected him, he knocks with his phallus at the door posts, and as often as he does so, the same number of years afterwards shall the girl remain unmarried." Kreutzwald, who published this record of Bœcler, adds :

"A fact which argues in favour of Bœcler's information is that there is still current among the common people a nickname for an old maid, namely, *üks wana löö türa*, *i.e.*, an old maid knocked with . . . Her flesh is supposed to be so tough that even the devil's teeth cannot crush it. Now even if, as we hope and believe, the practice of this severe punishment no longer takes place, yet the expression quoted shows that the belief that a girl may be left unmarried for this reason has not yet died out in the lower classes."

Kreutzwald then points out that the bewitched girl still has in the love spell a means of freeing herself from the hated ban.

Our German popular feeling also looks on the old maid as something unnatural, as is shown by many customs and ideas, some of which are certainly very old. The fact that in popular belief all sorts of useless occupations are assigned to the old maid after death, just as her life was useless, we shall see later. But during her life, too, the girl who has remained unmarried is exposed to all kinds of mockery and annoyance (just as bachelors are, too, sometimes). Thus, Rochholz records (quoted



FIG. 910.—Old maids are compelled to draw a plough. (After v. Reitzenstein.)

by L. Tobler) that, in the Fricktal in the Canton of Aargau, at the end of Shrovetide, all unmarried girls over 24 are put into several carriages by the young men, driven to the common, and there gently overturned at the first ditch. This is called "burying the old maids." Likewise, in the Canton of Lucerne there is a ceremonial entertainment at which all kinds of practical jokes are played on old maids. In the Unterinntal (Tyrol) there is a custom of "driving to the moor," according to which "the young men pack a carriage full of old maids ostensibly to take them to a bridge on the Sterzinger moor. They represent planks of wood, one being tied on the top as a hay-pole" (Frommann quoted by L. Tobler). The former favourite carnival procession in Allgäu and Vinschgau, the so-called "cart drawing," in which masked mummers draw a big cart in which sit young men dressed as maidens who are carried to the moor, has now become rarer (see v. Reinsberg-Düringsfeld).

In many places these *Fastnachtsspielen* have acquired a half-artistic appearance under the influence of the church. In other places, other styles are customary. Thus, Seb. Frank in the *Weltbuch* (1534) (quoted by L. Tobler) says : "On the Rhine, in Franconia and other places, the young men gather all the dancing maidens together, put them on a plough and draw them to the water." From the *Zimmerische Chronik* is extracted the information that in Upper Swabia, on Ash Wednesday, the young men pull the maids out of the houses and harness them to a plough, which is followed by a sower scattering sand or ashes; finally, they go to a stream and then follows a meal and a dance. In this case the appearance of the girls on the field may have the meaning of blessing the field, not the girls themselves. That harnessing to a plough becomes a punishment for virgins who had kept unmarried, L. Tobler proves with several examples: thus in Leipzig on Shrove Tuesday, 1500, masked bachelors forced the maidens they had caught on the way to be yoked to a plough.

In reality, virginity was not at all praiseworthy in the popular consciousness of old times : where it is emphasised, it is due to Christian influence. In the *Fastnachtsspielen*, for example, a custom is brought to mind by which all spinsters who had not got a man in the winter were harnessed to a plough in place of the horses and driven to a lake or river (cf. Fig. 910).

Though this may be told only as a joke in the time of the carnival games, yet in the Germanic period people certainly carried out this custom literally. It seems to have been connected with a worship of gods of fertility and marriage (cf. v. Reitzenstein²⁸).

CHAPTER XV

WOMAN AS SAINT

1. THE VILLAGE MAIDEN

WE must now consider a special arrangement which is found in Samoa. This is the appointment of a so-called village maid, a *taupou*, who is, as it were, the superior and the commander of all the other full-grown girls of the village. Every village has a *taupou*, who is, it appears, appointed to this office by the chief. According to Krämer, when she has got this title, she no longer belongs absolutely to her family, but enters into the service of the community, which, on its part, strives to serve her. Her virginity must be unquestionable and is most strictly guarded.

Fig. 911 depicts a Samoan village maid in full festive dress from a photograph by Dr. F. Reinecke of Breslau, which he very kindly gave to M. Bartels.

For further details, let us hear what Krämer has to say. He speaks of the chief's favourite daughter.

"She is generally destined to be 'the village virgin' from a tender age and even tries at this period to act in conformity with her duties. Charm and modesty are the qualities which determine the choice. Her upbringing is very careful, she is the avowed favourite, particularly in her father's domain. Like the chief, the taupou gets the best of food. She takes part in the ordinary work of women but she need not, in general, undertake the harder work, collecting banana leaves for cooking and sugar-cane leaves for covering the house, searching for shell fish, trepang, limidæ and all the other eatable figota in the lagoons. Hence, her colour is generally lighter than that of the rest of the girls, from which, too, Sina (white) for such highly placed maidens is derived; hence, too, the slender, well-cared-for hands and the smooth velvety hair which is always kept clean and fragrant by the perfumed oil which is specially prepared for her." And wherever she goes, to bathe, to look for flowers and aromatic leaves in the woods, or to visit friends and relatives, she is always accompanied by a few elderly women, who look after her and are responsible for the maintenance of her virginity. If, as a young girl, she had let her hair grow long, it is cut short when she reaches puberty and the hair on the other parts of the body, in her armpits and the genitals, is shaved. Now she becomes the leader of the young girls of her village and, as the leader of this community of girls, assumes the title of *Taupou*. The reason of the virginity, of course, is regarded for superstitious and not moral ideas.

"The Taupou stands as hostess in the foreground at feasts (if guests from outside come to the village) and therefore the older people have made the greatest efforts to perfect the chosen young lady in dancing as early as possible and to teach her to arrange the natural adornment of flowers in the form of necklaces, breast ornaments and aprons. Hence she is instructed year in and year out in the preparation of kava (kava is the intoxicating drink of the Samoans, the necessary material for which has to be chewed by the village virgin) so that she may receive and entertain guests. If, however, there is a taupou among the guests from a distance then she modestly retires."

THE VILLAGE MAIDEN

At the big dances and the feasts which concern the whole village, and in particular the feasts of homage which are offered to the titular chief, "the taupou is accustomed to play a prominent part and, dressed up with the big head dress, the brow band made of nautilus shells, the necklace of finely sharpened teeth of the sperm whale, and fine mats, adorned with flowers and well anointed, swinging clubs, leaping and dancing, she precedes the dense throng of the community which bears the food."



FIG. 911.-A Samoan village virgin. (Photo : F. Reinicke.)

In this great dress the village virgin is shown in Fig. 911.

The village maiden is generally desired in marriage and she has the right to marry but she then has to leave her position of honour.

"About this time, or even long before, the chief has to think about a substitute for his daughter in case she leaves her position of her own wish, or by the wish of the village community. If there are no younger sisters, then he must seek a substitute among the near or distant relatives of his family, who then enters into the position of the former taupou."

2. THE VIRGIN DEDICATED TO GOD

From time immemorial, we find among the most different civilised nations the custom of removing certain representatives of the female sex from profane everyday life in order that, prepared by special ceremonies, lodged in special houses and trained in a special way, they may be dedicated to God for the whole of their life. In most cases, these virgins of God were condemned to everlasting celibacy; they had to do duty in the temples, to glorify the festivals of the gods with their singing and dancing, to act as priestesses of the sacrifice and sometimes to prophesy. They occupied a very exceptional position towards the rest of the people, and to make up for the family life which they had to forgo for ever, the highest marks of respect were shown them on all sides. Often along with celibacy, the strict preservation of their "virginal chastity" was their sacred duty: they were the property of the Gods, to whom they had been consecrated and men were strictly forbidden even to come near them.

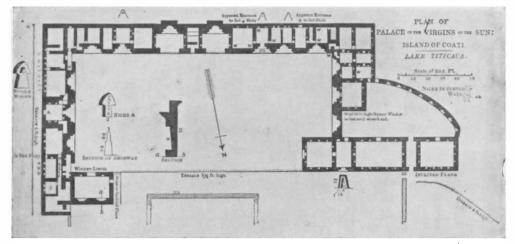


FIG. 912.—The Palace of the Virgins of the Sun, Island of Coati, Peru. (After Squier.)

Woe to those virgins of God who damaged their chastity. The hardest, most cruel punishment was theirs.

This was not so in all cases, however. Sometimes we see that the temple maidens, though a regular marriage was strictly forbidden to them, yet were not debarred from sexual intercourse with men, but were even compelled to undergo it. To be sure, these men were, in many cases, only the priests or the king of the country; that is to say, always the representatives of the Godhead. But there are not wanting instances where they had to yield to any man who came to make his sacrifice and offer his prayers at the altar of their deity. This last custom has likewise been wrongly called religious prostitution and we have already spoken of it in Volume II., p. 107.

Among the ancient Egyptians, there were virgins in the service of Ammon who were kept under special supervision in his temple. A "*head*" of these girls is also mentioned. We may, therefore, safely assume that these virgins were formed into sisterhoods. The temple virgins of ancient Babylon (who are to be distinguished from the "temple prostitutes" or girls destined for the temple prostitution) were called the "sisters of God" or "wives of the God Marduk" and to whom, as the latter and the *puellae publicae*, marriage was forbidden. As Meissner³ observes, through their alliance with the God, they withdrew from the family and had not, therefore, the same rights of inheritance as their brothers and sisters. Also in ancient



FIG. 913.-A Buddhist nun from Annam. (Naturhist. Museum, Vienna.)

Mexico and Peru, we find the institution of virgins consecrated to God. They had, it appears, special convents in which to live (see Fig. 912). Modern Buddhists also have institutions analogous to our Christian convents. One such Buddhist nun of Annam is portrayed in the full uniform of her order in Fig. 913.

Among the Romans, as everybody knows, the priestesses of Vesta had to make

a vow of chastity. Like the Goddess herself who, when Apollo and Neptune wooed her, swore the oath of eternal virginity by the head of her brother. The Vestal Virgins in Rome were first two, then four and afterwards six in number.

"They wore," states Minckwitz, " a long, white robe, a priest-like fillet round the head on which the hair was parted and, when they sacrificed, a thick veil. In the shrine which was assigned to them by Numa Pompilius which, however, served at the same time as the king's palace, they had to watch over the well-known Palladium of the City of Rome and other sublime things, to perform sacrifices to the Goddess and to keep the everlasting flame of her fire. The neglectful one, owing to whose fault the fire went out, was punished by the Pontifex Maximus with lashes whereupon the Goddess, enraged by this sin, expiated it with ceremonial sacrifice and prayer and rekindled the fire at the rays of the sun. Infringement of the vow of chastity was punished terribly; the criminal was, like the nuns of the Middle Ages, buried alive amid horrible ceremonies, whilst general mourning prevailed in the town, as people looked on such an occurrence as a heavy infliction by the angry Gods. Because of this, however, these priestesses also enjoyed the highest respect and a number of privileges. As soon as the Pontifex touched them with his sacred hand on the day of their ceremonial initiation, they were of age and capable of making a will; they had seats of honour in the theatre below the first town councillors; when they went out, the fasces were carried before them by the Lictor, and if a criminal who was being taken to the place of execution met them on the way he was granted his life. Moreover, the vestal virgin could not be more than 10 years of age, had to be a native of Italy, without external deficiencies, the issue of living parents who belonged to the free class and pursued an honourable calling. The father could then give her up voluntarily to be a priestess. If choice was necessary, it took place by lot at a meeting of the people when 20 young girls who fulfilled the above conditions were presented for election. The girl elected had to learn the service of Vesta for 10 years, practise it for the following 10 years and teach for a decade (that is up to her fortieth year); then she had permission to leave the temple and even to marry if she wanted to give up her sacred calling."

The Teutons also had their virgins dedicated to God on whom the gift of prophecy was conferred. Tacitus speaks of them in his *Germania*. These virgins were called *Wala*.

"The virgin of the Bructeri, Veleda, was one of these Wala who was for a long time regarded by most people as a divinely inspired being; even before her, Albrun and several other women were similarly worshipped. In fact, 'wise women' were held to be inspired by the Gods and able to foretell the future. They are to be distinguished from the priestesses, although it often happened that their special features and functions, as soothsayers, were united in one woman" (cf. Dahn).

This Veleda, who foretold the annihilation of the Roman legions by the Batavi, dwelt in a tower and did not show herself to the envoys of the surrounding tribes; one of her relatives acted as intermediary in question and answer; she was asked by the Romans to use her influence on the Teutons to put an end to the war.

E. Mogk, in his article "Weise Frauen" in Hoops's Reallexikon d. Germ. Altertumskunde (Strassburg, 1918), has treated his subject very well. According to the view of all Germanic tribes, the women had a special gift of prophecy to which the power of performing magic was allied. Such prophetesses are the $w\bar{s}siu w\bar{v}p$, who foretold the decline of the Burgundians. To them belongs the woman who prophesied to Drusus his approaching end in the land of the Cherusci (Dio Cassius, 55, 1), and also Albrun, Veleda and Ganna, who stood in great honour under Domitian (cf. Dio Cassius, 67, 5); there was also Gambara, the ancestress of the Lombards (Paulus Diaconus, I., 3). It was the matrons who warned Ariovistus to engage with Cæsar in battle before the new moon (Bell. Gall., I.). Cimbrian women prophesied victory for their people when they were on march (Strabo VII., 2). Among the Norwegians and Icelanders, women with the gift of prophecy used to go from farm to farm in the winter foretelling their lot to the people. Because of this gift of prophecy, people believed that something divine was innate in these women and, therefore, applied to them for advice (cf. Germania, 8). Indeed, there arose a belief that women determined the fate of human beings which none could escape (cf. the Norns). Along with the gift of prophecy, Teutonic women had the power of performing magic. In this activity, we come across them in the first Merseburg incantations, where, as *idisī*, they unloose the chains of their captive friends by magic at a distance. On the other hand, they could cast bonds over their enemies in battle so that these were hindered in their movements so that they soon fell victims to their opponents. Here the wise women resemble the Valkyrie, who in ancient Nordic sources are frequently called $d\bar{\imath}sir$. $D\bar{\imath}sir$ is the more comprehensive conception by which are understood women with the gift of prophecy, fateful powers or help-giving beings. Their activities did not end with life, but continued after death. Then they wandered over the land giving protection or doing harm; they became land $d\bar{\imath}sir$ to whom, in Iceland, various stones were set up. Then, too, offerings were made to them, the $d\bar{\imath}sabl\delta t$, which like the $\bar{a}lfabl\delta t$, took place at midwinter. Also a kind of shrine appears to have been erected in their service; at least the mythological sagas repeatedly mention a $d\bar{\imath}sarsalr$.

In general, the Teutonic soothsayers, some of whom the West Goths had also, used certain wooden staves to foretell the future on which runes were scratched. Hence, according to Weinhold, all names of women in which the word "*run*" appears were originally women who had the gift of soothsaying.

To the sphere of consecrated women belong the nuns with the variations of nursing orders and those of deaconesses' orders. For the last in particular, self-denial, neighbourly love and self-sacrifice are necessary. The convents originated almost simultaneously with the monasteries about the second century in our reckoning of time. The first impetus to these was given by crowds of hermits who, as St. Jerome records, came to the west in daily immigrations from India, Persia and Ethiopia. Around these, believing disciples flocked in great numbers, who were then gathered into bigger groups by prominent clerics. Saint Pachomius (fl. c. 320) is considered to be the first to found a convent of this kind. These convents consisted of a great many individual houses which were united under a supreme direction.

The convents made their way over all Christian countries, and from all classes of the population, from empresses and princesses down to the poorest peasant girls, pious souls streamed to them in crowds. But the life of pious ecstasy and self-mortification gave place, after a few centuries, to a freer conception of human existence. A happier, nobler enjoyment of life entered within the sacred walls. Thus among the works of Antonio Allegri, who is known as Correggio (1494–1534), there is a series of frescoes representing groups of children with hunting emblems amid garlands of foliage with which, by order of the Abbess Donna Giovanna da Piacenza, he decorated a room in the Benedictine Convento di San Paolo in Parma. At the fireplace of this so-called " camera di San Paolo," the abbess had the painter portray her as Diana in a carriage drawn by two hinds. Her appearance is far from suggesting that of a nun.

However, there was also in the convent no lack of a freer "worldly" and scholarly life (cf. Fig. 914). If there still exists even at the present time in many places a popular tale that this or that famous convent had had an underground passage connecting it (certainly not without a purpose) with the neighbouring monastery, there are, in not a few cases, only too well-founded reasons for this. From the secretary of Pope Urban VI. (1378–1389), Theodoricus de Niem, we have a ghastly picture of the vile life which the holy virgins led with the monks and with their priests set in authority over them :

"Fornicantur etiam quam plures hujusmodi monialium cum eisdem suis praelatis ac monachis, et conversis, et in iisdem monasteriis plures parturiunt filios et filias, quos ab eisdem praelatis, monachis et conventis, fornicariè, seu ex incestuoso coitu conceperunt. Filios autem in monachos, et filias taliter conceptas quandoque in moniales dictorum monasteriorum recipifaciunt et procurant : et, quod miserandum est, nonnullae ex hujusmodi monialibus maternae pietatis oblitae, ac mala malis accumulando, aliquos foetus eorum mortificant, et infantes in lucem editos trucidant, seque habent saevissimè circa illos, etiam Dei timore secluso " (p. 498, and cf. Coulton, *Five centuries*, etc., p. 585).

Of the Frisian convents, Gregory XII. wrote in 1408:

"In quibus penè omnis religio et observantia dicti ordinis, ac Dei timor abscessit, libido et corruptio carnis inter ipsos mares et moniales, necnon alia multa mala, excessus et vitia quae



FIG. 914.—A nun writing. (From a miniature by Christian Pisan in a MS. (Cod. gall., 11) in the Bayr. Landesbibl., Munich.)

pudor est effari, per singula [monasteria] succreverunt, ac de die in diem magis pullulant et vigent in ipsis " (Ib., p. 497).

The preacher, Barlette, laments :

"O quot luxuriae! O quot sodomiae! O quot fornicationes! Clamant latrinae laticula ubi sunt pueri suffocati!"

and the preacher Maillard says similarly :

"Utinam haberemus aures apertas, et audiremus voces puerorum in latrinis projectorum et in fluminibus" (cf. Dulaure).



FIG. 915.—Armenian nun from Transcaucasia. (Photo : Jermakoff, Tiflis.)

That, however, according to Christian ideas, still "worse" things took place among the nuns pledged to eternal chastity, we may learn from the penal laws which have been preserved :

"Cum sanctimoniali per machinam fornicans annos septem poenite
at ; duos ex his in pane et aqua" (cf. Martène, IV., 52), and

^{*} Sanctimonialis foemina cum sanctimoniali per machinamentum polluta septem annos " (cf. du Cange, *Glossarium*, S.V. *Machinamentum*).

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In the sixteenth century, it was believed that the sexual question had been so far solved that the brothels could be abolished if, by chance, as we have shown in another chapter, they had not already ceased to exist. This was carried out in



FIG. 916.—Russian orthodox nun.

1537 in Ulm, yet, in 1551 again, they were obliged again to set them up. For a very dangerous situation was created by the increase in the number of public girls who were now infected with all the vices of brothel prostitution, because the girls of the brothels under the name of the "Maria Magdalena penitents" had become vagrants.

Finally, these were merged in the common prostitutes. The connection of prostitution with the convents was a very close one. Hans Rosenblut makes the brothel girls complain about the nuns :

> "They complain too of the convent women They can so prettily go beyond the bounds When they have themselves bled or when they bathe Then they invite Master Conrad."

Geiler was even able to say that he would rather his sister become a prostitute than be placed in a nunnery where life was lax (cf. Wiskowatoff, p. 125). The nobility in particular went in and out of the convents. Thus the Zimmerische Chronik describes an occurrence which took place in the Obernhof convent in the Tal (Württemberg) which was frequented by the families Rosenfeldt, Brandeyk, Ow, Stein and Neuneck in particular.

In Christendom, nuns are not exclusively an institution of the Roman Catholic Church; also in other sects of Catholicism with the Orthodox Greek and Armenian Christians there are a great number of nuns. An Armenian nun from Transcaucasia is shown in Fig. 915. She was photographed in Tiflis.

One used to see nuns of the Orthodox Greek faith in Russia in every church. Here they stood in groups of six or eight either inside or outside the church door. In their hands they held a big black book with a huge cross on the binding. Anyone who entered the church or left it was greeted by them with a deep bow, at the same time they held out the black book horizontally. They expected people to put a money offering on it. One of these Russian nuns from St. Petersburg (Leningrad) is shown in Fig. 916.

The fact that the vow of chastity has often caused much distress of mind is expressed by J. von Schwartzenberg in the sixteenth century in the following verses :

"I a poor nun oft secretly complain That I cannot become worldly again. Had I but taken me a man As many a virgin else has done, God and myself, I would have honoured And too by this have increased the world. But in hate and envy, I stay here My suffering is indeed severe, However much in body enchained, My heart has in the world remained. And doubting ever in my trust, Do I please God ?—That I know not."

A modern poet gives us very appropriately the following verses, which show that women having tasted all pleasures take refuge in a nunnery, where they have no longer anything to hope for :

> "Receive me now within thy peace, Convent walls, so quiet and near ! Haven of refuge, her release Who the world as world has seen.

Ring on, ring, ye deep toned bells, Sound within my heart thy peace; All charms will now entice in vain, Ye will mitigate my pain. Here alone can I forget What to me was once so dear, Till in the deep cool cypress shade I am laid into my grave."

However, we must not fall into the error of regarding certain houses for women built like convents as true nunneries. Although they were set up and established exactly like nunneries and even had an abbess at their head, yet nothing was changed in their character, and they remained what they were, namely, public places, without any supervision, to which anybody had right of entrance.

"On trouve," says Dulaure, "que, dès le commencement du XII^e siècle, Guillaume VII., duc d'Aquitaine et comte de Poitou, fit construire, dans la petite ville de Niort, un bâtiment semblable à un monastère, où il recueillit toutes les prostituées. Il voulut en faire une *abbaye* de femmes débauchées, dit Guillaume, moine de Malmesbury. Il y crea des dignités d'abbesse, de prieure et d'autres, dont il gratifia les plus distinguées dans leur commerce infâme."

In the same way, after this some other brothels were established and likewise called abbeys. The brothel of Toulouse is even designated in a royal decree of Charles VI. as "grant *abbaye*" (see Dulaure).

In sharp contrast with the above-mentioned liberties within the convents is the terrible severity in many of them towards the unfortunate virgins of God who had broken the vow of chastity. The more severe penances, fasting and whipping, awaited them, and in many cases they explated their sin with death, which was brought about usually by their being buried or walled up alive.

It is no doubt less well known that in China, too, many young girls became Buddhist nuns in order to avoid a marriage not desired by them.

The Buddhist Church has, like the Christian, the institution of convents, which no doubt rose from the same root, and, in spite of the above statement, many an imprisoned virgin heart may die of longing for the joys of the world within those walls where she remains by the parents' command. In a rather long Chinese poem, translated by Ellissen, we hear the painful lamentations of such an unhappy Buddhist nun who, full of worldly thoughts, performs the nightly temple service against her will and amid tears :

> "Against her father soft complaint escapes her mouth. Over her mother she sighs heavily from the depths of her heart. Of from the happy house of my father They dragged me to the convent ! In the morning, I have to go to the altar To pray to Fo and Quan-in, But when evening comes, I send Longingly my wishes into space. See myself dreaming by the side Of a husband, kind, understanding ! ' "

> "In holy places She awakes from dreaming To soft prayer, She washes her hands For the burning of incense To the gods and implores : 'O-Mi ! Nan-Wu ! Quan-Shi-In ! Ye Gods of high heaven !

Nan-Wu! Quan-Shi-In! Oh, be the saviours of thine handmaid! Shew yourselves protecting, helping, kind! Graciously incline unto my prayer! In the beloved arms of a husband Let me shelter in delight! Thankfully, I vow you chapels, Build you beautiful pagodas, Will on new consecrated ground Place thy image in gold!'" etc.

Of the Bhotea, who inhabit the most northerly part of Sikhim on the frontiers of Tibet, Mantegazza says :

"Some women are close-cropped and are nuns, but, before they consecrated themselves to the gods, they had usually enjoyed earthly life even to excess."



FIG. 917.—Temple girls from a Shinto temple, Kasuga, Nara. (After Rein.)

One can imagine the great number of the nuns and temple maidens (Fig. 917) in the Buddhist church, when one learns through Junker von Langegg³ that in Japan alone, according to the Census of 1877, there were 57,860.

The honour of priesthood is denied to the female sex by the majority of savage peoples. It is not an absolute rule, however, and here and there it is possible for women to become priests. Of the Javanese women, we have already stated above that they are permitted to attend a Mohammedan school for priests, and only if they have been successful there may enter the mosques, which are strictly barred to all other women. In Fig. 918 we make the acquaintance of one such young priestess from Western Java.

Delafosse records that, in Dahomey also, a kind of nun exists :

"Il existe en ce pays une institution assez curieuse qui est celle des couvents et des confréries de femme féticheuses, dans le genre de ceux que l'on rencontre au Dahomé. Les initiées obtiennent des parents, par la crainte qu'elles inspirent, qu'ils leur confient leurs petites filles ; elles les enferment toutes jeunes dans ces couvents, après leur avoir fait subir une sorte d'opération destinée à sauvegarder leur virginité et qui consiste, l'excision des nymphes ayant été pratiquée, à les ramener en avant et à les souder ensemble, de façon à ne laisse libre qu'un

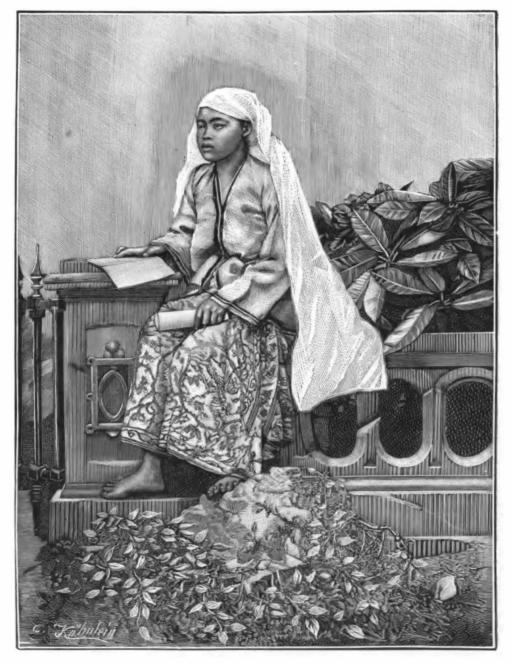


FIG. 918.-Mohammedan priestess from W. Java.

orifice très étroit. Il leur est défendu d'avoir aucun rapport avec les hommes, mais il faut croire qu'il en est qui passent outre et qui rompent, en détruisant la soudure, la ceinture artificielle de chasteté, qu'on leur avait imposée, car il se trouve qu'elles ont des enfants. Si l'enfant est un garçon, les matrones du couvent le tuent impitoyablement, si c'est une fille, on l'élève avec soin et l'on l'initie aux mystères de la confrèrie. Ces féticheuses se posent aux jambes une espèce de cautère qui produit une elephantiasis artificielle, toujours suppurante. Ces gens qui ont besoin d'un talisman infaillible doivent avaler un peu de la sanie sécrétée par cette plaie."

3. THE SORCERESS, PROPHETESS AND FORTUNE-TELLER

Actually, only very slight differences separate the witch from the sorceress and the prophetess and the fortune-teller also belong to this tribe, for do they not know how to foretell the future from every possible thing; how to cure diseases and



FIG. 919.-Krasnoyarsk Shaman. (After Beschr. aller Nationen d. Russ. Reiches, 1776.)

injuries by incantations, that is, by murmuring magic formulæ, and how to make enchantments harmless by sympathetic expedients ?

Krämer² describes an Araucanian witches' tree (*rehue*). In the trunk, which has been denuded of most of its branches, steps are hewn. The tree is climbed by the witches on certain occasions, *e.g.*, on the death of a chief, "so as to announce from there in a dream from a higher inspiration the person who was guilty of the death : this person is then put to death."

Speke found that special women functioned at the court of the king of Uganda, who at every audience the ruler granted had to be present in order to ward off the evil eye from him. They bear the name *Wabandwa*.

Among the Wachaga in East Africa, there are, according to Gutmann, besides male witch-doctors, also female witch-doctors who, decked with gnu-tails, magic horns and amulets, wander through the country. Women fortune-tellers are also known.

Pallas records of the sorceresses of the Kalmucks, who were called *Uduguhn*, that they were not to be confounded with the religious or holy persons, but are of a lower class, and that they "are held in abhorence and are accustomed to be punished for practising their forbidden arts. They are supposed to practise magic only once a month and that on the night on which the new moon rises. They do not make use of magical drums, but have a dish of water brought, immerse a certain herb in it and then sprinkle the hut with it. After this, they have certain roots which they take in each hand, kindle them, and with outstretched arms make all kinds of gestures



FIG. 920.—Dancing Shaman and Shamaness. (After Pauly.)

and violent motions of the body, during which they sing in constant repetition the syllables Dshi, Eje, Jo, jo, till they fall into a kind of frenzy when they answer the questions asked about lost things or future events." (However, men, called $B\delta h$, also perform magic.)

Among the Kirghiz too, Pallas came across all sorts of magicians, and after having told of this, he continues :

"Finally, there are, besides, two kinds of witches, who are generally women (*Dshaadugar*), and who bewitch slaves and captives so that they either get lost when escaping or fall into the hands of their owners again, or, if they succeed in escaping, yet soon fall again into Kirghiz slavery. They pull a few hairs out of the captive's head, ask his name and place him in the middle of the tent on hearth ashes, which have been scattered and strewn with salt. Then the witch repeats her incantations, during which she makes the captive step back three times, spits on his footprints and springs out of the tent each time. In conclusion, she sprinkles on his tongue some of the ashes on which the captive has stood and with this the working of the spell ends."

Wizards and witches play a great part also among the Siberian tribes. Compare Fig. 919, where a Krasnoyarsk Shaman woman of 1776 is portrayed, and Fig. 920, where two, male and female, Siberian Shamans are dancing. However, all these Siberian witches do not differ in their magic arts from the male Shamans. In their costume and outfit they are almost exactly like the latter. Like them, they use peculiar hand drums, and wear fantastic costumes at their official functions. In his

book on *Die Medizin der Naturvölker*, Max Bartels has given full particulars of these Shamans, male and female. See also v. Reitzenstein,¹⁵ p. 318.

If a Goldi woman wants to be a Shaman, the oldest Shaman has to carve in wood a female figure about half an inch high to represent her. When this work is finished, then the woman has attained the honour of being a Shaman. From this it appears that it rests entirely with the chief Shaman whether he will receive the woman into the ranks of the Shamans. If he has anything against her, then he need only never succeed in carving the figure ; then the woman can also never become a Shaman. These wooden figures are, moreover, surprisingly crude. Captain Adrian Jacobsen brought one of these figures back with him for the Ethnological Museum in Berlin, and this is reproduced in Fig. 921.

Siberian sorceresses get themselves into a state of ecstatic excitement reminiscent of hypnotic processes by lively movements of the body, monotonous songs, the banging of the magic drum and noise of tin rattles (cf. Fig. 800).

It was no doubt very similar in the case of the famous Pythia in the temple at Dephi. who was transported into a state of semi-torpor by the frightful noise made under her feet and, it appears, by sending out gases. The use of hypnotism for the purpose of fortune-telling, which, under the name of somnambulism. in the century before last and at the beginning of last century played such a great part, we still find in some islands of the Moluccan Sea.

For instance, Riedel¹ records of the Island of Buru:

"If they want to find out who has made someone ill or to have a glimpse of the future, they call two of these experts, generally elderly widows, into the house or to a big tree in the woods. Here



FIG. 921.—Wooden figure representing a Shaman candidate, Goldi, Siberia. (After M. Bartels.)

a seat of gabagaba or a stone is set up for one of them to sit on, whilst the other stands amid the deafening noise of tuba and drum, grasps a sword (parang) and with this and with her eyes staring open and her hair hanging loose like a fury, leaps wildly, looks above, to the sides and also into the eyes of the second woman, whilst perspiration pours in streams from her body. While doing this, she cuts herself with the parang and then picks up a stone with which she hacks at her bare breast until her companion, who remains seated, falls into convulsions and becomes cataleptic, loses the sense of her personality and falls into a kind of torpor and hypnotic state. In this condition she is questioned by the other about everything people want to know.

"Other women simply lie down under a mat and after violent convulsive movements fall into a sleep. These can be questioned by anybody. When they are awakened again they cannot remember what has happened. The women are supposed, on the outbreak of the catamenia, to fall into a lethargic sleep lasting some days. They are besides very forgetful by nature because they have been attacked in the woods by the male *Ejabat* or evil spirit and have had sexual intercourse with him. This state is called *sanane* (also *tanane*), as people imagine that the gnome living in the mountain of Sanane has gone into the woman's body in order to remove her consciousness or her soul for a time and to take its place. These women wear only a short sarong reaching from the hips to the knees. During the wild leaping of the one and the convulsive spasms of the other, the sarongs fall down repeatedly and are then fastened on them again by one of the bystanders."

A similar custom prevails in the Luang and Sermata islands. Here, too, an old woman is put into a cataleptic state by incantations and drum beating. In this state they believe one of the spirits of her ancestors enters into her, and then people question her about what goes on in the spirit world. Likewise, on the islands of Leti, Moa and Lakor, there are women who have themselves hypnotised by the banging of drums and can then foretell the future and explain dreams. They are held in great respect and people ascribe their gift of divination to a union of them with the chosen spirits (Riedel ¹).

In China also, where the people in general are inclined to believe in all kinds of magic, hypnotism is brought into use for certain procedures. Freiherr v. d. Goltz tells of this from the book *Liao-chai-chi-i*. Reliable people have told him that this description is in accordance with the facts. Here T'iao-shên, the so-called "Hopping of spirits," is in question.

"In the land of Tsi (Shantung), it is customary for the female members of the family, when anyone has fallen ill, to send for an old witch who acts as medium. She beats a tambourine encircled by an iron ring and performs dances called T'iao-shên. In Peking this mischievous custom is still more common. There young ladies of good family often meet to perform these dances. On a table in the reception room of the house an offering of meat and wine is placed and the room brightly lighted by big candles. The medium performing the dance pins up her clothes, bends one leg and with the other does the dance called *Shan-yang* (this is the name of a fabulous bird). Two of the other women and girls present support and, one on each side, hold the dancer. She murmurs without interruption incomprehensible noises, which sound sometimes like a song, sometimes a rhythm. The words have no connection, but are brought into a certain rhythm. Meanwhile, several drums are beaten and produce a deafening noise which helps still more to make the sounds of the dancer unintelligible.

"She lets her head sink, begins to squint with her eyes, can no longer keep upright without help and, but for her assistants, would fall to the ground. Suddenly, she stretches her neck and makes a leap into the air. At this sign, all the women in the room cry: 'The ancestors have come to eat the food offering.' At once the lights are blown out and complete darkness thus produced. The women present hold their breath and dare not speak, though even if they did it would not be heard above the noise of the drums. Suddenly the dancer calls the personal name of her father, her mother, the husband or wife (*i.e.*, one of the deceased heads of the family). Since calling the personal names of an elder of the family is usually avoided out of respect, this is regarded as a sign that the spirit of the person concerned has entered the medium. The candles are relighted and the curious begin their questions about the future or any other matters which interest them. As soon as the candles are alight again, they see that the offering of food and drink has disappeared." (Whether it is devoured by the medium or her assistants or by someone else does not emerge from the text.)

"Then they decide from the face of the dancer whether the spirit which has appeared is good or bad tempered. An answer is given to each question. If a question is put in a doubting tone, the spirit notices at once, for the medium points at the doubter and cries : 'Irreverent mocker, I shall pull off thy trousers !' If the woman addressed casts a glance downwards, she finds that she is stripped and her trousers are hanging on a tree in the courtyard."

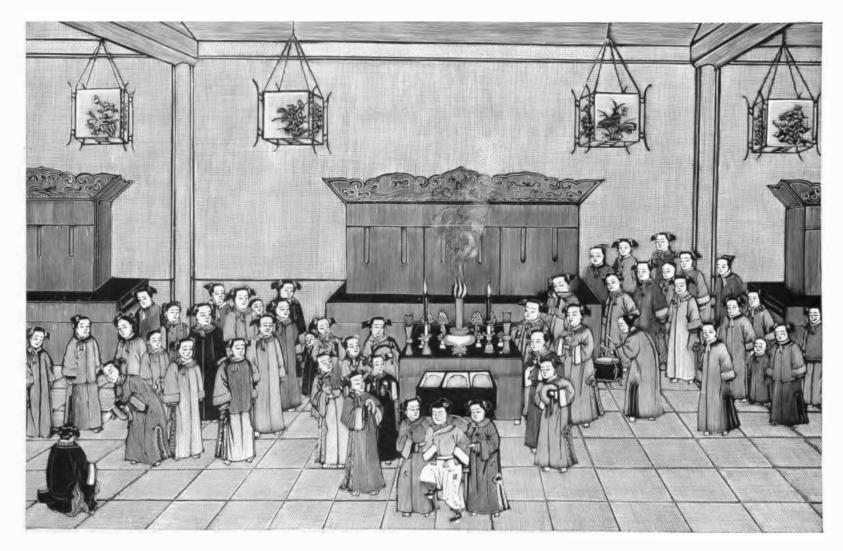


FIG. 922.-A Chinese soothsayer. From a coloured Chinese sketch. (After von d. Goltz.)

Fig. 922 shows this dancing from a drawing by a Chinese artist who had done it from a description by eye-witnesses. In the foreground, one sees the hypnotised woman and her supporters. "Before the altar, richly furnished with incense burners, candles and sacrificial dishes, stands a container in three divisions for the offering of the mutton, pork and beef." Among the South African natives there are special

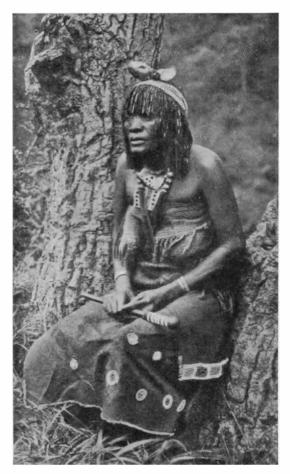


FIG. 923.—Native soothsayer from South Africa. (From Anthropos.)

fortune-tellers, which we show in Figs. 923 and 924 from a photograph of the Trappist mission.

Among the Scandinavians there are likewise women who practise the black art and possess knowledge of secret powers and things; such a woman who knew more than others was called *vala* or *völva*, *spakona*, *galdrakona*, *seidkona*.

In the Saga of Nornagest soothsayers of this kind are spoken of. There it runs :

"At that time there went about the country women soothsayers called *Volven*, and prophesied people's fates. Therefore, many men invited them to their house, entertained them lavishly and gave them valuable jewels when they left. My father did so, too, and they came to him with a great train of followers and were to tell my fate. I was in the cradle at that time, and when they were to say their say about my affairs, two wax candles were burning over me.

They spoke favourably about me and said I would be a very fortunate being, and so it was to be with me in all things. The youngest Norn felt herself slighted because she had not been questioned. Also there was a rough mob there who pushed her from her seat and knocked her to the ground. She was annoyed at this, cried loudly and angrily and made the others cease with their great promises, 'for I destined him not to live longer than the candle burns which is alight here by the boy.' Upon this, the older Volva seized the candle, extinguished it and bade my mother keep it and not light it until I was in the last days of my life "(Edzardi).

Weinhold tells us about another Volva named Thorbiörg, who went about as a fortuneteller in winter, to prophesy to people at feasts. The rich farmer Thorkell invited her, to learn whether the year of famine would soon come to an end. In the evening, she arrives with a man who had been sent to meet her. She wears a dark mantle laced with a thong which has knots in it from top to bottom, glass pearls on her neck, and on her head a cap of black lambskin



FIG. 924.—The soothsayer Uyitshigitshi at Mariannhill. (From Anthropos.)

lined with white catskin. In her hand she holds a staff with a brass knob set with stones. Her hands are in catskin gloves; on her feet she has rough calfskin shoes with long laces. A cork girdle is round her body on which hangs a leather purse with her magic instruments. As she enters, she is greeted respectfully by all; the host leads her to the place of honour, the high chair which, on this occasion, is covered with a cushion of poultry feathers. The clairvoyante has some goat's milk and a dish consisting of various animals' hearts; she is silent, but promises to prophesy next day and to accord with their wishes. In fact, everything that she needs for the magic is ready next day, only there are no women who understood the incantations for enticing forth the spirits. At last one is found who has learnt such incantations in Iceland; because she is a Christian, she decides to be helpful only after long entreaties. Then the women make a circle round the prophetess on the four-legged magic stool, the assistant strikes up a beautiful song and the Wala now declares that the spirits are now willing. Then she foretells a speedy end of the year of famine, and tells all that they wish to know; finally, she goes to the next farm, from which a messenger has already arrived for her.

In Norwegian tales by Asbjörnsen also, a few of these fortune-tellers are presented to us. They are greatly reminiscent of their sisters in Germany and in the Alpine regions of Austria, whose influence on the lower classes and on the ignorant members of the higher classes we encounter everywhere. Their territory is the abundance of formulæ of exorcism for resisting all kinds of sickness and enchantment, the power of which so far neither education nor the church, not even the explanations and culture of literature, have been able to eliminate.

The covalyi, the sorceresses among present-day gipsies, however, enjoy quite a special power and an extraordinary influence. v. Wlislocki ⁶ writes of them as follows:

"The sorceresses of the gipsies are at present in the front rank as helpers and, indeed, as physicians for human beings as well as animals. They know the magic formulæ by which the *misiçe* (evil, the demons of disease) can be banished from the bodies of the sick; they have the strength and power to put in bondage and release the souls of men, to arouse and to destroy love and hate and to combat psychic affections as well as those of the body. Thus, they still have the same rôle which priests had among primitive peoples before the care of the soul was separated from the care of the body. In the consciousness of supernatural gifts or in confident faith in the helpful power of supernatural beings, healing is done by knowledge of formulæ and herbs with magic power.

"As in healing sickness, whether of body or mind, the sorceress has to prove her ability in other forms of knowledge so as to be able to dispense talismans and fetishes to the people. She has to manifest her power even with regard to daily needs of life since she foretells the future, turns aside misfortune, promotes the success of an undertaking, all by magic working expedients. The sorceress must know not only how to banish the dead, but also how to regulate the weather in order to demonstrate her connection with supernatural beings."

Among the gipsies, there are two ways of becoming a sorceress. One way we have already learnt; it consists in a supernatural being, a *nivashi* (a water sprite) or a *pçuvush* (a gnome) having sexual intercourse with the woman, and then instructing her in the secret arts in order to buy her silence. Were she to cry out, the spirit could not move from the spot, and it would be very easy to kill it. To prevent the return of the elementary spirit, the newly-made sorceress had now to drink mare's milk for nine days. In her body she had a snake which could kill anybody who tried to do the woman any harm.

The second kind of sorceress acquires her power in a different way : in this case, too, we hear from Heinrich v. Wlislocki 6 :

"The gipsies believe that there are women who possess magic powers and qualities which they have acquired partly in the natural way, and partly inherited. Thus, *e.g.*, the seventh girl of an unbroken series of girl children brings with her into the world qualities which pass by other mortals, *e.g.*, she sees things (buried treasures, souls of dead people, etc.) which are invisible to other people. Most sorceresses are instructed from their early childhood in the art of healing and of magic. Sorceresses can instruct only their own daughters in their art after the latter have inherited the capacity for it; that is, they possess already a pre-destined magic power which, however, only comes to full strength when the woman concerned has herself brought at least three daughters into the world.

"If the mother, a daughter or a sister of the sorceress dies, then she must drink the water from the bowl which it is the custom to put at the feet of the corpse so that 'the soul of the deceased may bathe.' If she does not drink it, the dead woman takes her wisdom with her and she has ceased to belong to the guild of sorceresses. In order to preserve her wisdom or magic power, she also puts a piece of the burnt clothes of the departed in her pocket. According to ancient custom, the clothes are burnt immediately after the funeral. With these rags then, she fumigates herself in the next succeeding midsummer night or new year's night at some crossroads in order to lay the spirit of the deceased which is still hovering about and does not pass into the realm of the dead until the body is completely decayed. For this very reason, she must visit the grave of the deceased for the first nine days, always at midday, after the funeral and

THE WITCH

drop poppy seeds on the ground right up to the grave, so that the spirit of the dead woman which is following her may pick them up and have no time to weaken her in her magic power.

"During this period she must abstain from sexual intercourse so that she may not become pregnant and bring a dead child into the world from which comes a *locolico* (demon) or *mulo*, which might worry its parents to death. Frequent swallowing after the lapse of the said nine days indicates that the magic power of the woman concerned is not weakened; on the contrary, it is, in fact, strengthened and increases within her."

In this belief in the supernatural powers of sorceresses and in the methods by which they use their powers, we once again find cause to marvel at the way in which human beings in different centuries and in the most various parts of the globe, have yet hit upon similar ideas and analogous expedients for their performance.

4. THE WITCH

The oldest literary works of the Babylonians and Assyrians speak of witches who, as the ghosts of night, are credited with being excitants of disease and mishaps, evil dreams, slanders, in fact of any affliction (Weber ²).

"There is no end," says Weber, "to the names by which witches (who seem often to represent the whole family or guild) and magicians were called in exorcisms. The witch is the tramp, the harlot, the woman consecrated to the goddess Ishtar, etc. In her mind is the baneful word devised : on her tongue is magic; on her lips bewitchment; death follows in her footsteps. Eyes, feet and hands are quicker and more active than with other people. Like a demon, she is fond of staying in abandoned houses, but when she has spied a victim, she follows him through the bustle of streets and squares, entangles his feet in a net, and causes his downfall. But she likes best to practise her activities at night. Foreign women, particularly from the lands on the mountain frontiers of Babylon and Assyria, had a special predilection for appearing as witches. Their weapons were the 'evil eye' which exposed the victim to every misfortune, and the 'evil word,' the baneful formula which was full of magic and raised every evil power in the service of the witch. Along with these, they used the knotted string with which they filled men's mouths. That witches used amorous arts for the corruption of men is an everrecurring belief which existed even in Babylon. The strangest activity of witches is the making of images of the persons to be bewitched out of all kinds of materials like clay, asphalt, honey, wax. With these images the witches performed symbolical manipulations which were destined to have the same effect simultaneously on the original. The images were placed among the dead, thrown into ditches and wells, laid in much frequented places to be trodden on, etc."

On the other hand, people protected themselves against witches and wizards by making images of them and having them burnt with precisely prescribed ceremonies by the priest. One such exorcism concluded :

> "I have inclined myself before you, And put forward my complaint; Because they have worked evil, devised unseemliness; She (the witch) shall die but I remain alive ! May her magic, her spells, her ghost be undone !" (Weber.²)

And from another tablet, the priest recites :

"I raise the firebrand, their images I burn, The images of Utukku, Shedu, Rabiçu, Ekimmu, Of Lilu, Lilitu, Ardat Lili And of all the evil which lays hold of mankind. Quake, melt, disappear hence ! Let your smoke ascend to heaven," etc. (Weber.²)

The magic arts which Circe practised on Odysseus and his companions are known to everybody as well as those with which Medea brought aid to her guest Jason. The Romans too were firmly convinced of the magic power of witches, as can be seen in the works of Vergil.

Horace sings of two witches, Canidia and Sagana. He makes an image of Priapus, which has been set up on an old burial place, speak as follows: (Satires, I., 8):

"My own eyes have seen Canidia walk with black robe tucked up, her feet bare, her hair dishevelled, shrieking with the elder Sagana. Their sallow hue had made the two hideous to behold. Then they began to dig up the earth with their nails and to tear a black lamb to pieces with their teeth; the blood was all poured into a trench that therefrom they might draw the sprites, souls that would give them answers. One image there was of wool, and one of wax, the woollen one the larger, to curb and punish the smaller; the waxen stood in suppliant guise as if awaiting death in slavish fashion. One witch calls on Hecate, the other on fell Tisiphone. You might see serpents and hell hounds roaming about and the blushing moon hiding behind the tall tombs so that she might not witness such deeds. . . . Why tell each detail—how in converse with Sagana, the shades made echoes sad and shrill, how the two stealthily buried in the ground a wolf's beard and the tooth of a spotted snake, how the fire blazed higher from the image of wax ! "

Horrified by this, the image of the gods revenges itself by bursting with a loud report :

"Away they ran into town. Then amid great laughter and mirth you might see Canidia's teeth and Sagana's high wig come tumbling down and from their arms the herbs and enchanted love knots."

The lamentable confusion of mind which for centuries made thousands of people in Europe unhappy and after indescribable torment and anxiety brought them to a terrible death because of a supposed alliance with the devil, raged and stormed among the female sex in particular, and infinitely more witches suffered death by burning than wizards. This terrible period of witch persecution has had so many exponents that we need not go thoroughly into it here.

What manner of powers and misdeeds people attributed to witches has been summarised briefly by a physician of the sixteenth century, Dr. Johan Wierus.

The Neue Layenspiegel of the year 1512, by Udalricus Tengler, has a large illustration which shows the behaviour of these evil beings (cf. Fig. 925). We see the witches riding through the air on goats; we see the weather witch conjuring up bad weather; we see the butter witch bewitching her neighbours' butter; we see one dallying with the devil. In the middle a male magician is performing an exorcism in a magic circle and the devil is kneeling beside the circle. Above, one man is offering another (over whose head the devil is hovering) a basket with round objects. Below several witches are suffering death at the stake. Two men in long robes, probably the judges of the Inquisition, are looking on at this spectacle while a cripple on crutches stands near it. Probably he thinks that his infirmities are due to the spells of these witches. An angel with a bow seems to be aiming towards the burning witches.

A somewhat earlier representation of a weather witch from a coloured woodcut

from an edition of Hans Vindler's *Flores Virtutum* of the year 1486 is reproduced in Fig. 926; we see the witch calling down rain and hail with the jaw bone of an animal.

Although witches could have social communion with the devil at all sorts of



FIG. 925.—Witches and evil spirits. (After Tengler, Layenspiegel, 1512.)

times, yet, as is well known, there was one appointed time, Walpurgis Night, when the general meeting of all the witches with the devil took place. This is the great witches' Sabbath, busy preparations for which are shown in an interesting painting by F. Francken (1581–1642) in Vienna. We see it in Fig. 927. In a fairly large room decorated with all kinds of magical characters, a great many womenfolk have w.-vol. III. assembled. A well-built witch, quite naked, riding on a broom, is just going up a chimney. Three kneeling women are praying to a little hairy devil who is standing on a little platform illuminated by a tallow candle. In one hand he holds a dish, from which fiery rings and sparks ascend. Other women are cooking a ram's skull in a giant cauldron, whilst snakes, dragons, and all manner of monsters swarm over the cauldron which one woman is stirring with a broom while another woman pours something into it from a bottle. In the middle of the room an altar has been set up at which an old woman is reading incantations from a book of magic. A perforated human skull lies on the altar on crossed swords; snakes, frogs, human and animal bones and scratching creatures are heaped on the floor before it.

A young standing person is unlacing her bodice; another sitting on a stool is in the act of taking off her stockings. What the purpose of these two in taking off their clothes is explained by the three women standing behind them. One of these is already quite naked, and already has a broomstick in her hand which she

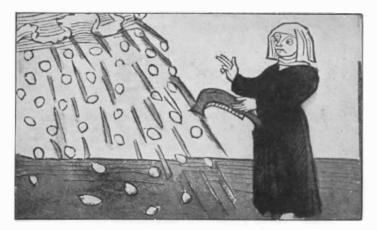


FIG 926.—A witch controlling hail and rain. (From a coloured woodcut in Vindler's Flores Virtutum, 1486.)

intends to use as a horse. Beside her stands another well-built young maid, likewise naked, who has her back turned to the onlookers. An old woman with a pot of salve in her hand is rubbing her back with her right hand. This is no doubt the witches' salve which gives women the power to go through the air on a broom.

Wierus, in spite of his belief in a personal devil, deserves our admiration for having been the first daring opponent of the superstitions about witches and of the incredible cruelty of the burning of witches.

He examined the details of the belief in witches with a vision surprisingly clear for that unreasoning period, and at every single point he sought to indicate its untenableness, its physical impossibility and its absurdity. Although the captured witches, he argued, had confessed all these misdeeds, yet they had been partly deluded by the devil, partly also they had confessed to the shameful deeds laid to their charge because they preferred to suffer death rather than undergo longer the indescribable tortures of the rack.

Unfortunately, as is very well known, the voice of this enlightened man went unheard, just as happens to-day in analogous cases. From the pen of the Frenchman, Bodin, who was mentioned above, there appeared an angry reply, which Johann Fischart translated into German.



FIG. 927.-The witches' kitchen. Oil painting by F. Francken. (Kunsthistorisches Museum, Vienna.)

U 2

MODERN WITCHCRAFT

The minds even of the most cultivated people in Europe were still not sufficiently enlightened to realise the enormity of these horrible trials of witches. More than two centuries were to pass and indescribable misery was to be caused to humanity before the evil was remedied. We do not intend to call this cruelty to mind again, but let us pay grateful tribute to the memory of Wierus, who once tried with undaunted courage to set sane human intelligence in the right direction.

5. MODERN WITCHCRAFT

Belief in witches is not yet completely extinct in Europe, and even in Germany there are still many pious souls to whom the existence of witches is an established fact.

With regard to the belief in witches prevalent among the Southern Slav peoples, the Serbians, the Croats, and the Bulgarians, F. S. Krauss² has made thorough investigations:

"In general, people regard witches as swarthy, old, evil, ragged women with curly white hair. People imagine the witches as malicious old women who cannot get away from this world and, therefore, prefer to inflict sorrow on their fellow men. Usually, they think that a woman before becoming a witch lies on young people as *Mora* (nightmare) and drains their blood. In every witch is lodged a demonic spirit which leaves her at night and turns into a fly, butterfly, hen, turkeycock or crow, but, best of all, a toad. If the witch wants to inflict particularly severe harm on anyone, she turns herself into a beast of prey, usually a wolf. When the evil spirit is outside the witch, her body lies as if quite lifeless, and if anyone were to change her position so that the head came to lie where the feet had been, and *vice-versâ*, then the witch would never regain consciousness, but be for ever dead."

People have certain signs for knowing whether anyone is or is to become a witch, and one of them shows itself even at birth :

"If a child is born with a caul, it must be made known generally. If the caul is red, then the girl will be a *mora* (nightmare) but after marriage a witch; a male child, on the other hand, becomes a wizard, but, if the matter becomes known in time, it may not happen" (Krauss³).

Among the other indications of a witch, here, too, the first is that if thrown into the water she does not sink. This is an idea from the lamentable time when witches were persecuted which has been preserved up to modern times.

In this Southern Slav belief in witches, other ancient ideas crop up as well :

"There are three kinds of witches. First, there are the witches of the air. These are of a very evil turn of mind; they are hostile to mankind, strike fear and terror into them and set traps for them on every highway and byway. At night, they are accustomed to waylay people and confuse them so much that they lose all clear consciousness. The second kind are the earth witches. These are ingratiating, noble and affable by nature and are in the habit of giving wise council so that they may do this and avoid that. They like best to tend the flocks. The third kind are the water witches who are most malicious, yet, if they wander free about the country, they even treat kindly the people they meet. But woe to anyone they get at in or near water; then they pull and whirl him about in the water or ride him successively till he drowns miserably " (Krauss ¹).

That in this belief from Croatia the elementary spirits transformed into the female, or, as Krauss expresses it, the usual division of the kinds of evil into three crops up, anyone can see. At the end of his work Krauss also makes the following observation :

"If one compares the Southern Slav belief in witches with the western, preferably with the German and Italian, from which the Southern Slavs have borrowed so many elements, it strikes one that in all the tales a wizard is not mentioned. Further, a very subordinate position is assigned to the devil. In the German and Italian trials of witches, the devil plays a very important part. The witches sell body and soul to him with the repetition of special forms of oath. There is no mention of this in the Southern Slav belief in witches. It is remarkable that with the Southern Slavs the gift of prediction is in no way ascribed to the witches. Vjestice was originally not a prophetess, but merely a woman physician. Prediction even to-day does not seem contemptible to the Southern Slavs. At certain festivals in the year, e.g., on St. Barbara's day and at Christmas, men and women still foretell the future even at the present day; the women, e.g., from fruit seeds, the men from the flight of a bird or from the entrails or shoulder parts of slaughtered animals. With the Southern Slavs there was obviously not originally, as with the Germans and Italians, a special class of priestesses, prophetesses and physicians. The strict democratic-separatist system of the household community which the Southern Slavs have, to some extent, as an ancient inheritance, preserved even to the present day, offered no hindrance to the development of colleges for priestesses. Moreover, women in the lower class of life of the Southern Slavs occupied and still occupy quite a subordinate position. To the woman who was bought, like any other object, from her parents and relatives, could not possibly be conceded a higher mental capacity which might have placed her above her husband. Consequently, the trials of witches of the West could find no favourable ground in the Balkans. The mediæval demonology of the West found no entrance here."

In Herzegovina people recognise a witch by the dull, deep set eyes, the eyebrows which meet and a little moustache below the column of the nose (Grgjič-Bjelokosič).

On the island of Lesina in Dalmatia all women were regarded as witches who were not on the best of terms with God and were born under a particular star. These are old, shrivelled women with grey hair, a long turned-up chin and sunken eyes (Carič).

According to Toeppen, there are in Masuren "women who have red eyes especially old ones—and who are bad people; they can bewitch, and the whole village is on its guard against them." Also by the evil eye, old women in particular are dangerous. People can protect themselves by going behind her and, without speaking a word, beckon with the index finger three times behind her back.

In Russia also, belief in witches has been reported.

"How easy it is to get the reputation of being a witch," says Löwenstimm, "one can see this from the enumeration of the signs by which the people recognise witches : in the Province of Vilna, *e.g.*, the people in the Molodetshno district believe (according to P. Bywaljkevitsch) that a witch, on the evening before Midsummer Day, cannot refrain from begging something from her neighbours, especially fire and matches. In general, our Russian populace imagine a witch as follows : She is a woman advanced in years, lean and bony, slightly hunch-backed, with tangled hair or hair hanging out from under her head cloth, a wide mouth and a prominent chin. According to tradition, in South Russia the witch has besides a little tail and a black stripe down the back from the nape of the neck to the shoulder " (according to P. Ivanov). In Russia, too, people believe in the witches' Sabbath : at night on Midsummer Day, all the witches fly out and they meet on the " Bald Mountain" (Lysa gora) near Kijev.

Unfortunately, this belief has required more victims even in recent times. Löwenstimm quotes several cases which have occupied the attention of the Russian courts. Thus on February 4th, 1879, in the village of Wratshevka in the Tichvin district, a soldier's widow, Katharina Ignatjev, who was regarded generally as a witch, was shut up in her house and burnt alive in the presence of 300 onlookers; the jury acquitted 14 of the accused, three were condemned to church penance. In the Ssuchum district in the year 1889, a widow, one of whose sons had died suddenly, the other falling ill soon after, was designated as a witch by the fortuneteller whom the sick son questioned, and thereupon, with the consent of this, her

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own son, the old woman was formally cross-examined by the peasants, tortured, bound to a pole, and on this roasted as on a spit. Löwenstimm cites a few more of these cases and points out how here "in good faith" all the ties of kinship, even the most sacred, are ignored. The following case given by Löwenstimm is connected with the above-mentioned idea of the Little Russians that witches have a little tail :

"In the year 1875 the peasants of a village in Poljessje (according to Kantorovitch) wanted to test their wives to find out which of them were witches. First they went to the landowner and asked for his permission to bathe the women in the pond, but, as the landowner did not permit them to undertake this experiment, they began to have their wives examined by the midwife to find out whether one or other of them had a tail."

In this case, however, another idea is involved also, and this too, as we saw, was also preserved elsewhere from the Middle Ages, the belief that a witch floats on the water; hence the trial by water.

The country people (and to some extent the clergy) in Upper Bavaria believe in witches even to the present day, as Höfler tells us :

"In the Isar Valley, want of milk in cows is still ascribed to the influence of witches, for which reason many peasant women will not sell milk; sold milk which boils over, by means of witchcraft, makes the milk curdled in the cow's udder; also the skin on the milk is still called 'the witch'; the 'witches brooms' are still put into flax and corn fields (consecrated 'palm branches,' *i.e.*, willow branches); the various strong-smelling 'witches herbs' are still put into the dark corners of the stables, to keep witches from the stable and, according to popular belief, also to keep away disease. Even to-day, a woman who suspects witches is said not to lend anything out of her house for three days, and the individual who, at the end of this period first comes into the house to borrow something is the evil-intentioned and the ill-disposed woman. On spilling the salt on the table, a pinch of it is still thrown backwards over the head with the words : 'Witch stay behind me !'"

In Styria people believe they can protect themselves from the harm a witch has done by the bewitched person catching her at cross-roads, cutting off her tongue and burying it underneath the threshold of the house; as soon as the tongue has dried up, the illness also disappears (Fischer, quoted by Löwenstimm).

The signs by which the country people in Brunswick recognise a witch are, according to R. Andree,⁵ as follows :

"A witch is easy to recognise : she cannot step over objects placed crosswise, e.g., brooms (general). A witch begins to tremble if a piece of blackthorn is held before her, for Christ's crown of thorns consisted of blackthorn, and, therefore, a witch cannot bear it (Christian). Also, on Maundy Thursday, the witches can be recognised if one carries with one an egg laid before sunrise on this day. One has only to beware that the witch does not squash the egg as otherwise its possessor dies. A girl from Schandelah recognised a witch in this way : when she was on her way home, the witch followed her, squashed the egg to pieces and the girl fell down dead."

Valerian hung in a room gives protection from witches, and also causes them to be recognised; if an old woman enters and the bunch begins to move, then she is a witch. Besides this, dill and wild marjoram are effective. Both plants neutralise the acts of witches.

Likewise in Scandinavia, in particular in Norway, witches, as we learn through Asbjörnsen, play a prominent part. They have power to change into all sorts of animals, and do very grievous harm to their own husbands in their possessions, body and life. A Sunday child can recognise them and frustrate their malicious tricks.

But belief in witches occurs even further north, viz., in Greenland, where Cranz observed it. He says :

When a woman becomes very old, she has to pass for a witch and they often like doing so. The end, however, is usually that, at the least suspicion of enchantment they are stoned, thrown into the sea, stabbed or cut to pieces. . . . Their trial of a witch is very brief. If an old woman gets a reputation for being able to bewitch (in which she herself is to blame because she tries to cure illness with all kinds of tricks and quackery), then if a man's wife or child should die or his arrows miss the mark and the gun misses fire, then the soothsayer puts the blame on such a poor woman, and if she has no relatives to protect her, she is stoned by all the people in the country, thrown into the sea, or cut into little pieces, just as their desire for vengeance suggests. Indeed, there are examples of a man having stabbed his own mother or sister in the house in the sight of all the people and nobody even reproached him for it.

That the belief in witches has not yet even disappeared in Greenland we learn from v. Nordenskiöld, who says :

"Little as the Eskimo is inclined to superstition, yet they often seek the causes of the misfortune and adversity which have befallen them in witchcraft, and as not so very long ago in Europe, so in Greenland people used to lay the blame preferably on elderly women."

The supernatural power of women is also known in South Africa. Natives in the Orange Free State believe that when a man curses anybody it does no harm to the person concerned, but if a woman curses seriously then the curse is certain to take effect. "That people are afraid of mysterious powers in woman," says Gutmann, of the Wachaga (East Africa), "the following idea shows. If a woman strikes anyone with the cloth or skin which clothes her body the person struck is bound to die. Therefore she protects her property from theft by touching each piece with a leather apron. Made safe in this way, she brings death to any thief. Even the leopard is afraid of this magical apron of women. But for this very reason the leopard kills any woman who strikes at it with her garment, acting from the point of view, which to the negro is quite logical, 'If I am to die, then you must accompany me on the way to the realm of the dead.'"

Among the Ama-Xosa, according to Kropf, belief in witches is widespread. They even have two kinds of witch-priests, one of which, the Amagqira awokumbulula, have to discover and remove the objects, whilst the Isanuse or Amagqira abukali, the "sharp doctors," have to smoke out the witches. It seems as if the Isanuse smoke out men much oftener than women. The explanation is simple. The property of the individual found to be a witch is confiscated by the chiefs and therefore it is a matter of course that wage-earning rich men are smoked out rather than poor women (cf. Figs. 923 and 924).

Witches are much feared among the Wachaga in East Africa, and with a certain justice, since, according to Gutmann, they do not exist only in the popular imagination but lead their diabolical existence in the midst of the people as mixers of poisons and agents of all knowledge of life-destroying forces.

"The superstition of the people has divided them into three classes :

"(1) The witch who causes swelling. To her people trace swelling of the abdomen and symptoms of dropsy.

"(2) The real poison witch, of whom people maintain that she tests her drugs on little children by giving them food in secret.

"(3) The 'consuming witch.' She causes death which appears with wasting phenomena.

MODERN WITCHCRAFT

She might also be called the sympathetic witch, for she is said to cause death by collecting whatever she can get of the body of the person concerned; hair from his head, spittle, nail cuttings, urine, threads from his clothes, etc. All these she buries with curses."

On the Gold Coast belief in witches is so deep rooted that even conversion to Christianity is powerless against it. Vortisch² relates that even a teacher of the Basel Mission had to be dismissed because he constantly accused the wife of a catechist of witchcraft and always hid his child from her.

Katscher records of the Chinese :

"As in other lands, there are in China also persons, old women, who pretend to be allied with certain supernatural spirits and to conjure up the souls of the dead and to be able to make them talk with living people. In all the bigger Chinese towns, there is an immense number of witches. In one part of the Province of Kwang-Tung, there is a kind of witch who pretends to be able to bring about the death of human beings by certain prayers and other hocus-pocus. Their services are mostly resorted to by married women who, because of cruel treatment or for other reasons, want to get rid of their husbands. The witch to whom they resort collects the bones of sucklings in graveyards and prays the evil spirits of babies to accompany the bones to her (the witch's dwelling) where she grinds them to a fine powder. This she sells to her clientèle who are given instructions to give it daily in water, wine or tea to the persons to be killed, whilst the witch prays to the evil spirits of babies to kill the persons hated by her customers. Sometimes for greater certainty, they hide an unpowdered part of the bones of a baby under the bed of the unsuspecting husband. The authorities have made repeated attempts and with success to remedy this evil. Gray records several cases of mass-executions of these witches."

Freiherr v. d. Goltz also speaks of these witches, but he gives a somewhat different description of their doings. He mentions an association of women which bears the name *Mi-fu-chiao*, *i.e.*, "The science of casting spells on men."

"The head of this association is an old woman who, by her magical influence, induces many women and girls to become members. When once they have entered, they have to carry out the peculiar customs of the association. In the silence of midnight, they repair secretly to a remote burial ground and, after they have discovered the grave of a boy or youth who has died while still in possession of his virginity, they burn incense before his grave; then they pray to his soul to help them in their work. After having thus, as they believe, conciliated the ghost of the deceased, they open the grave and each of the women takes one or a few of the bones home with her. When members are admitted, they receive one of these bones with the injunction that they must carry it on their person or hide it in the house. The new members are also taught the songs which are sung while practising witchcraft. Thus instructed, they can bewitch their husbands when they quarrel with them. For this they inscribe the eight characters which (after the system of the 10 heavenly stems and the 12 earthly branches) state the year, the month, the day, the hour of the birth of the husband on one of the bones in their possession, and either bury this in a hidden place or throw it away on the seashore. The man thus bewitched is supposed to become insane in a short time, or he is seized with a violent illness for which there is no cure and of which he soon dies."

Then von d. Goltz records further that the head of this society of witches was arrested, but after twenty years' imprisonment was set free in the year 1887. Now she lives, apparently peacefully, in her native village, but—

"A month ago a pilgrim was walking along a lonely mountain path in the vicinity of this village and, at midnight, came past a grave where several women were assembled who had kindled incense and were making all manner of strange movements. On being asked why they were there, they replied that they were praying for success for their lottery tickets. The man, however, put no belief in this statement, all the less as he noticed a suspicious bundle. When he opened this, he found human bones in it."

WOMEN SAINTS

Now this man had no doubt that these women belonged to the Mi-fu society, and he learnt, too, in the next town that the old woman, the discharged prisoner, had already forty young women again associated with her.

We see that the belief in witches in this case has continued up to our day. [The modern cult of spiritualism can also be considered in this connection and the number of female "mediums" compared with those of the early witch cults.]

6. WOMEN SAINTS

Frh. v. Reitzenstein¹³ writes: Women saints have really no direct connection with work of anthropological content on "Woman." However, as the worship of saints has in general an anthropomorphic bent in the case of women saints in particular, and just as the ascetic side of Christianity, which became morbid as a result of the so-called "abstinence," sought preferably sexual equivalents, it created cults in which the realm of sexual ideas was celebrated in actual orgies. We have already referred above to this aspect in the worship of Mary. This autoeroticism, however, also expressed itself in saintly form. People laid at the door of the ancient Roman state religion and its representatives things which resemble the circumstances of typical erotic day-dreaming, *i.e.*, they have proceeded from the erotic imagination of asceticism and are depicted in detail. Saints of this kind then were once real human beings and feigned quite a special, mostly pathological way of life. In the great majority of cases, however, there was a religious worship, the popularity of which Christianity was not able to displace and for which they adopted a female saint either under the same name or under a similar one. But they could not be called goddesses in the former sense, just as little as can all the traditions of the various places of pilgrimage dedicated to Mary be connected with the biblical Mary. They are local religions merely held together by a common name. Here and there the missions find various forms of religion which they cannot dislodge. All these fundamentally different local religions are Christianised according to personal taste, and, as there was no alternative, identified with Mary or another Christian saint in accordance with a decree of Pope Gregory the Great, who was born in Rome about 540 and died on the 12th March, 604. In an order, very wise for Christianity, he forbade the destruction of "heathen" temples. Only the images of gods were to be destroyed, the interiors sprinkled with holy water, altars built, relics deposited and Christian temples made from old places of worship. In this way the people would afterwards, as before, visit the places which had become dear to them and continue to hold their sacrificial feasts—but in Christian form. Thus it depended on individual missionaries which Christian figure they set up as "object of worship" in a Teutonic place of worship. Hence it often came to pass that figures of worship were not to be identified at all with Christian saints, and thus arose names still half Teutonic which were quite unknown to the Church, and which even to-day are not recognised Christian saints, but are suffered by the church only as "saint like": these are the very ones most important to us. Thus. originally, Holden and Perchten are only troops of demons; by personification there arose their woman leader, Holda or Perchta, who may have enjoyed greater reverence (or, better perhaps, fear) than Freia, and who possibly had much less religious significance.

There can be no doubt that, *e.g.*, at the centre of the circle of cults of female fertility a demonic being (which modern philology has persecuted) plays a great part, namely, the figure of Holda or Perchta. The attempts at explanation which have been made on the philological side are all too artificial and must be quite without significance for ethnologists, for the survivals of the Perchten and Holda religion are perhaps the most important of all that we have of Teutonic antiquity.

They are simply not to be argued away, and research should explain them properly and give up the denial which is unworthy of science. It goes without saying that it was a mistake that Perchta and Holda and similar figures were figures of former deities which were connected with Freia, Frigg, etc. We may say now that the remains which we have of Holda and Perchta represent essentially the same image as they represented formerly. The material and important thing is the worship and the many survivals in popular tales and customs. These are naturedemons in which people used to believe with the same fear as superstition does nowadays, and at certain places where there was reason for it, arrangements for acts of worship were to be found which would certainly have led to images of gods if our Teutonic life had had the good fortune to evolve without interference from outside. The evolution, however, was interrupted, and in place of nature-demons Christian saints appeared. Details of the *Perchten* festivals are to be found in Andree-Eysn.

The female representatives of this worship are to some extent very strange saints who were not officially recognised by the church at all. Foremost among them is Kümmernis, doubtless, as her Latin name virgo fortis suggests, a female phenomenon with a masculine form. Popular etymology made this a Wilgefortis and invented for her the legend of the "constant" virgin. According to the Christian way of thinking, there is a predilection for praising the constancy of a female being who is unfaithful to her true vocation, and in the morbid imagination of the Christianity of that period people could not interpret a virgo fortis as anything but an ascetic woman. There is no doubt that this saint is one of the most interesting of all the ecclesiastical conceptions. As we have said, the Church has not recognised her. No chapels have been dedicated to her, but many images of her have been preservad. At the present day, people pray to her for children, and wax toads at her images show that she was probably prayed to in the case of women's ailments (hysteria, etc.). She is represented as a bearded virgin with a long robe, crucified like Jesus of Nazareth. It is, of course, not to be wondered at that a certain kind of research declares her images to be misunderstood images of Christ; this, of course, explains the type of art but not the ethnological type, and the latter is the starting point. However, it is true that the legend did not crop up till late (first about 1419). As mentioned above, she was called Wilgefortis or Comeria. In order to get away from a heathen wooer, she prayed God to disfigure her as much as possible. He thereupon caused a beard to grow on her, whereupon her father had her crucified. It is interesting that underground passages are often connected with the chapels where there are images of Kümmernis, as in Kissing near Friedberg (Upper Bavaria). There a field chapel with underground passages and an image of Saint Kümmernis and the name of St. Wilgefortis stands on an artificial hill. It is interesting also that the worship of this strange saint occurs over a very wide territory. One finds it in Spain, Portugal, France, Holland, England, Belgium, North Germany and, in particular, in Bavaria, Switzerland, Tyrol and in Salzburg.

Another series of such figures is connected with the "lock." Aigremont draws attention to the relationship between the female abdominal organs and a lock (padlock). Thus, for example, it is the custom that if the bride has bathed on her wedding day but wants to remain childless for a few years, she puts a padlock and key in her bath water, first, however, locking the padlock. We have no very thorough knowledge of the appearance of the key with our forefathers. But we do know that the ancient Nordic house doors could be locked, as also the doors of the bedrooms and the store rooms. For this, iron padlocks with keys were used. The oldest keys from the first century in the Christian era show Roman influence. Nevertheless, it is an ancient custom for the keys to be carried by housewives as a sign of their dignity.

A similar set of saintly figures—to bring forward another example—connects the imaginary world of ancient Rome with that of the Celts, and, in particular, in respect of purification ceremonies.

Thus Nork, in his *Festkalender* (Stuttgart, 1847, pp. 153 ff.), says that "the Church yielded to the pressure of the populace, and this time, as so often before, gave delicate attention to heathen scruples and made up to the people for the loss of the Lupercalia by a festival likewise consecrated to purification. It was, too, not difficult for the Pope to derive the necessity for a purification ceremony from Luke ii. 22. The saint who arose for this was St. Agatha.

Agatha, a heathen virgin from Catanea in Sicily, was converted as early as the year 10, and in order to save her virginity fied to Malta, where she supported herself by needlework. Taken prisoner during the persecution of Christians by Decius and sent to Catanea in charge of a procuress she, nevertheless, guarded her chastity carefully, and among other tortures had one of her breasts cut off. She is reputed often to have prevented the eruption of Etna, warded off famine and averted the destruction of the town. In Rome, she is worshipped as the patron saint of women and formerly a festival of the Bona Dea was celebrated by the matrons at which no man could be present. Now Bona Dea is the Latin translation of the Greek name Agatha, as the virgin Demeter (Ceres) was called by the Greeks who inhabited Sicily, and she was worshipped under that name, in particular in the Sicilian town Catanea or Catina, as the patron saint of which the Romans called her also Ceres Catinensis, and of her Cicero records (in *Verr.*, IV., 45) that no man might approach her temples. Thus we have then the "chaste Agatha." The reason, of course, is not in "chastity" as a concept of Christian morality, but in a woman's cult, part of which demanded the exclusion of men.

In addition, Nork (pp. 140 ff.) records further, in order at least to draw a parallel:

He says that Brigitte—in an old glossary she is called Bridgit, the daughter of Dagha, a goddess of Ireland—an Irish virgin, even in her early youth showed signs of her future saintliness, and a flame was often seen over her dwelling house. Hence in Ireland in the present convent at Kildare, an ever-burning fire was kept up for her, and as in Rome for Vesta, a thick hedge surrounded it, which men were not allowed to approach. In order that the sacred element should not be made unclean by the breath of the mouth, the fire had to be blown only with bellows. Legend has it that angels were her constant companions and that once, too, they brought her the holy water which she needed to heal a leper. Her prayers procured for King Illando (Ireland ?) victory in a battle, and again it was by virtue of her prayers that an empty barn was filled with corn. In Flenstreet there is a church dedicated to her. Kildare in Ireland is said to get its name from an oak beside which she built a nunnery. This convent took the place of the former temple of the goddess which no man might enter.

CHAPTER XVI

THE WIDOW

1. MOURNING

"Now hast thou given me my first pang With thy last breath ! Thou sleep'st, thou hard unfeeling man, The sleep of death. Then the forsaken wife looks on before The world is drear. Loved have I and lived but now no more Am living here. I retire within myself from emptiness ; Let the veil fall, There have I thee and my past happiness Oh thou my all."

Thus Adelbert v. Chamisso makes the widow lament at the death bed of her husband, and he could not sketch a more apt and finer picture of the situation of the true wife. From the sixteenth century also, we have a pictorial representation of a German widow and her lament. This is a woodcut by Hans Burckmair (Fig. 928) from which we become acquainted with the widow's dress of that period and at the same time learn that the corpse is carried to the church on an open bier without a coffin, as was the custom in past centuries. J. von Schwartzenberg wrote the following lines on this :

> " I cry and wail in grief and dread, My good man alas is dead, Now am I in the vale of sorrow And too am counted a poor widow. Much comfort had I as a wife, Now bear alone my woe and grief; More sorrow in my heart I feel That to another would I reveal."

At the opposite pole are conditions such as Powell has described from New Britain, but they are exceptional. A chief had carried off a woman from a hostile tribe to take her as his wife, and in doing so her existing husband was killed. At the wedding feast, the latter was eaten and his widow calmly shared in the horrible meal.

Although in this case we do not find any mourning, or at least it is stifled at once, yet among other tribes we find it customary for widows to be obliged to mourn the departed husband for a prescribed number of years, or even for the whole of the rest of their lives. This mourning, apart from the loud lamentations, mostly consists in the habitual adornment and pretty clothes being laid aside and replaced by ugly and coarse clothing, and the cleanliness and care of the body and the hair neglected. The body sometimes also is smeared intentionally, injured and mutilated.

There can be no doubt that there is a superstitious motive again at the root of our mourning customs. The married woman in the period of patriarchy is exactly like the servants, who were also reckoned as part of the family. She is the property even of the dead man, and has to follow him into the grave and beyond. This custom extended into the era of history and its shadows are only now dying out. Just as the bride was declared dead for her ancestors, and hence regarded these as enemies and therefore veiled herself, so the widow who did not follow her husband was persecuted by his ghost. She veiled herself, smeared herself with dirt (with savage peoples often the defensive sign of a woman who rejects a man's wooing), laid aside all adornment and offered sacrifice by self-mutilation. It was a very common custom for the widow to be beside her husband or to go to him in the grave and to stay there for several days. A hut was put up at the graveside and there the widow had to live for a longer or shorter period.

In New Guinea (among the Kai), the widow (and, in the reverse case also, the



FIG. 928.-German widows. Sixteenth century. (After Hans Burckmair.)

widower) is obliged to spend a few weeks (among the Bukaua until the mourning dress is ready) in a mourning hut hastily erected at the grave (cf. Keysser). When the weeks of the strictest mourning are past, the widower appears in a mourning hat of bast, and the widow with a long mourning net (cf. Fig. 929). The grave is hedged round and with this a feast is connected. The length of the whole period of mourning varies from six months to two years. In Dutch New Guinea, a white garment of bark material is used (see Fig. 930).

In New Caledonia, widows blacken their whole body with soot as a sign of mourning and draw tears on it with white chalk (see Moncelon).

Among the Chippewa Indians, when a woman's husband has been carried off by death, she blackens her face; in addition, she has to fast and may not wear ornaments and comb her hair for a year (cf. Mahan, p. 184). Among the Choctaw Indians, the widow laments for a month at the open grave and, in this period, she neglects her dress. After a month, a feast is given at which the grave is closed. The cries of lamentation which the widow raises at this are called "the last cry" (Benson. p. 294). Probably the widow was formerly pushed into the grave. This lamentation at the open grave was also, according to an old engraving (Baumgarten), performed by the South American Indians in Paria (Fig. 931).

The widows in the Las Pinos Indian Agency in Colorado, as a sign of mourning, smear their faces with a substance made from pitch and coal which, however, is only smeared on once and left until it falls off. A. J. McDonald, Yarrow's informant, did not know of any other mourning customs (p. 128).



FIG. 929.—Widow's dress. Bukaua. (After Neuhauss.)

Among the Dakotas, according to L. S. Turner (p. 164), the wives as well as the mother and sisters of the dead man during the first three days after the burial take off their mocassins and their trousers and cut their legs with butcher's knives to show their grief. Then one sees them going about streaming with blood.

Before the year 1860, records C. E. McChesney (p. 109), at the death of a Sioux warrior, the whole tribe gathered in a circle. The widow cut herself on the arms, legs and body with a flint and cut off her hair. Then she went round in the circle and as often as she went round, so many years she had to remain unmarried. While doing this, she had to lament and wail. Then amid general lamentation, the corpse was put on a wooden platform, and while this was being done, the women cut off their hair and hacked their arms and legs with flints.

Such self-inflicted injuries of mourning wives are, according to Rhode, customary also among the Bororo Indians in Brazil.

"When a man dies, the wives sing a song of mourning. and the female relatives of the dead man cut their breasts with sharp stones. With most women I saw the breast full of scars from such cuts."

Among the Kaffitscho (Abyssinia), on the death of a man the wives lash their bellies below the navel with thorny wild rose twigs till they bleed; they also shave the hair off their heads (Bieber).

Besides the mourning customs among widows of the Chippewa Indians already mentioned, we learn some very strange ones from McKenney (p. 292). He states that he has often seen women walking about with a roll of material (cf. Fig. 932). When he asked what this signified, he was told that they were widows who carried these things and that this

was the badge of their mourning. For a Chippewa wife who loses her husband, it is absolutely necessary to take her best dress, roll it up and tie it together with her husband's sash and, if he had ornaments, as is usually the case, fasten them at the end of the roll, round which a piece of cotton is tied. This bundle is called her "husband," and people expect her not to let herself be seen anywhere without it. When she goes out, she carries it with her ; when she is sitting in her hut, she lays it at her side. This sign of widowhood and mourning the widow has to bear until the family of her dead husband thinks she has mourned long enough, which is generally the case after a year. She is then, and not before, released from her mourning, and is free to re-marry. She has the right to take this "husband" to the family of her dead spouse, but this is regarded as dishonourable and rarely happens. He once visited a hut in which he found one of these badges of mourning. They vary in size according to the quantity of material which

the widow can use. It is expected of her that she will take her best for this and wear her worst. The "husband" which he saw was 30 in. high and 18 in. in circumference. When presents are shared, this "husband" gets the same share as if he were alive.

This is reminiscent of a custom which existed among the Ostiaks, as we learn from Pallas.

He says : "A kind of deification happens to dead men among the relatives. For people make wooden images which are supposed to represent the dead man, and at the memorial feasts



FIG. 930.-Mourning dress made from bark-fibre. Dutch New Guinea. (After v. d. Sande.)

which are held for them their share is placed before them. Indeed, wives who have loved their dead husbands put these dolls beside them in bed and never forget to feed them at meal times."

Of the Shushwap Indians in British Columbia, Boas states that the widows have to put up a sweating hut at a bay and sweat every night as regularly as they bathe in the bay. After this, they must rub their bodies with tree sprouts; these twigs must only be used once and are then stuck in the ground round the hut. The woman in mourning uses her own dish and cooking utensils and she must not touch her body. No huntsman may approach her because she brings ill luck. She may not let her shadow fall on anyone because this person would otherwise fall ill at once. They use thorn bushes as pillows and as beds to frighten away the ghost of the dead man; thorn bushes are also laid round the bed. In these measures we can no longer see any reverence for the dead man. Rather we see that from the evil which the widow may bring upon others she is regarded as tabu, and she must be very careful to protect herself from the return of the dead man. Therefore, she has to surround herself and her bed with a hedge of thorns and sleep on thorn bushes.

On Bali, according to Jacobs, widows are said to visit the corpse of the husband in the house where it has been placed for burning, and here as a sign of grief, they handle the penis of the dead man.

The arrangement of widow's dress so familiar to us is to be found also among other peoples.

Among the Samoyedes, as Pallas records, widows have to loosen their hair plaits



FIG. 931.—Dance of the "Sauvages de Paria" around the husband. (After Baumgarten.)

and afterwards, besides the usual two plaits of hair, they have to wear a third at one side over the ear for the rest of their life.

A. R. Hein reports that the Dyaks in Borneo have special hats for widows. They consist of kettle and funnel-shaped plaited work which are called *tangpoi* hentap or merely hentap, and have white lace on the outside. According to other authorities, widows have to wear white clothes in the first period of mourning, and are also obliged to have a white head covering, which consists often only of a piece of white calico which is tied round the head after the fashion of our kerchiefs; this head cloth is called sambalayong.

Among the Basutos in South Africa, according to Grützner, after the burial, the corners of the cowhide in which the corpse was wrapped are cut off and cut into thin strips which are bound round the widow's forehead.

Of the Angoni widow (East Africa), P. Häflinger (quoted by Fülleborn²) records: "When a man has died, his wife, as a sign of her widowhood, puts a band round her brow; she wears this for six months or a year; when this time is over, she calls her f^{r} iends and relatives together, goes with them to a neighbouring stream and lights a fire; she then takes off the band and burns it in the fire. The ashes are

then thrown into the stream and even the place where the fire was is washed clean as a sign that her widowhood has now been buried in oblivion. Then they all return to the hut where a ceremonial feast takes place. Now the widow can remarry."

Wiese reports that the period of mourning lasts four years; Porter that it lasts two years. Fülleborn² adds that the custom of the mourning bands is also to be found among the neighbouring tribes, *e.g.*, the Wahehe, etc.

According to Fabry, the Wapogoro widow in Tanganyika (East Africa) mourns for a year. As outward mark of mourning she winds a string three or four times round her neck, and later, she is allowed to marry again.

Among the Hottentots, according to Kolben and G. Fritsch, one often finds



FIG. 932.—A Chippewa widow, with the "model" of her late husband on her arm. (After Yarrow.)

mutilated fingers in the female sex, and a joint of the little finger is most often missing but sometimes also the last joint of the next one. Kolben gives as the reason that it is done among the widows who want to remarry. However, it also occurs to a certain extent in children to keep away greater misfortune.

Among the ancient Israelites, a special widow's dress was likewise prescribed (Genesis xxxviii. 19).

The widow's garb of the Mentawai islanders is described by Maass ¹ whom we have to thank for Fig. 933. "The banana strips of the apron and the covering of the upper part of the body are cut wide; pearls, bracelets as well as all other ornaments are taken off; and also the flowers which have such an exciting effect. The hats are worn smooth without strips of banana. The ornaments are not put on again till she remarries."

In the Kei Islands, as a sign of mourning, women go about with their hair hanging w.-vor. III. x

loose; on the Tenimber and Timor Laut islands, the widow wears a piece of the burial garment of her dead husband in her hair. The mourning garb of widows on



FIG. 933.—Mentawai woman in mourning dress. (Photo: A. Maass.)

the islands of Leti, Moa and Lakor consists of a short sarong which reaches from the hips to the knees; the hair is not combed till the new moon appears. The mourning widows in the Luang and Sermata islands dress themselves in the same fashion.

They take off all their ornaments, and if they wear bracelets which cannot be taken off, they wrap these in old dirty cotton. The widow in mourning may not visit a strange village for a whole year, and at home may not answer anyone; she has to act as if deaf, and may not join in the singing (Riedel ¹).

Among the Aru islanders, the woman whose husband has died leaves her home and smears with *kalapa* oil every house in the village which her husband was accustomed to frequent. Then she takes off her usual garment, the sarong, and puts on only a hip cloth which is made like a fringe of palm leaves and is 25 cm. wide (Fig. 934). Her hair is shaved off and round her head she puts a band of palm leaves. Also round her upper arm and the legs just below the knee, palm leaves are bound. Round the upper part of the breast also, two bands are put, which cross in front and are fastened under the armpits; a little mat which hangs down behind is fastened in front. Broad stripes are made on her body with charcoal.

This dress is worn by the widow up to the time when the remains of the dead man are taken out of the coffin and conveyed to the shore to be purified. The other inhabitants of the village then go to the shore together, the men with the image in wood of the quson or qusing (i.e., the penis), and the women with the koda (the female organ), carved from gabagaba. All clothes and bandages of mourning are taken off and burnt together, and singing all kinds of erotic songs, the people dance about the fire as if possessed. Meanwhile, the men put the image of the guson into the image of the kodu offered to them by the women, and imitate in doing so the motions of copulation in order to excite the widow sexually, and to make her understand in this drastic way that she may now marry again. Children take part in this peculiar ceremony. For three days more, the villagers sing and dance in front of the house where death has taken place, because the widow has taken off her mourning garb. If the dead man has had several wives, the same ceremonies fall to their share all at the same times (Riedel 1, 6).

Of the Turks of Central Asia, the following is related by Vámbéry :

"The female members of the family gather together in a separate tent and, amid sobbing and weeping, sing songs of lamentation. The

wife and daughter of the departed put on mourning clothes and cover their heads with a special mourning hat; nobody may greet or talk with them and even unavoidable questions and answers have to be exchanged in the same tone of lamentation and howling. At the act of burial, women cannot be present; they have to wait meanwhile in the already mentioned women's tent and amid uninterrupted lamentation, scratch their cheeks with their nails, *i.e.*, destroy their beauty, and one often meets widows who bear scars as permanent signs of mourning because of the heavy loss which they have suffered in the death of their husbands. The bearing of the wailing wife is in general extremely miserable, and has a particularly distressing effect on foreign onlookers. From the day of the death of the husband, the widow, except when asleep or eating, has either to weep or sing songs of lamentation for a whole year, for which reason the widow's tent immediately attracts the traveller's notice and, in spite of a long stay in one of these villages, it is difficult to become accustomed to the heart-rending sounds which penetrate to a great distance."

Among the Hindus, even at the present day under English authority, the



widow in mourning

garb. (After Riedel.)

mourning duties of widows are very severe and painful. Schlagintweit has given a detailed record of them :

"Great is the wife's grief for her dying husband; it is increased not diminished if death has taken place before the marriage has been consummated, for the virgin widow is for her whole life subject to the same limitations as the matron who has the consolation of children and grandchildren by her side. The widow still follows her husband's funeral procession, and if she has no son, even sets fire to the funeral pyre on which the corpse is imperfectly burnt to ashes. Immediately after this, the widow is taken to the river or the village pond ; here she takes off her clothes, breaks the iron wristband which adorned her arm as the symbol of the love of her husband, throws it into the water, washes from the soles of her feet the red colour which has hitherto been put on daily, and must suffer, amid crude ceremonies, the badge of her dignity being cancelled, a red circle, which shines from her brow, like the planet of Venus from the dark blue sky. According to the rules of the sacred books, the widow must deny her every wish and give up every pleasure of life. For the salvation of her husband's soul, she is to take only one meal a day and avoid meat and fish as well as all sweetmeats; in addition, she has to fast often and to impose on herself all sorts of mortifications of the flesh. She must choose the most unbecoming clothing, and her hair, which used to be combed, oiled and arranged in a becoming knot at the back of her head, is no longer looked after. Looking in the mirror is forbidden. In place of a couch of soft cushions with a mosquito net, a bast mat with a block of wood or a piece of wicker-work is her pillow."

As in the above-mentioned case, so also among other peoples, it is often the thought of the change for the worse in her own material position which is expressed in the widow's lament. Andree 4 cites two examples of this.

One quoted from B. Hagen is a lament of the widow of a Bogadjim in former German New Guinea, who sings at her husband's grave :

" Oh my good man My good man is dead My man, strong and handsome as a walnut tree, He was so kind ; When he ate, he always gave me a big share of the food."

A Bogadjim widow is shown in Fig. 935.

A second song is translated, the lament of the Baronga negress for her dead husband :

"Thou hast forsaken me, my husband What shall I do now ? Thou hast fed me ! Now I am despised and forsaken !"

The missionary Posselt relates of the Bapedi from Khalatolu in the Transvaal that "there are a great many customs which the wives of the dead man have to follow. First, there is the horrible lamenting the dead. Then, secondly, the wives have to be fumigated by bending over a jar in which all kinds of herbs are being burnt. This is rather a long torture, for the smoke, which, as they have to sit kneeling close over the vessel, is quite hot in their faces, makes their eyes smart, gets up their noses and into their lungs. However, 'it prevents death from passing over to the wives and through them to others.' Thirdly, the root of a certain plant is burnt to ashes and these scattered over a special dish prepared for this purpose. Fourthly, another *selare* (medicine) mixed with fat is smeared on their heads, and the hair, if the dead man was of high rank, is shaved off except for a strip about $\frac{1}{2}$ in. wide which is worn round the head like a wreath. Other women of the kraal do all this. Fifthly, a python is killed (only at the death of an important chief) and the wives have to wear strips of the skin wound round their head."

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Widows' mourning with the Serbians and Croats really lasts only 40 days; but the black head-kerchief which marks the widow must be worn for a whole year, and also in the year of mourning the widow may not visit the spinning room or the dances or go to a fair (Krauss¹).

The widow in mourning in civilised countries used to be accustomed to wear as the last visible memorial of her husband, a curl of his hair in a locket or a plaited chain of his hair on her watch or as a bracelet. We find such relics far more precious



FIG. 935.—Women from Bogadjim, New Guinea. On the left a widow; and on the right a married woman. (After Hagen.)

and more numerous among some primitive peoples. Thus, among the Sambo and Mosquito Indians in Central America, after the widow has mourned for a full year at the grave of her husband, his remains are removed from the grave and now the widow has to carry them about with her for a second year of mourning. At the end of this, they are deposited on the roof of the house (Bancroft).

The widow of the Tautin Indian in Oregon has, according to Ross Cox, similar obligations. He states that after the cremation, the widow collects the bigger bones in a container of birch bark which she is obliged to carry on her back for a year. She has now to do slave service for

all the women and children, and if she is disobedient is severely punished. The ashes of her husband are collected and laid in a grave which she has to keep free from weeds; if weeds appear, she has to dig them out with her fingers. In this, she is supervised by her husband's relatives and tormented. Often the poor cruelly tormented widow takes her own life. If she survives the torture for three or four years, then she is released from it, when a great feast is given at which guests from a great distance appear. These are given presents. The widow appears with her husband's bones on her back. These are taken away from her and put into a box which is fastened with nails and set up 12 ft. high. Her behaviour as a faithful widow is then praised; a man sprinkles feathers and oil on her head and then she may marry again or live an undisturbed life. Most of them, however, have no desire to risk a second widowhood.

The souvenirs of the dead husband which the Mincopi widows on the Andaman Islands have to carry about with them are still more remarkable. A certain time after the death the skull of the dead man is specially prepared, painted red and ornamented with fringes of wood fibre (Fig. 936). This skull, which in the

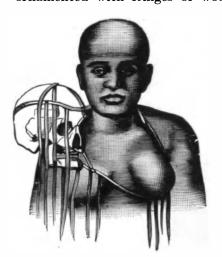


FIG. 936.—A Mincopi widow with the prepared skull of her late husband. (After Andree.)

ornamented state is called *chattada*, the widow now has to hang on herself and is obliged to carry it with her until she remarries. The skull is fastened in such a way that the band holding it passes round the neck and the left breast and hangs from the right shoulder (Mouat, p. 327).

In New Guinea, a bunch of the dead man's hair and his penis covering are part of the widow's mourning garb (*vide* above); the covering the widow wears under her knot of hair, the bunch of hair on a string round her neck (Lehner).

The mourning dress of one such widow is taken with the kind permission of Prof. Neuhauss from his work on New Guinea, and is reproduced in Fig. 929. Lehner describes this dress as follows :—

"The widow appears quite covered with several nets hanging over each other which are covered over by the *atu*. On her head she has a thick twist of hair under the nets; among other things, she wears the penis cloth

of her dead husband under this. On the string round her neck she wears a bunch of her dead husband's hair. Moreover, widows, as widows, are uncommonly dirty; and the privy parts are insufficiently covered.

"The widow has to wear her nets; if they rot away, she has to renew them till a man desires her as his wife. Then the sister of the dead man takes pity on her and takes the filth off her. This has to be done with cunning, for she would not take off the mourning things at any price or have them taken off by others, for the shame is too great. Therefore, she has to be taken quite by surprise. While she is sitting unsuspecting, the relative with her companions suddenly seizes her by the head and pulls down the whole net erection which is thrown away in the woods."

A Chinese widow is obliged to wear mourning clothes for her husband for at least three years; it is, however, considered specially honourable if she continues the mourning for her whole life.

Chu-hi, the most famous commentator of the classical canonical works of the Chinese, who lived in the twelfth century A.D., says, according to v. Brandt's ² reports :—

"Woman is born to serve man with her body, so that the life of a wife comes to an end with that of her husband and she is said to die with him. Therefore, after the death of her



FIG. 937.—Jewish widow. Fourteenth century. (From a MS. (Cod. germ., 6406) of Rudolf v. Hohenems in the Bayr. Landesbibl., Munich.)



FIG. 938.-Mourning Wends. (After Leonhardt, Dresden.)

husband, she is called 'the woman not yet dead'; she is merely awaiting her death and she is supposed never to have any desire to become the wife of another man."

Yarrow (p. 147) cites a strange custom of the Corsicans. He says that "according to Bruhier, there prevailed in Corsica as late as 1743 this custom that when a husband died, the women fell upon the widow and thrashed her soundly. He adds that this custom made wives look after the health of their husbands carefully."



FIG. 939.—A concubine of the dead, Egypt, Middle Kingdom. Ägyptisches Museum, Berlin. (After H. Fechheimer.)

Fig. 937 shows a Jewish widow in Germany in the fourteenth century; Fig. 938 shows a Wendish widow of the present day.

2. SUTTEE AND THE KILLING OF WIDOWS

Among some peoples, widows were not allowed any period of mourning but were compelled to follow their deceased husbands to death. The opinion has been wrongly advanced that this was done to make it impossible for the women to contract another marriage, and to prevent them from becoming the property of another man, just as the weapons of a great warrior were broken in pieces so that they should not fall into the hands of strangers.

Many savage peoples do not imagine that dying is an extinction of life, but regard it only as a change or a continuation. Thus people were already accustomed to speak of a "living corpse." Thus, it was the belief of the ancient Egyptians that the dead man went on living in the grave. To make this new life as bearable and pleasant as possible, it had to correspond as closely as possible to the earthly life; the dead man needed food and his usual surroundings. They gave him his property with him, but then, from the same conclusion, they hit upon the idea that imitations and, finally, portraits, had to suffice for the dead, hence the pictures and other things put into the tomb which are so valuable to us. For our purpose, only the question of the wife, the servants and children, which we touched upon above, is of importance. Since in every nation in the world, celibacy appears abnormal, the dead man had either to take his wife with him into the grave or, if he dies unmarried, get a wife. Later, as we have said, people chose

images and created those nude figures of women (see Fig. 939) in clay, which were put into the grave with the corpse (concubines of the dead). Very often along with these female figures, a boy is represented to assure offspring to the dead man. In place of the girl sacrifice customary in Egypt, the Near East, etc., we find among other peoples customs under the name of "marriages of the dead" (see Vol. III., p. 428, etc.). Other peoples again, somewhat higher in the scale of civilisation, conceive death as a journey into the realm of the dead; but retained essentially the same customs (cf. the tombs of Ur, Wiedemann,³ Schreuer, etc.).

Thus, on many Etruscan coffins there are sculptured representations of the dead man leaving his family on horseback, in a ship, or in a carriage guided by the genii of death. The dead man has just left his family and set out for another, unknown, land; however, he still remained the same person with the same characteristics and the same needs as before. For this reason, the dead man is dressed in his best clothes; for this reason he is given his ordinary weapons and utensils and his wife is killed so that she may accompany him and that he may not miss the comforts and conveniences of conjugal life in the unknown land. It is a similar motive which *e.g.*, among many African tribes, leads people to kill an enormous number of slaves, male and female, on the death of a man of importance, in order that he may arrive at his destination with the splendour befitting his rank. Thus it happened recently, when Europeans wanted to prevent some negroes from making human sacrifices on the death of one of them, that they retorted : "But who then is to serve him in the next life ?"

The classic land for killing widows is, as everyone knows, India. Even Cicero and Diodorus (XIX., 32, 33) recorded that the Indians killed widows.

"According to the story, Sati, the wife of the great Śiva, the great god contending with Brahmä for precedence, threw herself from grief into the sacred fire at the sacrifice of her father Daksha since her husband was not invited to the sacrifice by Brahmä. Since then, every wife who, with her husband, mounts the stake on which his corpse is to be burnt to ashes, is called *sati* and the custom itself *sahagamana*, 'the going with '" (cf. Schlagintweit). (Concerning the rise of the custom, see E. J. Thompson.)

As Schmidt⁸ emphasises, deflowered or not yet deflowered wives are several times spoken of in ancient Hindu writings, who wish to marry again after the death of their husbands. Also, as we shall see in the following chapter, the arrangement of the levirate seems to have existed.

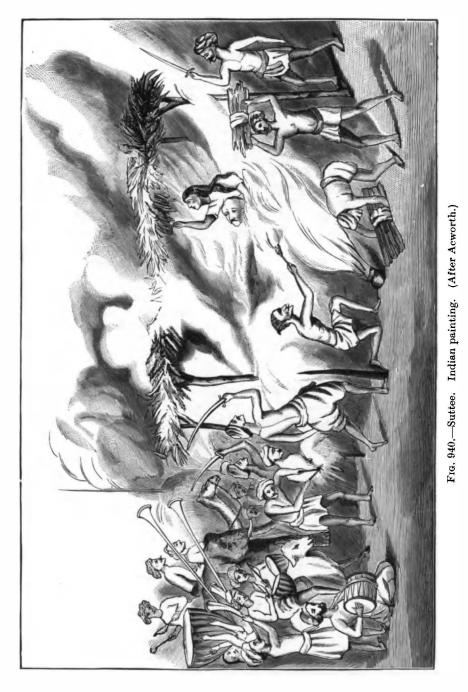
In the Rigveda, the obsequies of the husband are described (Geldner). Here it runs :—

"Here the wives, not widows, happy in their husbands They enter in and bring a fatty ointment And tearless, in the bloom of their beauty, They enter first the abode of the dead man."

The ointments are to be used to anoint the mourning widow who is to be decked by the wives for her re-entry into life. Then the priest bids her part from her husband's corpse :—

> "Arise woman to the world of life ! His breath has gone by whom thou sit'st, Who once did hold thy hand and wooed thee With him now is thy marriage ended ! "

Schlagintweit states that "the English Government put an end to this custom with stringent laws, and the burning of widows now occurs only in quite isolated cases and in secret, remote and not easily accessible districts. It is prohibited by an Indian law of 1829, and the Penal Code punishes all participants in incitement to this form of murder with imprisonment up to ten years. Nevertheless, there are one or two *sati* burnings to be dealt with annually. In one of these cases, which came up for judgment in the year 1884, the judges pronounced sentences of from



three to seven years' penal servitude on all the participants." During the World War the custom, under the influence of the priests, came actively to life again. A verse of Sanskrit, quoted by Böhtlingk, lauds the faithfulness of the wife,

which continues even after death :---

"A man later discontinues the amiable attentions which he has paid wives in secret; the wives, on the other hand, embrace the inanimate husband from gratitude and ascend the funeral pyre with him."

However, as early as the second half of the century before last, Niebuhr wrote :---

"Living women in Bombay may not burn themselves with their dead husbands any more than in the towns under Mohammedan rule. This is not allowed even under their own Government. A merchant at Mascat of Brahmin stock told me that his family had a great advantage over many others in that his grandmother had been allowed to burn herself with her husband; for this was not permitted to anybody who had not previously given the authorities many proofs of her virtue and her love for her husband."

In Nepal it is said that the widow who has not followed her husband in to death always loses caste. At a burning which took place shortly before Schlagintweit was there, the widow, unfettered but supported, went to the 4-ft. high stake with cloths hanging about it. Guided up

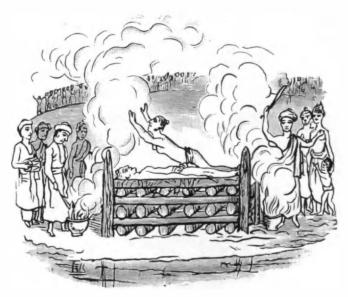


FIG. 941.—Suttee. (After Coleman.)

on to it, she lay down beside the corpse of her husband and then, as the funeral pyre was set on fire, she was pressed down by bamboo staves held at each end by Brahmins. A few cries of pain reached them, quickly stifled, probably by the pressure of the staves, one of which went over her neck, another over the middle of her body.

The Hindu, Madhowdas, according to Ryder, declares that it is easy to understand that a widow should prefer death to the state of widowhood, "for widows are only human beings! Neither butcher nor baker will give her anything; no owner of property will let her have a house; no coachman will drive her; if she falls ill no doctor will attend her; if she dies nobody will take her unclean corpse to burn it; nobody will talk with her; nobody looks at her, and the persecution of her never ceases. Her children are exposed to the same afflictions, no school will receive them, no priest will instruct them."

Another Hindu, Rama-Krishna, certainly denies that the lot of a widow is so wretched that it is a reason for her choosing death in preference; the real reason, according to him, lies in the Indian woman's romantic sense !

A widow when she trod the funeral pyre had to carry a lemon (or else an arrow) in one hand and in the other a mirror. The significance of this custom is not quite certain; perhaps they are symbols for warding off evil (cf. Zachariæ,^{2×3} Caland ⁸); perhaps, too, the mirror, as Zachariæ has tried to explain, signifies a fortune-telling instrument. He quotes in support of this that the power of foretelling the future is ascribed to widows consecrated to death a short time before their last journey.

Fig. 940 gives a copy of an Indian painting which shows suttee, or the burning of widows. The copy is given by Acworth, who supposes that this burning took place in Madras. Coleman has also published a sketch by an eye-witness of a widow-



FIG. 942.—A widow leaps upon the funeral pyre. (After Linschoten, 1613.)

burning which took place a few miles from Calcutta in 1829. An old representation is a picture by Linschoten (Fig. 942).

In an Indian folk song, an English translation of which is given by Acworth, one such burning of widows is extolled. The thrilling conclusion runs :—

"Then, while all people held their breath, She mounted on the stone of death, And clapped her hands : the signal giv'n, Fierce rushed the roaring fire to heav'n, And high her spirit soared. In Indra's bark divine upheld Such boon her piety compell'd, Like Sulochana, side by side, She graced the heavenly portals wide With her beloved lord."

Sulochana also burnt herself; it is the favourite song of Hindu women.

The Hindus, however, are not the only people among whom the burning of widows is to be found (see Penzer). Katscher says : "Four tribes of the savage aborigines of the Chinese island Hainan burn their dead after first covering them either with silken shrouds or with horse, cow, goat or sheepskins. These tribes too favour the Indian principle of the suttee, *i.e.*, widows are burnt alive along with their dead husbands."

On November 26th, 1903, the Vossische Zeitung published the news that the Government of the Dutch East Indies had sent two warships to Tabanan in Bali because the Rajah was to be prevented from allowing two widows of his late predecessor to be burnt with the latter. The burning took place nevertheless on October 26th, 1903. In Bali, Hindu culture prevails and the natives are given over to Siva worship (cf. E. J. Thompson, p. 41).

According to Doolittle, widows in China are accustomed to kill themselves in another way, so as to show publicly their faithfulness to their husbands. We shall deal with this custom in detail later. According to ten Kate,² it was also the custom in ancient Japan for widows to follow their husbands into death.

In the Nordic Sagas also, widow-burning played a part. Nanna is burnt with Balder. Brunhild contrives to be burnt with Sigurd, and Gudrun (*i.e.*, German Krimhild) is reproached for having survived her spouse.

St. Boniface says of the Wends (E pist., 72; I., p. 136) :--

"They treasure conjugal love with such tremendous zeal that the wife refuses to survive her husband and among wives she is deemed worthy of admiration who dies by her own hand in order to burn with her husband on one funeral pyre."

Among Slav peoples as well, it used to be customary for the wife to follow the husband to death. The following extract is from Schrader,⁴ and quotes an old record of an Arab traveller Ibn Dustah (about 912 A.D.).

He relates of the Slavs : "When one of them dies, they burn the corpse. Their women, when a member of the family dies, cut their hands and faces with knives. The day after the burning of the dead man, they gather up his ashes, put them in an urn and lay this on a mound. After a year has passed, they take to that mound 20 jugs of mead. Then the dead man's relatives assemble there, eat, drink and then return home. If the dead man had three wives, and one of them, in her opinion, loved him specially, then she brings to his side two poles, sets them firmly upright in the ground, puts a cross piece over the ends and in the middle of this ties a rope fast. Then she gets on a bench and fastens one end of the rope round her neck. When she has done this, they take the bench away from under her feet and the woman hangs in the air until she dies. They throw her corpse into the fire and burn it."

Then he says of the Russians : "Among them, when an important man dies, they dig the sepulchral mound for him in the shape of a spacious room; then they put in his clothes, golden bracelets which he wore, a good deal of food, jugs with drinks and other inanimate objects of value. The wife whom he loved is put into the grave chamber alive, then they lock the door and the wife dies there."

Moreover, Herodotus (V., 5), too, tells of the killing of widows as a custom prevalent among the Thracians :—

"Each has a number of wives; now if one of them dies, there arises a great dispute among the wives, and friends get very excited about it as to which of them was most loved by the husband. Now the one who is awarded the honour is extolled by the men and women, slaughtered over the grave of her nearest relative and buried immediately afterwards with her husband; the rest of the wives, on the other hand, take it as a great injury to them because it is regarded among them as the greatest insult."

Herodotus (IV., 71–73) records also of the Scythians that at least at the death of a king, his concubines were killed and buried with him. According to Pomponius Mela (II., 2) the Goths, and according to Procopius (*Bellum Goth*, II., 14) the Heruli

to some extent, had the custom of killing widows. The wives of Lithuanians who had fallen in battle, hanged themselves.

In New Zealand, on the death of a chief, they used to give his wife a rope with which she was to hang herself in the woods.

The Solomon Island women also are accustomed to follow their husbands in death either by their own or by another hand. Eckardt states :---

"If a chief in the Solomon Islands dies, his wives are killed by strangulation; it would be a disgrace to them and to the memory of the dead husband to marry later men of lower rank. The strangulation is generally done while they sleep. Often the wives or nearest relatives of an ordinary man end in the same way. As in life, so also in death, he must be surrounded by people who love him. The majority of these unfortunates regard it as a duty to follow the dead man at once; they stupefy themselves with the juices of certain plants and then hang themselves near their husband."

Until recently, among the Fiji islanders there existed the custom of strangling the wife of a man of rank at his death. Her corpse was then anointed as for a feast, arrayed in new fringe girdles, her head dressed and adorned, her face and breast powdered with curcuma and laid beside the dead warrior. When Ra-Mbithi, the pride of Somosomo, was wrecked at sea, seventeen of the wives were killed; and after the news of the massacre among the population of Namena, in the year 1839, eighty women were strangled to accompany the souls of their murdered husbands (Tylor, I., 460).

Likewise, in former German New Guinea, the killing of widows occurs, and that by their own wish. The missionary Keysser describes this in detail in Neuhauss's¹ book on New Guinea.

"Strangulations of widows are not uncommon among the Kai. They usually occur if husband and wife have, in the Papuan sense, lived happily together. The wives are strangled only by their own strongly expressed wish. The mourners have no interest in the death of the wife; on the contrary, she is thus taken away from them. Also the dead man's relatives never desire the strangulation of the widow; for at her death, they have to make a special payment to her relatives. Nevertheless, people do not restrain the wife who wishes to be strangled, for fear of the spirit of the dead man which might do them all kinds of harm if they did not let his wife follow him.

"The widow has herself shaved and puts on her best array. Then they put a strip of bast round her neck, the ends of which are grasped by people standing on the verandah so as to lift into the air the woman dedicated to death. Then a few people take hold of the body and pull hard downwards. One jerk and the dead woman is laid beside her husband's corpse : both are buried in the same grave.

"The strangulation always takes place during the widow's first grief over the death of her husband, neverafter his burial. Once, when a certain Jâbu died, both his wives had themselves strangled and were laid in the grave with him. Jâbu was a hard-working man who always cultivated his land well and was, besides, held to be a skilled hunter. In this country the love of wives works through the stomach and, therefore, Jâbu's wives showed great devotion to their husband. Since they believe that such dead men work hard and are expert hunters also in the world beyond, the wives wanted to keep their good husband after death as well. In any case, they had no hope of being better off on earth than with their husband in the world beyond . . ."

Among the Basutos also, according to Joest, after the corpse of the deceased husband is buried, the widows are beaten to death with clubs.

Similar motives are at the root of the custom of watching by a dead body. Thus, among the Tautin Indians in Oregon, according to Ross Cox, the corpse is

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exposed for nine days and the widow has to sleep beside it. On the tenth day, with the ceremonial assistance of fellow tribesmen, the funeral pyre is kindled. If the widow has been guilty of any unfaithfulness or neglect in food and clothes towards the dead man, she is thrown in the funeral pyre, pulled out by her friends and thus pushed in and out till, scorched and burnt, she loses her senses.

According to Tylor (I., 461), among the Kwakiutl Indians in North-Western America, the widow is obliged, while the corpse of her husband is being burnt, to lie with her head beside it. Then, more dead than alive, she is pulled out of the flames and when she comes to herself, she has to gather up the remains of her husband and, as we have seen in a similar case before, to carry them about with her for three years. If her fellow tribesmen think that she is not mourning properly, they have the right to turn her out of the tribe.

An important confirmation of the opinion that in these customs it is a question of the rites of a real burning of widows is contained in a statement which E. v. Hesse-Wartegg makes about the Nataotin Indians (Babines) in British Columbia. He says :

"I need mention only the peculiar custom of burning widows which Paul Kane discovered among the Babines in the year 1858 on his journey, and which has now, fortunately, been abolished. The burning of corpses, however, is still a common custom, and the widow of a dead man has to mount the funeral pyre and stay with the corpse till it is enveloped in flames. Until then, she may not leave the pyre."

3. PROHIBITION, COMPULSION AND PERMISSION FOR WIDOWS TO REMARRY

In the foregoing sections, we have already become acquainted with many duties which widows among various peoples are obliged to undertake and also some of their rights. There are two kinds of very special rights, however, which are of the greatest importance for the whole of the further life of the widow; these are the right of inheritance and the right of remarriage. With some peoples, we see the widow quite deprived of the latter right.

Thus, in India, the widow who has not followed her husband to death is strictly forbidden to remarry. Not only the Brahmins and Rajputs forbid it, but all religious castes, even the singers and beggars. In Bombay, the authorities had to order a girls' school to be closed because the principal was a remarried widow.

In India where girls, even in childhood, are often married to elderly men, it is not difficult to explain why there is such an astonishing number of widows. Schlagintweit says :

"According to the census of February 17th, 1881, there were in British India 99‡ million females [census of 1931, 169 millions] including 21 million widows [1931, 26 millions]. Every fifth female is a widow; indeed, if one excludes the Mohammedans, among whom the disproportion is not so great, and takes the figures for the Hindus alone, then very often every third girl is a widow. Thus, in Calcutta, of 88,627 [1931 census, 381,786] females, 42,824 are widows [1931 census, 69,245]. Among these, the unfortunate creatures subjected to the rules for widows are not exclusively adult. In Calcutta, 77 widows [1931 census, 257] had not even reached their tenth year, 340 were at the virgin age of 10 to 14 [1931 census, 336 from 10 to 15], and 1100 had become widows between 15 and 19 years of age [1931 census, 1919 from 15 to 20]."

We have already seen that among the Chinese, widows often commit suicide from grief for the loss of their husbands. But of the widow who remarries, v. Brandt records that her own children renounce her and do not mourn for her at her death : she loses her place in the ancestral hall of the family which she leaves and, if her husband was an official and after his death she was given the right to wear the badges of his rank, she loses this too (cf. Penzer, Ocean of Story, etc., IV. 257).

Among the Ossetes, when the corpse of the husband has been buried, his wife and the horse which he rode were led three times round the grave. Nobody might mount the horse again and the widow could not marry anybody (Tylor, I., p. 463).

Among the Chevsurs, it is regarded as scandalous for a widow to contract a second marriage if she has a son (Radde).

With the ancient Peruvians, a woman who had children never entered into a second marriage. An Omaha Indian woman who had lost her husband might marry again only if she had not passed her fortieth year.

Among the Southern Slavs, according to Krauss ¹, a widow's second marriage is regarded as an insult to her deceased husband. A widow who has children rarely marries a second time with the Croats and Serbians, for she is not allowed to take her children with her into the second marriage and these are then regarded as orphans. "Not even a bitch leaves her young in the lurch," people shout at her, and in a folk song it is said :

> "Such a shameless mother. For this God shall punish her ! She has deserted her children in her husband's house, Gone back to her relatives and made a new marriage."

Similar views prevailed in Western Europe in the Middle Ages. Hüllmann writes of this :

"In France a special outbreak of coarseness was the barbarous uproar which is called *charivari*; in front of the house of a widower or widow who was going to marry again, the neighbours, on the eve of the wedding, played licentious, insulting pranks, beating kettles, basins and pans against each other and behaving wantonly at the wedding ceremony in the church. For this reason, many ecclesiastical prohibitions were passed against this in Avignon, Reziers, Autun, Tregnier in Brittany."

One such scene is portrayed on a miniature of the fifteenth century which is to be found in the *Roman de Fauvel*. Fig. 943 reproduces this from a copy by Paul Lacroix. Fauvel or the fox has stepped up to the bed of the remarried widow at which people are making the charivari; he makes her a speech of warning.

Among many peoples, however, we find the quite opposite custom. A widow often has to marry again whether she will or not, and to be precise, the right of marriage with her usually appertains to a new relative of the husband.

This is, e.g., according to Paulitschke's statement, the case among Harari in East Africa.

In Israelite law too, marriage with the widowed sister-in-law is prescribed.

As is well known, this marriage is called *levirate*. According to the wording of the law, this levirate is to take place only if the widow is childless : it is also open to the brother-in-law, as we saw earlier, to refuse this marriage. This is called the halitzah.

Among the Abyssinians, it is regarded as a rule that after the death of the husband, his brother must, in any circumstances marry the widow (Hartmann¹¹).

With the Masai, according to Merker, the widow can, of her own accord, pass into the possession of the eldest brother or half-brother of her husband; but, whilst she may only cohabit with the former, she can legally marry the latter after the lapse of three or four months. The remarriage of widows (or divorced wives) who have sons living is forbidden; but they are allowed to cohabit with men who are of the same age as the dead man.

Among the Wachaga in East Africa, a widow who has a son living, likewise has no prospect of remarrying. Gutmann, who reports this, states as the reason that the second husband would be afraid that, when the step-sons had grown up, he would be ejected from his property.

With the Wapokomo on the Tana River in East Africa, the widow with her children passes into the possession of her brother-in-law. The brother of a dead



FIG. 943.—Charivari at a widow's marriage. Miniature of the fifteenth century. (After Lacroix.)

Wolof negro has the right to take the widow to wife without, however, being obliged to do so. The same is true of the Afghans.

Of the Persians, Polak wrote to Ploss :

"The levirate is not legally obligatory in Persia but is only proper and praiseworthy. Hence it is in general customary that after the death of the brother, the widow, whether childless or not, is married by her brother-in-law who then regards the children as his own."

Vámbéry says about similar customs among the Turks :

"It seems to us that the supposition that the Chuvash custom, according to which the younger brother must marry the widow of his elder brother, is identical with the halizah of Jewish law is not quite sound, because a similar custom exists also among the Karakalpaks and w.—vol. III.

the Turkomans where not only the wife but also all the female slaves of the dead man pass to his younger brother, a custom which is known by the name of *djisir* and without being prescribed and sanctioned by religion is practised everywhere by the Turkish nomads."

Among the Paharias from Nepal, according to Mantegazza, the widows pass to the brothers or nephews of the dead husband; they may, however, also return to their parents' house if they like and they are even permitted to remarry.

According to Crooke, the levirate is permitted in quite a number of Indian tribes and castes in Oudh and the North-West Provinces and with the Aheriya and the Bhuiya this is even expected. But here there is the almost universal limitation that the levirate is permitted only with the younger brother of the dead husband whilst his elder brother may in no circumstances marry the widow. The custom is similar also among the Savara in India, according to Fawcett.

The levirate is known too in some parts of the Indian Archipelago. Among the Battak on the west coast of Sumatra, the widow may, however, (cf. also Crooke'sstatement about India) marry only a younger brother of her dead husband, whilst marriage with an elder brother is looked upon as incest and results in the man being killed. The corpse of the executed man is devoured. Among the Karo-Karo on the east coast of Sumatra, the levirate can take place before the burial of the husband (Schmidt⁹).

In the Aru islands, when a man dies, his brother steps into his rights, *i.e.*, he marries his sister-in-law. But, if he abandons his right, the widow can marry anybody, her brother-in-law then gets the price of the bride which is not reckoned much lower than the first (Ribbe).

A widow in Ceram also has the right to marry her deceased husband's brother, whilst in some parts of the Tenimber and Timor Laut islands, she is even obliged to do so. And he must be a younger brother of the husband, and she has to marry him even if he is younger than herself. This, however, does not take place till after the expiration of the mourning period and no dowry is paid for her (Riedel ¹).

Also among the Chippewa Indians, according to McKenney, the deceased husband's brother has the right to take the widow to wife. This takes place at the grave of her husband with a ceremony in which she steps over the grave. In this case, the above described mourning is then removed.

An ancient law of the Arabs which requires that the son marry his widowed mother is peculiar.

This holds good in Nias where a son often takes all his stepmothers in marriage unless they are pregnant (Modigliani).

In Corea, if a man can prove that he has had sexual intercourse with a widow, he has the right to claim her as his property. Young widows of noble family may not marry again; most of them, however, become concubines. But if they really want to lead a life of abstinence, they are often exposed to the brutalities of men; it even happens that they are dragged away by hired bandits. Therefore, it is no wonder that, to keep their marriage unsullied, young widows prefer to follow their husbands in death, which is done by cutting their throats or stabbing.

In quite a number of peoples, however, there is tolerance enough to allow the widow to re-marry according to her own choice; yet this must not take place before the end of a certain period of mourning. In Germany, as is well known, a widow waits a "decent year" before taking this step. A year is the minimum period fixed for this also among the Chippewa (Mahan), the Sambo and Mosquito Indians

(Bancroft) and with the Chiriguano Indians. Among the last named, if the widow has children, then when she remarries, she leaves the boys to her deceased husband's relatives; the daughters, however, the new wooer is accustomed to marry either later or at the same time as the mother (Thonar). In the Admiralty islands a widow may marry again as early as two months after her husband's death (Parkinson ²). Among the Kai (New Guinea), Keysser states that a man leads the widow of his dead friend to his house when she comes out of the mourning hut, where she has had to spend a few weeks, and makes her his wife.

Crevaux ² describes the obsequies which took place among the Guahibo of Vicharda in South America a year after the death of a chief. The widow first brought up the dead man's things, then weeping she showed each one, and then they danced, played the flute and drank. After this they dug a grave in the hut and the remains of the dead man were lowered into it :

"Après les avoir recouverts de terre, on met la veuve sur la tombe ; on lui enlève un lambeau d'étoffe dont elle s'est pour la circonstance, recouverte la poitrine. Elle se tient les mains au-dessus de la tête. Un homme s'avance et lui frappe les seins à coups de verge. C'est le futur mari. Les autres hommes lui donnent les coups sur les épaules. Elle reçoit cette flagellation sans se plaindre. Le novio (fiancé) reçoit à son tour les coups de verge, les mains jointes au-dessus de la tête et sans se plaindre. Après cette cérémonie, ils placent une autre femme sur la tombe et lui traversent l'extrémité de la langue avec un os. Le sang coule sur sa poitrine et un sorcier lui barbouille les seins avec ce sang. On lui donna boire et le bal recommence."

The beating is, as always, a means of driving off spirits, in this case, that of the dead husband.

A propitiatory sacrifice of another kind we find, according to Herrmann, among the nomad gipsies of the Balkan Peninsula. Here, if a widow wants to marry again, she buries, a short time previously, in her husband's tumulus, some of her menstrual blood, as well as some of her hair and nails which have been cut off.

That a widow is not condemned to live unmarried for the rest of her life in every part of India and in all circumstances, we were able to assume from the previous statements about the levirate. In a number of cases and tribes in Oudh and in the North-West Provinces, it is, however, permitted to the younger brother of the deceased to marry the widow, but he can also renounce the right. Then the widow may marry another man, and among the Basor, the Bhuiher, the Biyâr, the Dhânwar, the Ghasiya, the Majhwar and the Musahar she may even marry a foreigner. Among the Chamâr, the Dusadh, the Kol and others, however, the custom is, if a widow wants to re-marry, for her to take a widower. Among the Mallahs, the second husband may also be a divorced man (Crooke).

"At the marriage of a widow in Northern India, the bride and bridegroom are covered with a sheet during the ceremony, probably to avert the envious or evil spirit of the woman's first husband" (cf. Schmidt 9).

Vātsyāyana (see P. Peterson) differentiates seven kinds of widow, the first six of which are still virgins; and for them there are then special regulations to carry out. The designation for a widow who marries again is *punarbhû* (*punar* = again; $bh\hat{u} = wife$).

Among the Ama-Xosa, according to G. Fritsch, the widow's relatives, if she had borne no children by the deceased, claim her back in order to have her married again and return to the heirs the price paid for her as a bride. This is called "wiping out a house." 324 PROHIBITION, COMPULSION AND PERMISSION FOR WIDOWS TO REMARRY

The widow's desire to find a mate again soon is expressed by the following proverb in use in Albania.

"St. Andrew's Night (December) is as changeable as the mind of a widowed woman" (v. Hahn).

The Finns also are convinced that a great number of their widows do not treat their widowhood seriously. Several of their poems give evidence of this (cf. Altmann):

" Better to **a** bad spouse Be joined, than as widow Spend each day alone Pass each night alone."

And a widow's efforts to get a new husband are explained still more plainly in the following verses :

"Graceful is the widow's mien, Smiling are the widow's lips, Golden sounds the widow's voice, When she wants a second wooer, Or even a third will catch."

Among the Serbians, when a widow wants to marry again, she takes some soil from her first husband's grave and throws it unexpectedly on the man whom she desires as a second husband (F. S. Krauss).

With the Omaha and some other North American Indian tribes the widow may not make a second marriage till after from four to seven years at the earliest, whilst a Choctaw Indian widow may marry again after only four months.

When an Afghan widow marries a stranger and not the brother of the dead man, then the second husband is obliged to pay a price for her to the first husband's parents.

In the Mentawei islands a widow may marry again as early as three days after the death of her husband. Maass,¹ who records this, adds :

"Moreover, the widows show no grief for the deceased husband. His evil spirit then goes to his house; there it scratches and knocks at the walls and attacks the house; it is said even to pinch the people sometimes. The presence of the spirit lasts for three days; after this he returns to the woods or to the dead."

The Japanese have, according to Ehmann, the saying :

"A faithful wife has no meeting with two husbands."

By this is meant the first meeting which takes place in the presence of relatives, after the marriage has been arranged. A faithful wife does not marry after the death of her husband.

Katscher records of the Chinese :

"It is not at all good for a widow to marry again and, in the better classes, perhaps, such a thing never occurs. A lady of rank would, by contracting a second marriage, be liable to a punishment of 80 lashes. In the lower grades of society, however, many widows marry a second time. The reason for this, as a rule, is poverty. For widows from the country there are in big towns, places of refuge which belong, as a rule, to a female matrimonial agent. If a widow marries a brother of her first husband, he adopts her children generally. The children of her second marriage are often regarded as the offspring of a courtesan."

Among the Pilaga on the Pilcomayo River (N. Gran Chaco), Frič was an eyewitness of a remarkable procedure which he was able to photograph and which is also corroborated by Schmied, who has, likewise, navigated the Pilcomayo. Frič reports :

"In Lagadik, we had a friendly reception as if nothing had happened. Here one of the scenes common in the life of the Pilaga women was enacted before our eyes : a pacuná, i.e., a duel between two jealous widows. They had to fight for a husband who had come on the scene with this expedition. Such a contest often lasts for several hours till one of the women is convinced that it is better to remain whole than to get the desired husband. The women decide other matters in the same way, but these fights are caused chiefly by jealousy. In particularly serious cases they arm themselves with doeskin arm-loops on which hoofs are fastened, and with *piraña* teeth which are otherwise used as scissors. If the Indians kill a doe when hunting they bring these hoof-armlets back with them for their wives or relatives as a sign that they have been thinking of them on the way. Very jealous wives are often equipped with 10 and more armlets on each arm."

4. THE RIGHTS OF WIDOWS

Only a few indications are to be given here of the position of widows in the rest of their lives, as the question has little anthropological interest.

On Leti, Moa and Lakor, widows are treated kindly and benevolently, also in Ceram where, when they are old and without means, people willingly provide them with all that is necessary. With the Amboina Group islanders, widows, when they have many children, are even held in great respect. In Ceram Laut and the Gorong Archipelago, in Tenimber and Timor Laut islands, as in Halmahera (Dutch East Indies), widows are supported by the husband's kin. In the Luang, Sermata and Babar islands, however, they have to earn their livelihood themselves (Riedel ¹).

Moncelon records of New Caledonia :

"Les veuves restent à la tribu, quand elles y ont du bien et de la famille ; sans quoi elles retournent à leur village natal. Elles restent ordinairement à la tribu du mari et donnent leurs services à ceux qui leur fournissent la nourriture."

In Persia if the father of a family dies, it is regarded as a matter of course that the widows and orphans move into his brother's house and get maintenance and care. Also the widow among the Chippewa Indians may, without further ceremony, move into the house of her brother-in-law, and he is obliged to provide for her (McKenney, p. 185).

Among the ancient Germans, if the husband had not paid for his wife the price fixed, then, after his death, the ownership of his widow fell to her father or to a male relative on her father's side (Grimm 4).

Among the Serbians and Croats of the present day, according to F. S. Krauss, a widow has the right (without regard to whether her marriage has been blessed with children or not) to stay in her husband's house. Only young childless widows sometimes go back to their parents' home. People look askance at this, however. It is regarded as a disgrace and depends on the good-will of the people in the parental house whether the widowed woman will be received again. She, on her part, usually has no desire to return to her parental home, especially if her parents are dead. The proverb says :

"Woe to the sister who becomes dependent on her brother."

According to Valenta, with Serbian women in childbed, widows generally do the nursing, just as in the time of the early Christians, the substantial part of administering charity as deaconesses fell to their share. Among the Japanese and also in Persia, we saw widows in many cases acting as midwives. In Russia they call a widow by a name that means actually a nun, but also signifies a woman alone in the world, leading a life consecrated to God. Hence old maids and deserted wives also come under this designation. This class of the population is distinguished by quiet living, industry and diligence and, for the most part, they earn their own living.

The widow in India has a particularly unfavourable position. Schlagintweit writes :

" If as housewife she was mistress over the children and all the female inhabitants in the household, now she is almost overburdened with the dirtiest work of the house, and she is not asked but ordered into the kitchen, to sweep floors and to look after the children, for she has to earn the bread she eats. Since, as a widow, she is not entitled to wear any ornaments, a kind relative is soon to be found who volunteers to keep her jewels safe for her and turns them into cash for his own use. The law, according to which the whole of the husband's property falls to the widow, they have for a long time tried to interpret so that she is at most allowed only the life interest. They also tried, by having false witnesses to swear that she had been unfaithful to her husband (naturally, after his death) to defraud her even of this. She is obliged to remain faithful to her husband throughout her whole life, and any unchastity involves the loss of her inheritance. A wealthy widow was, therefore, never safe from an accusation of unchastity and more than half the facts brought forward were sworn to by perjured witnesses. This, too has been altered by Anglo-Indian laws."

Helene Niehus, in 1906, also describes the life of a widow in the East Indies as unspeakably wretched :

"They take all the poor widow's ornaments away from her, depriving her even of the natural ornament of her hair and give her shabby clothes. But not content with this, they have her eat one meal a day only and fast twice a month. 'They have now to go through a cold widow burning,' a Hindu once said, and he was only too right. I saw many such piteous creatures with gaping holes in their ears once so prettily adorned, scantily dressed, and making sacrifices in the Ganges in the cold season with the temperature at zero. Even the Brahmins were not so fanatical as they in the matter. They anxiously avoided even the shadows of the Europeans who are all, of course, without caste. Now, when one realises that there are 23 million widows in India, over two million of whom have to taste all these torments in their early childhood, it affects one with the deepest sorrow."

Among the Iroquois and Delaware Indians a widow inherits nothing at all, as the relatives of her dead husband distribute everything that belonged to him to strangers, so that they may not be continually reminded of the dead man by the sight of his possessions (Loskiel). Among the Ostiaks also, the widow inherits nothing (Castrén). On the other hand, with the Amboina Group islanders, she gets the free disposal of the personal property and real estate. With her consent, the weapons, fishing gear and conveyances may be divided among the sons. The daughters' share, and the gold and silver articles remain in her charge. Unmarried children remain with the mother, married ones have no further claim on the inheritance, nevertheless, the mother can let them share in the produce of the crops.

The Pata-siwa in Ceram have a custom by which a widow, with the children, use the property in common without its being divided. Similarly with the Patalima in the same island; however, married daughters whose dowry has been duly paid do not share in the usufruct, but rather, where there are no children, the husband's relatives. Also one of the latter not infrequently marries the widow, so that the property may not pass into the hands of strangers. In the Tenimber and Timor Laut islands, the widow inherits everything and has, at the same time, the guardianship of the children who are minors. In the Luang and Sermata islands, she inherits conjointly with her children. However, if she marries again, her claims pass to the eldest son. The same holds good for the island of Eetar. In the Ceram Laut and Gorong islands, if a widow wants to marry again during the period of mourning, which lasts 140 days, then she forfeits all rights of inheritance. In the Tenimber and Timor Laut islands, if the widow remarries, the dowry remains with the children and the second husband is obliged to make a present, however small, to her parents. As a widow in the Keisar islands who remarries forfeits all her claims to the inheritance, most widows there remain unmarried (Riedel¹).

In the Gilbert Islands, according to Parkinson, the widows have the use of the property till the children are grown up; they, however, are the heirs.



FIG. 944.—The Widows' Arch, *Pai-lu*, Gate of Honour, erected to the memory of a virtuous widow. Peking.

Doolittle speaks of a special privilege of Chinese widows. He says that tablets of honour and arches are sometimes erected to the memory of virtuous widows who were attached to their parents and husbands with filial devotion. These tablets are made of fine black stone or ordinary marble, and usually rest on four more or less carefully constructed pillars from 15 to 20 ft. high, and a few horizontal cross-beams also of stone. Inscriptions are sometimes engraved on the uprights and on the cross-beams in praise of chastity and filial fidelity. Near the top there are always two Chinese symbols which indicate that it has been erected by permission of the Emperor. These portals may cost anything from about 40 to several hundred dollars according to size, material and elegance. A tablet is erected in honour of a chaste and childless widow when she has attained her fiftieth year and is still living, provided that she has wealthy and influential friends. . . When the portal is completed, a few mandarins of lesser rank go to it to show reverence, and if it is customary for her also to go and show her reverence for it.

Widows and chaste and unmarried girls who commit suicide on the death of husband or

fiancé are also commemorated on tablets in conformity with the customs of the country if they have friends and relatives willing and able to obtain the Emperor's permission and to contribute the necessary sum to the Emperor's donation for the erection of the tablet. In reality, however, such memorials are erected for very few.

Fig. 944 represents one of these arches or *pai-lu*, in Peking.

In Ningpo, a famous seaport of the Chinese province Chekiang, there is a long street which consists entirely of these buildings. They are all carried out in stone and are rich and majestic in architecture. The outer side is covered with sculpture of great beauty.

A hard and cruel fate, according to Danks, attends widows on Duke of York Island. A missionary informed him that it is customary there for the men to claim the widows. They are common property. Danks, on important grounds, thinks it very probable that the same custom is in force also on the big island of New Britain.

What Thurnwald ² records of the fate of widows in Nissan islands (Melanesia) sounds still worse : they are placed under the protection of the chief, are free for sexual intercourse, and are used as sacrifices in the cannibal meals which occur almost every month. Thus, even if they are not killed at once, yet they have forfeited the life under the protection of their own community.

A strong light is thrown on the absence of rights of widows among the Masai by one of the riddles which Hollis has collected. The question is: "What hides itself against the wall of the hut?" The solution is: "The widow who was not there when the ox was shot." That is to say, they shoot the chained animal in the neck with an arrow and the blood which pours out is caught in calabashes by old and young and drunk with avidity. But who gives the widow any ?

In Madras widows are obliged to dance naked in rain which is very heavy; while doing so, they have to look up to the sky and carry a burning brand. Specially ugly women are chosen for these ceremonies. "This spectacle displeases Varuna, the rain god, who shrinks back from such a sight and stops raining" (Schmidt⁹).

It is likewise worthy of mention that in Malabar the widowed state is unknown. There, promiscuity of women exists, and consequently they can never become widows (Schmidt⁹).

5. UNMARRIED WIDOWS

When old maids were discussed above we saw that their lot is very often far from enviable and von Schweiger-Lerchenfeld, writing in 1881, says of the Russian woman of good family when she has passed a certain age without having found a husband, that she is regularly boycotted and exposed to the mockery of her fellows.

To escape this disgrace, a peculiar way out has been chosen. The case is as follows:

"In Russia, the home of so many queer things, there also exists an arrangement not to be found anywhere else in the world : unmarried widowhood. With anxious eyes the young woman sees the spring of her life nearing its end. All her efforts to get married have failed; all her arts of attraction have not been able to conquer the hearts of men. In the society in which the unhappy girl moves, the fear is already asserting itself that the unheard of thing, becoming an old maid, might happen to the poor creature. There is a recipe for this which, to be sure, can hardly give satisfaction to the person interested and this recipe leads to ' unmarried widowhood.' One day, society hears that Miss So and So has set out on a journey or pilgrimage abroad. If the lady in question is wealthy, the pious journey will include a pleasure trip with a stay in Paris or Nice. All in all, it will take two or three years. When this time has passed, the fugitive lady reappears unexpectedly among her old acquaintances, neither as girl nor wife but as a widow. Who her husband was and to what buffets of fate she has been exposed meanwhile never form the topic of conversation in good society in Russia, wherefore the 'unmarried widow' always escapes the inconvenience of having to confess the truth. That in the circles in question real doubt about the pilgrim's widowhood exists need not, of course, come into the question."

CHAPTER XVII

THE MENOPAUSE OR CLIMACTERIC

1. THE CESSATION OF MENSTRUATION

WHEN we put the question : to what age does woman's power of propagation last ? the usual answer is that so long as menstruation recurs regularly. Apart, of course, from abnormal changes, the possibility of impregnation is not excluded, but if her monthly courses have stopped, then she must, in general, be declared incapable of propagation. The time in a woman's life when menstruation comes to an end is called the menopause or climacteric. In a number of cases, this occurs suddenly, *i.e.*, these women have had up till then their menstruation regularly but then it is absent and never returns. It appears, however, that this way is less usual. Generally, the climacteric has certain preliminary symptoms : the hitherto regular menstruation becomes, without traceable reasons, irregular; sometimes the intervals are longer, sometimes much shorter; sometimes the quantity is less, but usually much more abundant than before, and after these irregularities have gone on for several months or even for a few years, the menopause finally sets in. Usually, during this period, women have quite a number of discomforts and abnormal sensations to endure.

Now we must try to identify this cessation of the power of propagation with a cessation of the capacity for copulation. For this latter, connected as it is with the sexual impulse, usually lasts for quite a considerable time beyond the climacteric and that it sometimes extends into the sixties, well authenticated examples have shown.

Let us, however, return to our question as to the actual time of the climacteric. Comparatively little is certain. It has, however, been ascertained, that among civilised nations, this time is a very vacillating one. But whether the matter is analogous among primitive peoples, observations have so far not been able to decide. "In our part of the globe," says Scanzoni,² "menstruation ceases for ever as a rule in the forty-fifth to forty-eighth year." D. W. H. Busch gives 45 to 50, whilst the author of the books of "Faithful Eckarth" speaks of the fiftieth to fifty-third year.

In the consideration of the processes of the climacteric, one of the most difficult questions is what is normal and what is pathological in the phenomena. Wiesel (in Halban-Seitz, *Biologie und Pathologie d. Weibes*, Berlin, 1925) may be quite right when he says that a "normal" physiological course of the climacteric is rare. In any case, he is quite correct in saying :

"Just as the individual constitution is of supreme importance for the whole issue of the normal and pathological happenings in the life of mankind, so also in the symptom-complex now under consideration. Less so the momentary condition. Every woman goes through that form of the climacteric which corresponds to her constitution, modified only by outside influences to a lesser degree than has hitherto been supposed. The type of constitution of a woman is of an importance not to be underestimated—less for the time when the climacteric begins than for its course in the individual. The assumption that women who arrive at puberty early enter into the climacteric late is certainly wrong, just as much as that infantilism which is commonly associated with a late onset of the menses is always coincident with an early climacteric. It is true merely that in hypoplastic women, climacteric troubles often make their appearance to a less degree than in individuals of higher quality.

It is, of course, evident that affections of the endocrine glands may very often lead to the premature onset of the climacteric, especially those in which the thyroid and pituitary take part; it is apparently least so with the suprarenal bodies.

That the whole question of the climacteric is essentially a matter of the internal secretory apparatus is evident; climacteric comes from the Greek $\kappa\lambda\mu\mu\alpha\kappa\tau\eta\rho$ —a round of a ladder, and at the same time represents the highest rung of the ladder. This culminating point is characterised in particular by the involution of various glands of internal secretion, such as the ovaries (Fig. 945). They are more or less eliminated in this declining period of life in which the building up of the bodily structure ceases. Just as in the first steps of the ladder, when the real structure begins, namely, the period of puberty, the glands which were decisive for childhood (thymus, etc.) were eliminated, so in both periods there is a greater predisposition to psychic disturbances, etc. Both points, the beginning and the culminating point, are causes and periods of discomfort. Now, quite logically, we see these phenomena



FIG. 945A.—Ovary of a girl of nineteen years. Normalsize. (After Kisch.)

FIG. 945B.—Ovary of a woman of seventytwo years. Normal size. (After Kisch.)

in the male also. Formerly, people—e.g., Bartels himself—were of opinion that the climacteric was identical with the cessation of menstruation (which is certainly the most striking phenomena in the case of woman), and they ascribed it to this cause alone. Now we know, what is really a matter of course, that the male goes through similar disturbances at about the same age, only in his case the manifestations are often even more marked (cf. M. Marcuse, Handwörterbuch d. Sexualwissenschaft, 2nd ed. (Bonn, 1926), Art. Klimakterium II., des Mannes). Wiesel says, very rightly:

"Special discussion is necessary for the vasalgia which, with R. Schmidt, we designate aortalgia and which takes its course in the form of angina pectoris and thus very often gives rise to the serious diagnosis of arterio-sclerotic processes. These are, however, principally in men in whom analogous processes at the corresponding age likewise occur, even more commonly than in women, in which nicotine, alcohol, more concentrated work and the like may contribute to the condition. It is certain that the sensations of pain in both sexes occur, as is well known, without any arterio-sclerotic changes in the coronary arteries, as indeed even in the worst affection the latter anginal conditions may be quite absent. In any particular case a decision, as already mentioned, is only possible after repeated examination and long observation, in which it must not be overlooked that by the gradual development of marked arterio-sclerotic conditions, the phenomena appertaining to this, if not in the beginning, yet in the course of years, are often to be connected with these processes."

As supplementary to the above arguments, let us consider the most important constitutional types.

(1) The Pyknic type, *i.e.*, women with unambiguous sexual differentiation. Rare as they are, they have the easiest part for, with them, the transition is accomplished without any special physical or mental discomforts. At most, there is an inclination to put on fat and disturbances in circulation.

(2) The intersexual type has, in its representatives, a more difficult time. First of all, the climacteric age often sets in rather earlier. As they have male characteristics in their appearance, they are less inclined to fat, but rather to thinness, but have, of course, much more to do with internal secretory phenomena.

(3) Women of the *Status Hypoplasticus*. To this belong the women affected with infantilism or who are below normal in height and weight. In women who are markedly afflicted with these phenomena, a marked climacteric seems even to be absent, because the period of menstruation is in itself more or less absent.

(4) Women of the distinct *Status Hyperplasticus. i.e.*, abnormally large, early developed women who are, as we saw, to some extent infantile. Little is known about this.

(5) Status Asthenicoptoticus. In this case, Mathes and Wiesel are of the opinion that it is a question of a congenital predisposition to disease which may be latent but makes its appearance when any asthenic attack sets in. Owing to the lowering of almost all the tissues, these women usually suffer from severe constipation, changes in the skin, flat foot and much formation of adipose tissue. We see thus that we were fully justified in saying above that nothing definite can be said about the beginning and end of the climacteric. There are even women who retain for the rest of their lives, the phenomena which are otherwise entirely characteristic of the climacteric. Wiesel says very rightly :

"The mere cessation of the menses alone, even at the proper age, is just as little the essential characteristic of the beginning of the climacteric, as the continuance of menstruation, even in the normal type is, in all cases, to be regarded as an argument against a developing climacteric. However, it may be concluded that the *cessatio mensium* is an important but not at all an essential symptom of the climacteric. Many observations of late conception tell in favour of this as well as the fact that ' climacteric ' troubles may occur also in younger individuals, where there can certainly be no question of the extinction of the function of the ovaries. Thus it remains extraordinarily difficult to define the time limits of the climacteric in the individual case, and we often have to draw our conclusions merely from a general impression and from the age of the woman concerned. All statistics have, therefore, only very limited value. Certainly one cannot tell in any individual case."

Now let us further consider symptoms and changes of the climacteric in the light of the most recent researches. It is quite incorrect to maintain that the whole exterior of women could be materially altered in any way by the physiological process of the climacteric. M. Bartels erred in the earlier editions when he spoke of a type of "matron" and meant by that a woman in and after the climacteric. The latest investigators, in particular Novak, Aschner, Wiesel, stress, for good reasons, the difference between climacteric and senium, which Bartels failed to distinguish. The real climacteric phenomena may already have disappeared in many women before their external characteristic have materially altered. Many authors speak even of a "second youth" in women. Wiesel says :

"Hence it must be assumed that alterations of this kind are the results of organs growing old in the anatomical sense, and that the climacteric troubles in these cases are dependent not so much on morphological changes in the organs concerned as on disturbances in their functional co-operation, in which, no doubt, the declining ovarian function is most to blame. From this fact, too, the supposition that the climacteric troubles owe their origin less to anatomical changes in the hormone-producing organs than to phenomena of irritation on the part of the sympathetic nervous system in the sense of a heightening of the sympathetic tonus seems to gain in value."

Naturally, this is not the place to go into the full details of all the clinical symptoms of the climacteric. Those who are interested may be referred to the work of Wiesel where they will also find an abundance of literature on the subject. There is an alteration in the hairiness of the body which in many cases (due to the influence of the suprarenal bodies) assumes a more virile form. Where the more male form, *i.e.*, the boundary of the hair arched upwards did not already exist, stronger hairiness towards the navel now sets in. Also the hair on the thighs and the buttocks become stronger. Very important are the disturbances of the vasomotor centre, thus we find congestions, headaches, sense of heat and paresthesia, sensations of dizziness and outbreaks of sweat, etc. Internal secretory disturbance is also at the root of these conditions. Thus Wiesel says :

"The hypertonic attack in the climacteric is in many features clinically reminiscent of the results of experimental adrenalin injections, and is to be found in women who suffer from symptoms resembling angina pectoris, that is to say, from local—certainly painful—vascular spasms."

Probably the changes in the blood at the climacteric will, at some future time, play a great part. So far as we know up to the present, it is a question chiefly of a diminution of the eosinophils. Wiesel thus comes to the following general decision :

"We could be certain that, in spite of the many forms of the phenomena, at least in a number of cases, climacteric types, ultimately dependent on the individual constitution, show a certain regular course and, as has been mentioned repeatedly, can often be compared with extra-climacteric occurrences. We were also in a position to show that only a lesser number of subjective troubles and objective states are peculiar to the climacteric, just as it could be proved that numerous symptoms, hitherto regarded as purely climacteric, exist during other incisive periods of life, above all puberty and pregnancy."

Certain observations go to show that in the lower classes, menstruation ceases earlier than in the upper. Krieger thinks this can be affirmed, and Mayer also found (for Berlin) the menopause occurring in women of the upper classes at 47.138, and in women of the lower classes at 46.975 years of age from which thus an average difference of one month twenty-eight days would follow. In this, it must be kept in mind that with the former, the first menstruation occurs about 1.31 years earlier than in the poorer classes.

For St. Petersburg (Leningrad) Weber ascertained that if one took five-yearly intervals, 4.6% came in the ages 30-35, 14% at 35-40, 28% at 40-45, 41.4% at 45-50, 12% at 50-55. On an average, 45.5 was the age for the cessation of the menses ; the maximum of all the cases fell in the 45th year with 11.9%, in the 50th with 11.5% and, finally, the 48th with 11.04%. The majority of menopauses thus fell between the ages of 40-50 in St. Petersburg. Weissenberg ⁷ found the same in South Russia and among Jewesses as well as Russians (average about 45 years of age) ; thus no difference was shown although the two groups exhibited differences in respect of the first appearance of the menses.

Mantegazza arranged interesting investigations for Italy, in which he observed the three main divisions of the country separately. It appeared that in the whole of Italy, the cessation percentage is highest in the ages 44-49 (44 = 9.6%, 45 = 9.7%, 46 = 10.9%, 47 = 8%, 48 = 9.4%, 49 = 6.1%). In this case, a climacteric influ-

ence is perceptible. In Northern Italy, the cessation of the menses shows the highest percentage of cases in the ages 44, 45 and 46 (13.8%, 9.5%, 16.9%); in Central Italy in the ages 45, 46 and 47 (9.6%, 14%, 13%); in Southern Italy, on the other hand, the cessation is postponed so far that from the age of 45 in which, it is true, the maximum falls, a far higher percentage of cases than in Central and Northern Italy falls in the later period, especially also in the period from 50 to 60 years of age (48 = 10.3%, 49 = 7.3%, 50 = 9.6%, 51 = 4.7%, 52 = 3.7%, 53 = 3.3%, etc.).The warmer climate seems to postpone the cessation of the menses more frequently.

Turkish women, according to Oppenheim, lose their menses at 30 years of age. Vasiliev, found among the Kirghiz women, who generally marry in the 17th year, the average beginning of the climacteric in the 44th year.

Minassian, on the ground of a great number of observations, states the beginning of the climacteric to be in the ages 40 to 45 among Armenians.

Pilsudski supposes the climacteric with Ainu women in Sakhalin to be not before the age of 50.

Currier, in his investigations on North American Indian women found as follows. The menopause occurred :—

In the women of the Sauk and Fox (Indian Territory), at 48 years.

Crow and Assiniboin (Montana), at 40 to 50 years. ,, ,,

- Uintah (Jute), at 40 to 50 years. ,, ,,
- Apache, at 42 to 53 years. ,, ,,

The women of the Cheyenne and Arapaho ceased their menstruation :---

```
2 at 46 years of age
1 at 49
            ,,
                   ,,
l at 50
            ,,
                   ,,
l at 51
            ,,
                   ••
3 at 54
                   ,,
l at 57
            ,,
                   ,,
1 at 73
            ,,
                   ,,
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A question mark must no doubt be put after this last number.

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1 at 38 years of age
4 at 40
            ,,
                   ,,
l at 43
            ,,
                   ,,
3 at 45
            ,,
                   ,,
2 at 46
            ,,
                   ,,
l at 47
            ,,
                   ,,
3 at 48
            ,,
                   ,,
1 at 49
            ,,
                   ,,
3 at 50
            ,,
                   ,,
2 at 51
            ,,
1 at 52
            ,,
1 at 53
            ,,
                   ,,
2 at 58
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From all these statements, it appears that many Indian women still have their menses at an age in which women of our race have long passed the climacteric. Wiesel has made the following summary of the climacteric :---

The climacteric is a period in which, by a gradual or more sudden cessation of

particular section of life are unknown),* the rest of the system of endocrine glands is disturbed. The individual manifestations in which the climacteric proceeds are dependent, above all, on the woman's type of constitution and, by it, the sequence or juxtaposition of the endocrine disturbances is chiefly determined and, indeed, much more intensely than by ectogenous circumstances, which indeed are calculated in the individual case to suppress or to emphasise particular symptoms, but hardly ever-unless a very deep-seated diseased process is involved-to irritate the general course of the climacteric. The whole course of the climacteric is determined by the disturbance in the co-operation of the hormone-producing organs but almost always in a quite definite way. A distinct division between sympathico and vagotonic forms of the process cannot be made; the climacteric is the period of heterotonia. This is easily understood when one realises that the disturbance of the function of the endocrine glands can never, in any particular case, have purely sympathicotropic or purely vagotropic consequences. Finally, it emerges that only a very small part of the symptoms hitherto regarded as specifically climacteric can have this strictly applied to them but that, in the ordinary life of woman, we often come across "climacteric" symptoms, and also in the climacteric we cannot recognise as specifically belonging to this physiological period a great number of the symptoms.

In addition to the constitution of the woman, the course of the climacteric is determined above all by the growing old of the organs, functionally and anatomically. Further inquiry will elucidate many problems which have hitherto been obscure.

2. HIGHEST AGE OF IMPREGNATION

Medical men are sometimes asked by women advanced in years whether they could enter into marriage without exposing themselves to the danger and discomfort of a pregnancy. It is often difficult or quite impossible to answer this with certainty. We know, as was remarked in the previous section, at what age approximately menstruation finally ceases. But there are no fixed laws for this, and even in women of the same tribe, fairly considerable fluctuations in respect of the age for the menopause may exist. There is one thing more, however, which adds considerably to the difficulty of answering this question. We are so far still quite in the dark as to whether, after the onset of the climacteric, a renewed, regular sexual intercourse may not be able to stimulate to renewed activity the ovaries which have already become inactive and thus the possibility of an impregnation would again arise.

With women in Northern Germany as we saw, 45 is regarded as the average age when the menopause sets in, and the confinement of a woman who has passed her 40th year is, among the masses, considered a great exception. This latter view is, however, erroneous, as statistics indicate. In Berlin, for example, in the eight years from 1892–1899, no fewer than 15,031 births took place where the mothers were from 40 to 45 years of age. The total number of births in Berlin in the same period amounted to 405,440. Moreover, the 45th year did not form a limit for child-

^{*} Of the various attempts at explanation of why generally at the end of the fourth decade in the human woman the function of the ovaries begins to die out, to which occurrence the climacteric is ultimately to be attributed, no serious examination has been made. Also the question of a climacteric in animals has not yet been investigated. Halban has made an attempt to explain the reason for the extinction of the ovarian function at the proper age. While, in animals, the young are dependent on the mother's care only for a comparatively short time, the human child is helpless and defenceless for a long time, and is in urgent need of the maternal care and protection till the time of puberty. Now, if the human woman were to remain capable of child-bearing up to an advanced age, there would be a danger that the child might be deprived prematurely of this necessary care and protection by the death of the mother.

bearing, for there were 1,205 children born of mothers between 45 and 50 years of age and 45 women were confined even at an age of over 50 years. These particulars are statistical figures from which nothing further is to be learnt. This is a great pity, for several important questions arise, the answers to which have great anthropological interest. Here again, a fruitful field for gynæcological investigations offers itself.

The first of these questions, to which several subsidiary questions at once attach themselves, is as follows: What was the menstrual condition in the case of these women who became pregnant late in life? Was it still regular or had it already ceased altogether some time previously? To this a further question now attaches itself: What happened after delivery? Did menstruation return after the puerperium was over, and in what way and for how long; or was the activity of the generative organs now terminated with the delivery and the ensuing lying-in? Further, these studies should investigate whether a person who had already given birth to one or more children was involved, or whether these elderly women had become pregnant now for the very first time. If they had already had children, it is, of course, also of importance to know how long a time had elapsed since the preceding pregnancy and the last confinement respectively had taken place. For a number of women who were confined after their 50th year, we are in the position of being able to learn how the matter stood as regards earlier confinements (M. Bartels). The records of the statistical department of the city of Berlin fortunately give particulars of this. We have already stated that the number of such women in Berlin, in the years 1892-1899 amounted to 45. Among these, there were only four who were confined for the first time. Nine had already had one to three confinements. Eighteen had been confined from four to nine times before, and 13 even showed a high degree of fertility, for 11 of them had had 11 to 12 children, one 14 and one even 15 previous confinements. Naturally, it must remain questionable whether the number of confinements coincides with the number of pregnancies; the latter might very well preponderate since, as is easy to understand, it is not impossible that there may have been intervening miscarriages. ٠In the case of these prolific women, the late impregnation will be less surprising than in the case of those who had never had a confinement before.

The question also arises as to how the matter stands with regard to the husband. Had the woman already lived with him for years, or is it a question of a procreator with whom the woman had only recently been connected ? Also it would be of interest to know the age of the husband. Finally, it must also be noted whether it is probable that the woman had not had any sexual intercourse until just before the pregnancy took place, or whether she had already had regular sexual intercourse for a long time. Also the viability of these children born of elderly mothers would be of great interest ; above all, of course, the question whether they were born dead or alive.

These, as we have said, are all questions which still await a thorough solution, the study and investigation of which, however, we would suggest to gynæcologists.

How long the capability of child-bearing lasts with other extra-European peoples is, so far, almost unknown. The little we know about this, at present, may be briefly stated here. The Tungus and Ostiak women are said to have ceased to bear children at 40 years of age, and generally, not later than 30 or 35 (see *Physische und ökonomische Zustände*, etc., p. 63).

On the other hand, according to Jagor, the women of the Nayar caste in India remain fertile until they are 40, no doubt up to 45 years of age. Marshall drew up a table in respect of the wives of the Todas in India according to which they ceased to bear children on an average at 37.4 years of age. This, however, is only the average, and in reality there were nine women among them who had given birth to a child after 40. One of these was 43 years of age, one 48 and one even 53.

Pilsudski says of the Ainu in Sakhalin :

"From the statistical data collected by me among the population on the eastern shore of Sakhalin, it appears that 12 persons were borne by women over 40 years of age. Five of these gave birth to children in their 41st to 45th years, seven at the age of 46 to 53. This gives 20% of the total number of women over 40 on the eastern shore of the island. It must be noted, however, that I have recorded only the cases where the children lived." In fact then, there were still more who were capable of child-birth at a still greater age.

Ramon de La Sagra (see Meyer-Ahrens³) wrote of the women on Cuba that they are fertile to their 50th year.

Although, in general, the women of the African races cease to bear children very early, yet Winterbottom found on the Sierra Leone Coast that women were confined as late as 35 to 40 years of age.

The women of the Solomon islands attain their highest age of capability to bear children at about 45, according to Elton.

Goldie, from the evidence of Thomson, states that among the Maori (New Zealand), a woman was confined as late as 47 years of age.

3. THE MIDDLE-AGED WOMAN IN HER ANTHROPOLOGICAL ASPECT

In the life of any organism we are able to distinguish three main divisions : the period of growth and development, the period of florescence and the period of decay. One may designate these three periods also as the youth, maturity and old age of the individual. The old age of woman makes its beginning at the climacteric. In woman, when "the change sets in," as women express it, then the years of her blossoming are past. The mistake mentioned above of confusing the climacteric with the phenomenon of senility is made, as we have said, by M. Bartels. He describes the picture of an old woman and not a woman in the climacteric. If we allow the description to stand, then it may be taken as the beginning of the old woman. We extract the following from it (and would refer the reader at the same time to the account of senility in the section "The Aged Woman").

This important period, that is to say, the beginning of old age in the life of woman, is not introduced without very considerable transformations in the whole of her external appearance. That these admit of not inconsiderable gradations, both in respect of the time when they set in as well as the degree of their development, need scarcely be emphasised. Care and sorrow, or well-being and comfortable existence, childlessness or a wealth of offspring, cause not unimportant differences in these conditions.

Now the changes in the years of life which concern us here make themselves perceptible in all parts of the female body. These are due not least to a considerable and sometimes even quite astonishing increase of adipose tissue on every part of the body. In such a woman the face, since it is, of course, not concealed by clothing, seems to be altered the most markedly by this. It often seems much bulkier and broader in the region of the cheeks, but also in the lower mental region, than formerly. The figure, too, compared with its former appearance, has quite obviously increased w.-vol. III.



FIG. 946.-Mordvin matron. From Karaguzi Mordofski, Saratov. (Nathistor. Museum, Vienna.)

in circumference, this being noticeable in the whole of the middle of the body, the hips and buttocks becoming much fatter and broader. Thus, in many cases, it is possible, on seeing a woman from behind, if artificial appliances do not conceal her form, to hazard an approximate conclusion as to her age. Now it is, of course, the subcutaneous fat which, in the youthful female body, gives the peculiar charm to the lines, and the roundness, which has such a pleasing effect to the male eye. Possibly one might be led to think that towards the years



FIG. 947.—Ruthenian matron. From Rycov, Taropol, Galicia. (Naturhistor. Museum, Vienna.)

of the climacteric, when again an increase in the subcutaneous fatty tissue is to be observed, the rounding of the lines must be shown in the same way as in the young girl just blossoming. But how differently this abundant accumulation of fat acts in the case of the matron ! The elastic firmness which the plump parts of the young girl show have gone; the bands of connective tissue which separate and, at the same time, support the individual fat lobules have become loose and easily extensible. This is the reason why the effect of weight, to which in youth the elasticity of the tissues offers sufficient resistance, makes itself felt so excessively.

Let us consider firstly the face. Whilst in youth the cheeks begin their curve from the lower edge of the orbital cavity and have their greatest breadth towards the region between the mouth and the nose, now, in the elderly woman, the curve of the cheeks begins only at the lower edge of the zygomatic arch, and also suffers a shallow transverse furrow corresponding to the line of the teeth. This is all the deeper and wider the more the back teeth are faulty or lost altogether, and attains its greatest breadth in the lateral region of the lower jaw, to which then, with but



FIG. 948.— Maori matron, showing characteristic facial changes. (Photo: Pulman.)

little intervention, the large padding of fat of the floor of the oral cavity is attached, as in the so-called double chin.

By this shifting of the cheeks downwards, the orbital cavities seem larger and deeper, not infrequently appearing blue or bluish black, and, at the same time, the soft parts from the bridge of the nose, which formerly ran out flat and gently into the upper part of the cheeks and into the lower edge of the orbital cavities, are now pulled downwards into the cheeks, and appear now on each side as an oblique, sharply defined swelling, pressing outwards and downwards from the nose. Owing to this, the naso-labial groove seems wider and deeper than before and also extends further down. The mouth loses the fullness of youth; the upper lip becomes flattened and thus gets somewhat angular, whilst in the under lip there is

a distinct tendency to protrude slightly and to turn outwards. By these changes, the mouth, on the whole, is somewhat widened.

Wrinkles appear, since the subcutaneous fat has disappeared to a greater degree than in the immediate neighbourhood, and as the skin has, at the same time, lost its earlier elasticity, slight folding of the skin takes place which we are accustomed to call wrinkles. From the same cause, in all the other parts of the face, all manner of longitudinal and transverse wrinkles, straight or curved, gradually form, and that is the reason why the face of the elderly, or later the old, woman often seems distended and not very smooth. In the Mordvin woman in Fig. 946 and the Ruthenian in Fig. 947, these circumstances can be plainly recognised.

At the outer corners of the eyes are to be seen the little transverse wrinkles called "crow's feet." Here and there the hair loses its colouring matter, becomes grey and may also fall out; but real baldness, such as is found so frequently in men of the same age, is, as everyone knows, very rare in the female sex.

Now, while the hair suffers a loss of pigment, the skin of the face has a considerable increase of it. Yellow and even brown discolorations appear on the forehead



FIG. 949.—" Bholidog " Queen, Wagga tribe, New South Wales. (Photo : Kerry.)

and on the temples, whilst the region of the cheek-bones and the point of the nose often assume a peculiar redness, almost copper in colour. When we add that very often wart-like thickenings and isolated bristly hairs sprout out here and there on the face, we have described practically all which merits being called characteristic of the face of a woman in the climacteric (and in old age). In our Maori woman (Fig. 948), all the peculiarities mentioned are very plain to be seen. For this and for the following, compare also the Australian woman (Fig. 949).



FIG. 950.—Obesc German matron.

At the upper as well as the lower extremities, owing to the more abundant deposit of fat, the circumference has, naturally, also increased. But here, too, the want of elasticity makes its influence felt, so that with every change of position of the limbs, the natural furrows between the individual muscle cavities which are



FIG. 951.—Abyssinian matron. (Photo : Krämer.)

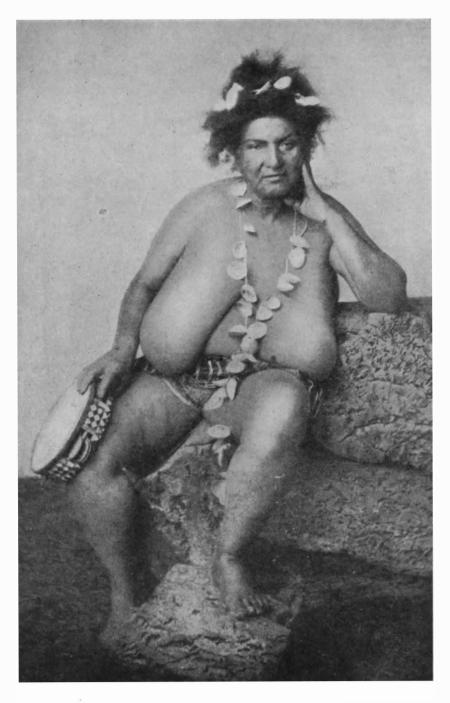


FIG. 952.—Abyssinian matron. (Photo: Krämer.)

obliterated by the roundness of youth, are plainly marked. Owing to this, the limbs get somewhat flat and broad, and in their movements, suggestive of a sticky dough. In the legs the veins are not infrequently expanded and stand out from the surface of the skin as large, curled thickenings, so-called varicose veins. In very

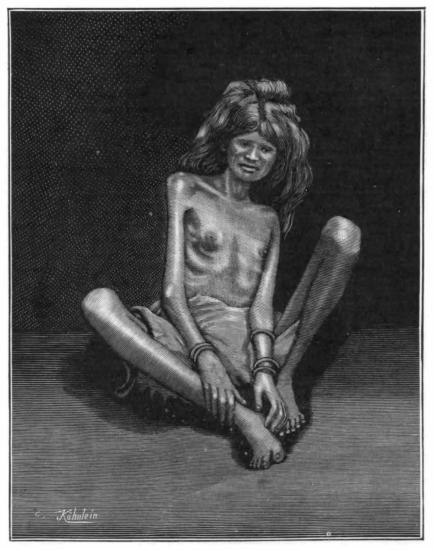


FIG. 953.—Hindu woman from Bangalore, aged through hunger. Mus. f. Völkerk., Berlin.

fat individuals, transverse swellings, formed by the subcutaneous fat, appear as is shown in the German woman in Fig. 950.

The breasts, in many cases, become merely long, loose double layers of skin, at the lowest part of which the remains of the mammary glands appear as a little knotty thickening. But even when the breasts are still full and abundant in fat, they are mostly pendent and look like a bag incompletely filled with sand, *i.e.*,

they appear flat in their upper part and the lowest part is round and curved, spreading towards the sides. In many cases the pendent character of the colossal breasts assumes enormous dimensions, and the woman can hold them up only with a certain amount of effort (Fig. 951). The large knotty areolæ and the likewise big and shapeless nipples do their share in making the sight anything but a pleasant one.

Sometimes, however, even in the matronly age, the roundness of the breasts is retained. But then, instead of the youthful smoothness, there appear all manner of roughnesses and knots. Often, too, the nipples are much lengthened and thickened, so that they protrude from the big knotty areolæ almost like a finger.

The abdomen, not infrequently disfigured by old pregnancy scars, has usually received a specially abundant share of the general increase in fat.

In many women, fat buttocks, in spite of their enormous bulk, appear not round and spherical, but rather triangular. For in this region in particular, the effect of the weight of the masses of fat is especially noticeable. The latter sink downwards and towards the sides, which makes them look as if a round pillow had been introduced horizontally just above the femoral fold. In this spreading downwards, the masses of fat of the thigh which extend from the region of the trochanters to the lowest part of the buttocks have their share. In other cases, however, the subcutaneous fat develops particularly abundantly in the lower sacral region, so that just below the crest of the ilium, it curves outwards on each side and immediately joins the crural deposit in the region of the trochanters. Then the upper half of the gluteal region appears very much developed ; the lower part is then less prominent and gives the impression of the nates having been compressed from the sides towards the median line. There is no longer any likeness to the spherical nates of a young woman, and over the whole surface there are many irregular little hollows which are caused by the tension of the fibres of the connective tissue.

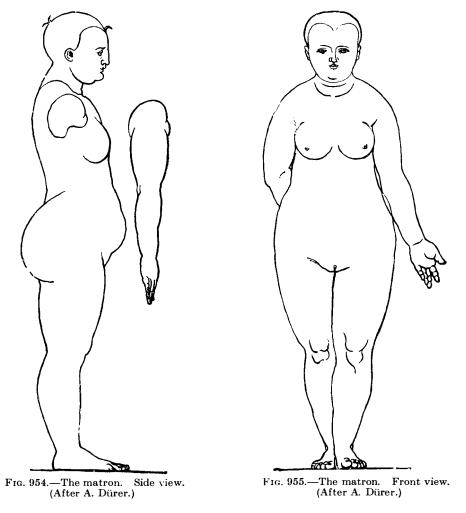
All the conditions described in the face as well as on the body can be seen in Figs. 951 and 952 of an aged Abyssinian woman. In both cases it is the same person, who probably belongs to the class of itinerant dancing women.

Now all these alterations in the exterior of woman which have been described do not appear suddenly and without intermediate stages, but take place gradually, and not so very seldom several years pass before they reach full growth. In this case, too, there is a great deal for anthropological research to do. For neither the time when these transformations begin nor the number of years required for their development, nor the order in which they manifest themselves, has yet been studied even in their most superficial elements ; and what we know of the peoples outside Europe in this respect is, at present, hardly anything.

One thing, however, we can say to-day, and that is, that there are certain factors which accelerate considerably the beginning of old age, compared with the time at which old age normally sets in. These factors are disease and sickness, trouble and sorrow, mental stress and physical want. As an example of how the last causes premature old age, I give in Fig. 953 a Hindu woman from Bangalore. She is one of a group of starving people who were photographed during a famine (M. Bartels).

4. EARLIER VIEWS ON THE ANTHROPOLOGICAL ASPECT OF THE AGEING WOMAN

We have already encountered repeatedly the works of the "Faithful Eckarth." Our present theme also received his attention and he described the fading woman in the following words : "Just as in young women, so long as their blooming takes its orderly course, all is in full flower and motion, so with those women who have lost their bloom, all spirit and briskness decline. The colour which excites love changes to a faded paleness; the once tense muscles and flesh-covered fibres become slack, and wrinkles take the place of the former smoothness and beauty; indeed, the whole form is altered so that when one compares the present figure with the earlier beauty, it is difficult to find any likeness. The eyes which used to dart hither and thither, like those of falcons, become dull and glazed. The lovely cheeks fall in; the beautiful round breasts



hang down like bags; the ruby lips become plum colour, brown and dull, the well-grown spine curves and bends and with it the erect neck; the beautiful white, ivory-like skin becomes yellowish; the flesh disappears from those pretty hands and feet. In fine, all that a lover once held beautiful, is now repulsive to him and arouses in him a disgust and horror of uncomeliness."

The picture which Eckarth sketches here has certainly much that is to the point. However, we cannot fail to recognise that here, too, a few of the circumstances which belong to old age are introduced.

Also a painter as skilful as Albrecht Dürer, as is easy to understand, acquired

full knowledge of the anatomical characteristics of mature woman. In his work on the symmetry of the human figure, he illustrated such a model which shows the abundant accumulation of fat on all parts of the body. Fig. 954 shows her in profile. The fat arm with the shoulder is shown at the side in a special drawing. In the breast we recognise the endeavour to represent it as pendulous.

"In the front view (Fig. 955), the breasts seem not pendulous enough, and the

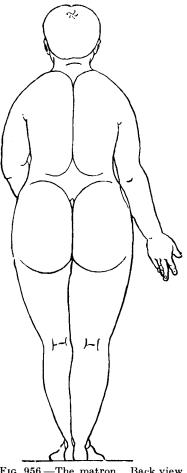


FIG. 956.—The matron. Back view. (After A. Dürer.)

same is true of the abdomen, which usually, in such a fat, upright woman at the age at which Dürer's illustration represents her, hangs down in its lower part so far that the inguinal furrows as well as the vulva, at least in its upper half, are covered by it. The sagging of the fatty skin on the thighs is more clearly expressed."

Brücke lays stress upon a few characteristic peculiarities of the female body in the state of fading.

"Plump upper arms are as rare in youthful individuals of the upper and middle classes as they are common in women who are in the so-called "second youth." This used to be more striking than now when the upper arms of many young girls are better developed owing to physical exercises."

One often finds the arm and hand in greater beauty in women at an age when the rest of their body is no longer suitable for portrayal in the nude. Indeed, sometimes the arm did not develop to such advantage till later.

At the lowest part of the nape of the neck, corresponding to the vertebra prominens, Brücke finds another fact worthy of note: "Here in women, a more or less extensive accumulation of connective tissue, rich in fat, is often formed. It is not a disfigurement in and by itself, but when it is not a question of the portrayal of a matron, painters and sculptors must beware of suggesting it, for it is a sure sign of advanced age."

We must not forget here a special type which the French have called "*beauté du diable*." It clearly shows that certain phenomena of the process of growing old—contrary to the opinion of

Bartels—may set in long before the climacteric because they are brought about by the constitution itself. Stratz, from whose work we extract the two following figures (957 and 958), says very justly :

"In the course of her life, every woman attains a point of highest vigour which, represented graphically, forms the highest point of a curve, which is conceived as ascending in childhood and descending in the decline of life. The curve of beauty may, in one case, rise very quickly, to decline again just as quickly, and we have then before us the so-called *beauté du diable*, a concept which exists only in the French language. In other cases, again, the curve ascends very slowly, to decline again just as slowly. The highest point of this curve comes later, but attains a greater absolute peak than in the former case, and the descending curve drops much more slowly (Fig. 958). The age at which the highest point is reached varies greatly. In Southern peoples, in particular, it is often reached in the fourteenth or fifteenth year; in Teutonic peoples, German, Dutch, Scandinavian and English women, generally at 20 years of age or still later. I know of cases in which full vigour was not attained till the thirtieth and thirty-third year." Fig. 957 shows one such transient beauty. The figure shows thick-set but pleasing lines, nevertheless, its roundness is not caused by strong muscles but by the deposit of fat of youthful maturity. The breasts are round, full and firm, yet the distinctness of the anterior boundary of the shoulders, the proof of the presence of a strong pectoral muscle, is lacking. The slanting line



FIG. 957.-Fully developed breasts of the type called "beauté du diable." Bohemian. (After Stratz.)

which runs down from the sternum outwards and separates the right breast from the bosom proper shows that the breast, by its weight, has already drawn down the skin. With the least increase in weight, the lower border of the breast will become a fold, and the same will happen if the youthful plumpness disappears owing to a trying mode of life or after pregnancy. The highest vigour is attained, perhaps already passed, and in some way or other it must pass away : *beauté du diable*

5. THE TIME OF THE MENOPAUSE AMONG EXTRA-EUROPEAN WOMEN

What information could be given as to the time of the beginning of the climacteric was grouped in the previous sections. However, there are a few scanty particulars at our disposal with regard to the age at which, in certain extra-European nations, the fading of woman takes place or the capability of propagation is accustomed to die out. Naturally, we cannot draw any certain conclusion from this that the climacteric or even the cessation of menstruation took place at the same time.

Schomburgk asserts that there is a quick withering and early extinction of the capability of propagation with the Warrau Indian women in British Guiana, and Burmeister says the same of the Coroado Indian women in Brazil. With the former, early marriage is customary. Maori women, according to Tuke, are said at 25–30 years of age to look as if they were 40–55 years old. On the other hand, the native women in Cuba, who are not infrequently mothers at 13, retain their capability of child-bearing till their fiftieth year.

According to Mayer-Ahrens, menstruation ceases with the Indian women of Peru at 40 years of age but often much earlier.

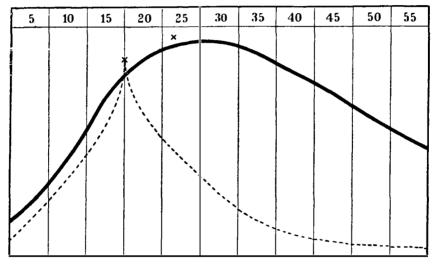


FIG. 958.—Curve of development in the type of "beauté du diable." (After Stratz.)

Of the Eskimo women of Cumberland Sound, Schliephake says that they age very early; v. Haven ascertained the fortieth year as that of the climacteric.

Most North American Indian women cease to menstruate in the fortieth year according to Rusk; while, according to Keating, the Indian women in Michigan retain their courses till the fiftieth, and indeed, even to their sixtieth year.

We have some further information as to the age at which women of certain North American Indian tribes have still had children. However, it is not proved by this that after this latest confinement, the menopause set in immediately. It is rather possible that later they were perhaps not capable of propagation but may still have gone on menstruating for a shorter or longer period. Comfort says that among the Dakota, Algonquin and Navaho Indian women, he has not come across a case where one of them was confined after 35 years of age, and that even confinements after 30 are rare. The latest confinement which Marden came across in the Mescalero-Apache Reservation was in the case of a 44-year-old Indian woman. Montezuma saw among the Paiute and Shoshoni Indians a woman confined at 45; Era one at 47 years among the Indians of the Santee Agency in Nebraska, and Wray one at 48 among the Yankton and Crow Creek Indians. Among the Chinese women, according to Mondière, menstruation lasts at latest till the fortieth year; among the Japanese women, on the other hand, it remains till the end of the fortieth year, according to Wernich. According to Kögel, it is due to the early marriage customary in Java that Javanese women rarely become pregnant after 35 years of age.

We find also early marriage in most African tribes, and probably for this reason a Gabun negress at 20 years of age gives the impression of being an old woman (Griffon du Bellay). At the same age, the Shangalla women are already full of wrinkles and have lost their capability of conceiving. At 30 years of age, Abyssinian women usually no longer become pregnant; but on the other hand, the negresses of Sierra Leone bear children as late as 35–40 years of age.

For the Wolof negresses, A. T. de Rochbrune fixes the thirty-fifth to fortieth year as the time of the climacteric. Berchon states that with the negresses on the Senegal this time does not come till the sixtieth year. In the case of this assertion, we must, of course, not underestimate the difficulties there are in such uncivilised peoples of finding out this time, on the one hand, and, on the other, of ascertaining with approximate accuracy the age of these persons.

Of the women of Upper Egypt, Bruce says that they not seldom become pregnant at 11 years of age, but at 16 already look as old as a 60-year-old Englishwoman.

Narbeshuber states of the women in South Tunisia that when young, they are really "very beautiful," but that at the beginning of the thirties, with their hard life, they fade quickly, and then they are the ugliest women he has ever seen. This fading, however, does not coincide with the climacteric, for the same informant says that here the climacteric sets in about the fiftieth year; moreover, he knows cases where menstruation still presented itself regularly after the fifty-fourth year.

CHAPTER XVIII

WOMAN AS GRANDMOTHER

1. THE GRANDMOTHER

THE period of the climacteric just described, in which woman begins to enter the state of an elderly woman, gives her not infrequently quite a new dignity in her family circle; she becomes a grandmother. Although, generally, one tends to imagine by grandmother a woman who has already reached the later years of life, yet this is erroneous. For even in our population, where marriages are not contracted at a particularly early age, it is not at all unusual for women about the fifties, if their eldest children were of the female sex, to have grandchildren. And the first time a woman sees herself become a grandmother, usually, as is natural, it makes a particularly deep impression on her. Moreover, it sometimes happens that a grandmother herself goes through one or two confinements after the birth of her eldest grandchild.

Now, we have learnt in earlier chapters that with some peoples in the world girls are accustomed to marry in very early youth, and that they often bear children at an age at which we are inclined to regard woman as a child. Now, if these young women have become mothers at 13-16 years of age, it is natural that their own mothers have attained the dignity of grandmother in their thirties where, with us, a woman is quite justified in claiming the designation of a young woman. And, in fact, not a few travellers have given us information of such youthful grandmothers.

The mutual relationship between grandmothers and grandchildren with us, though not often accustomed to be analysed, is often a very intimate one. No one knows so well how to get into the hearts of the little ones. No one has such understanding of the little pains which move their hearts as a grandmother.

This excellent understanding between grandmothers and their grandchildren, M. Bartels seeks to explain rather in a "poetic" than a psychological way. In the life of a woman when the years of maturity advance, very considerable changes Their children, the rearing and care of whom has taken up become perceptible. such a great and important share of their activity, have grown out of their hands, and have now gone out into the world or have made their own homes. The husband, for whom they kept house so long with faithful care, has often been removed from their side by death. Their household, owing to all these changes, has become a very small one, the management of which, for a woman accustomed to continual hard work and a wide and satisfying circle of influence, can occupy only a few hours a day. Often, too, circumstances make it necessary for her to give up her own home and accept thankfully the room offered her by her children, though with a reluctant Thus, it is no wonder that emptiness and desolation invade her and heavy heart. heart. The feeling of being a burden on her children, the painful sense of being absolutely useless and superfluous in this world takes relentless possession of her, and makes her feel with double severity what she used to possess and what has now been irrevocably rent from her.

Now the exciting time approaches when her little grandchild is to be born. As is easy to understand, she takes over the care of the household for the woman in childbed, and she also tries, as far as possible, to ease the burden of the work unavoidably imposed on the young mother by the new arrival. The grandchildren outgrow the nursing period : grandmother has to watch over their uncertain steps; she plays with them and has to tell them stories. Now there is no question that she has again got a vocation and again the satisfaction of having work pervades her soul. Moreover, the "dream of days gone by " hovers before her mind's eye. But in a quite different but more lavish way she can now devote herself to her grandchildren. Formerly she had to divide her time between them, her husband and her household, but now her whole time belongs to her grandchildren alone. The latter also know this only too well, for, although papa and mamma are often unable to devote themselves to them, grandmother has always time for them, and always lends an attentive ear to their little joys and troubles.

And there is one thing besides. The parents are accustomed to keep before them in all dealings with their children, the pedagogic standpoint, and the little ones cannot escape many a prohibition and reproof. But all this is quite different with grandmother, for she usually limits reprimands to the fewest possible. In these things are rooted the exceedingly intimate relationship between grandmother and grandchildren.

Now the question is whether this is the same with primitive peoples ? We know too little of their intimate family life to be able to answer this question. However, when we see how among peoples living far apart and at a very low stage of civilisation, the grandmother even becomes her grandchild's wet nurse as was discussed in detail above, then we shall probably not be wrong in seeing in this tenderness of grandmothers for their grandchildren and inversely of grandchildren for their grandmothers, not a product of civilisation but quite a common trait of the human character.

We have, from a lament for the dead of the Mordvins, the following verses:

"Wherefore do I look on without raising a lament? What do I hope for without joining in a dirge ? I went to and fro in the house. I went out and in the courtyard, I went into the house; My grandmother is not in the house ! (etc.) Thou my grandmother ! with thy precious sympathy ! Thou my granny ! with the soft heart ! Snuggled against thee, I grew in stature ! Although I did not, my grandmother ! Issue from thine own body, Did not sever myself from thy heart, Yet in thine arms was I reared, Was nursed against thy warm body. Sweet pap thou prepared for me, Sweet cakes hast baked for me. Thou gavest me good council, Grandmother, thou reasoned with me. Thou helpedst me occupy myself, grandmother, Thou hast directed me, grandmother, towards work !

2. THE MOTHER-IN-LAW

Our language is really inadequate since it has only one word for this. By rights, there should be a special expression to distinguish the husband's mother-inw.-vot. III. law from the wife's mother-in-law (as there is elsewhere, as we shall see). For their position with their children-in-law, and the parts which they play in the family, are by no means of equal value, and, as it appears, the relationship between the young wife and her husband's mother is usually the more strained. This is particularly striking when the husband is the eldest or the only son of a widow who has lost her husband comparatively early. She cannot reconcile herself to the fact that she must now share her son's heart with another, especially as the division is not even a fair one, but she has decidedly the smaller share. For, quite naturally, the young husband is now much more inclined to occupy himself with his young wife than with his mother, and the latter has now to take the second place. How different it was before, when for so many years her son belonged exclusively to her, when she could discuss everything and confer with him on everything; when she had his cares and sorrows, but, to make up, had also constant intercourse with him; in short, when he was, so to speak, a substitute for her dead husband !

This is now irrevocably past: another woman has taken her place, and this causes at the outset a discordance between the two women. In spite of every effort to be resigned and amiable, very often the young wife is unable to pacify her motherin-law's preconceived animosity and win her heart. The latter always has the conviction that her son has made a bad choice; that his wife does not enter into his intellectual interests sufficiently; that she is not near to his heart; does not understand him properly, and that she does not in any way sufficiently look after him. This makes a discord which often never dies out. However, it is considerably toned down in many cases when the mother-in-law becomes a grandmother.

Among the South Slavs, the husband's mother, as we learn through F. S. Krauss,¹ is quite right when she maintains that her young daughter-in-law estranges her son's heart from her. Whilst the latter rewards her for the faithful care with which she has brought him up, by the strictest obedience which goes so far that he even lets himself be talked into marrying contrary to his desire and love, yet every-thing becomes quite different as soon as the son has taken a wife. This is expressed in various of their proverbial questions and answers (called *pitalica*).

After many years, two sisters met again. Said the elder to the younger : "How lucky you are that your son treats you so gently and does not beat you as mine does me !" On which the younger asked : "Have you found him a wife ?" "Oh, long ago." "Now I have not betrothed mine yet."

Also a husband was asked : "Till when did you treat your mother gently and lovingly ?" He replied : "I always loved and caressed her so long as I was not married."

The following *pitalica* gives the reason for this phenomenon :

The younger brother asked the elder : "In what way do you reconcile your mother with your wife ?" He answered : "It is better to fall out with one's mother than with one's wife, for every mother is forgiving and indulgent but a wife is revengeful."

The source of the disagreement between the mother-in-law and her son's wife is easy to recognise. The young wife takes possession of the home and replaces her mother-in-law. Only for the first year, according to custom, she is allowed to enjoy her young life. After this, the mother-in-law retires whilst all the burdens of housekeeping fall to the daughter-in-law. For this reason, in a Southern Slav song, on her entry into her husband's house, she is received by his mother with these words :

> "Glory and thanks to Thee, O God the Lord ! Who sendest into my house the maid Who is to take my place !"

However, the young wife's reply at once defines the position which she will take in the house :

" I shall break my neck as if fallen from a horse If year by year we go not in turn to the Alps."

And so usually the advice which the young husband gave his newly married wife seems not to be followed :

"Do not worry my love ! As you correct my mother So my mother will always correct you. I will council you Gain favour my love Be sparing with bitter words In every answer."

For the daughter-in-law is often hostile to her husband's mother from the beginning in order to rid herself of as much work as possible. Therefore, it is said :

"That the daughter-in-law is lazy, the mother-in-law has to bear the blame";

whilst the daughter-in-law complains :

"The mother-in-law forgets that she was once a daughter-in-law,"

a saying which is repeated in similar phrasing in German and also in Latin. ("The mother-in-law at no time thinks that she has been a daughter-in-law "—" Non vult scire socrus, quod fuit ante nurus," Schrader ⁷).

Among the Albanians, the mother-in-law has a very far-reaching power over the daughter-in-law, for, as v. Schweiger-Lerchenfeld says, during the youth of the husband his mother can keep or send away his wife even against the husband's will.

"Therefore, the young wife is exceedingly obliging and amiable to her parents-in-law. She accompanies them when they go to rest and remains standing by the bed till she gets permission to go away."

The Albanians have a saying :

"The mother-in-law by the door is like the cloak at the thorn bush."

Among the Central Asiatic Turkish peoples, and in particular among the Kirghiz, respect to the parents-in-law is, according to Vámbéry, early recommended to the young wife. He records of this :

"Finally, the life of the young wife in the dwelling of her new relatives seems to us of special interest. On the day of her arrival, she is brought to the tent of her father-in-law in the evening. Two women take her arm and lead her, accompanied by many other women, to the tent where, on entering, she has to make three bows and to put into the fire some drops from the oil and koumiss-skin handed her: after this she bows three times before the hearth itself. At the hissing of the flames, the old women cry: 'Ot-aulia! Mai-aulia!' (Oh ! ye saints of the fire ! Ye saints of the oil !) The young wife sits down on the left beside the door of the tent and they sing the following to the usual tune :

'Honour thy father-in-law, he is thy father ! Honour thy mother-in-law, she is thy mother ! Honour thy husband, he is thy master ! Be not quarrelsome, etc.'

and after she has paid the usual compliments, she is given presents and taken back to the tent."

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The young Hindu wife likewise comes under the strict supervision of her mother-in-law, and her proverb says :

"In the presence of the mother-in-law, what is then the rank of the young wife ? "

The Kol, according to Nottrott, have a song in which it runs :

"Though the mother-in-law scolds thee, Do not, maiden, do not Then hang thyself."

Of the mother-in-law in India, Schmidt 9 says :

"The much despised mother-in-law, in certain circumstances, namely, when this *dame d'humeur* is *difficile et exigeante*—plays a much more important *rôle*, and can become a much worse tyrant in India where the young wife is often still a tender child. Nobody can imagine the suffering which awaits the young wife. Her husband is still too young to be able to protect her, and tender feelings in favour of his little companion are seldom aroused in him."

However, considerable demands seem to be made on these Hindu mothers-inlaw. We see this from other proverbs :

"The mother-in-law has not even drawers, and the young wife wants a tent and shade."

"The mother-in-law's maid is the slave of everyone."

The mother-in-law has gone to her village, and the young wife asks : "What am I to eat ?" (v. Reinsberg-Düringsfeld).

In the Pulayar caste in Malabar, it is one of the duties of the mother-in-law to deliver her daughter-in-law and in the Tenimber and Timor Laut Islands, the young wife passes into the special care of her mother-in-law as soon as she becomes pregnant.

We have already referred to the records which Hering has given of the books in use in Japan which are specially prescribed to be read by young girls and young wives. In these books, the discussion of the duties towards the mother-in-law plays a very prominent part.

In the Skogaku we read : "So long as a woman stays in her parents' house, and serves her father, her father is for her the way to heaven; if she serves another master, then he is for her the way to heaven and, if she marries, then her father-in-law and her mother-in-law are for her the way to heaven."

The Onna Daigaku begins with the words : "Maidens are destined to go as brides from their parents' house to another and to render all service to their parents-in-law." Of the husband there is no mention at first. And the Onna Chuyo begins : "A man takes a wife to have her with himself to serve well for his parents." Indeed, it is even required that the wife shall love her parents-in-law much more than her own parents. For the house of the parents-in-law is the house destined by heaven for the wife, as to marry signifies "to return." In other passages it says more sensibly that the wife or her son may someday inherit this house, and the parents of this house are therefore her real parents. This love also may not be difficult for the wife, for her parents-in-law are favourably disposed towards her from the beginning, otherwise they would not have chosen her as a wife for their son. It depends entirely on the daughter-in-law to retain their favour. Here, then, in addition to all the other responsibilities, the young wife has also that of keeping in favour with her mother-in-law. In order not to lose this favour she is enjoined to proceed very carefully; for example, not to visit her own parents too often and particularly not to praise her parental home too much in the presence of her parents-in-law. If she should incur the displeasure and annoyance of her parents-in-law, then she must try to pacify them again with love.

In the face of this responsibility which is continually put on the young wife, it is a great

relief when the young wife is excused and a share of the blame for the disagreements which arise so easily is imputed to the mother-in-law. This is done by the author of the Taikio and so truly that it can only come from a thorough knowledge of human nature. He says, "Man is large-minded and generous-hearted. Hence it seldom happens that a father-in-law hates his son's wife. Woman, on the contrary, is narrow-minded, suspicious, exacting and, therefore, it often happens that a mother-in-law dislikes her son's wife." Now is described how this takes place little by little : "The young wife serves her mother-in-law very well for a time. But in time she serves her less well, as she thinks it is enough if she serves her husband well. The mother-in-law at first treats her daughter-in-law as a guest and instructs her in everything in the gentlest way. In time, however, her love grows less and now if anything happens which arouses even the slightest ill-will in the mother-in-law, she at once gets ill-humoured. Then the daughter-in-law gets ill-humoured too, and in the end tells her husband. In this way the dislike of the mother-in-law breaks out openly, and it often comes to actual enmity. Finally, she tells her own mother who believes only her daughter's story and thinks the mother-in-law a malicious woman. A dissolution of the marriage may even result." The author, however, falls back into the tone of the old moralists when he continues : "Thus the germ of divorce lies in the evil deed of the young daughter-in-law." The latter must accommodate herself to this. For consolation, she is assured that her mother-in-law will never require of her anything so hard that she will "break her bones" in doing it. The mother-in-law will never order her to draw a waggon, fill the tub with water, or carry stones. Now the individual duties are shown her. In the morning, when her parents-in-law awake, she is to take them the water for washing the face. At breakfast, she is to wait upon them even though she is herself attended at table by a servant. Also, she is to prepare their meals herself. If they fall ill, the daughter-in-law must be with them always and nurse them. She must prepare and administer the medicines after she has taken a little herself-in case of poison. What is soiled, she must wash, and she must do everything herself. In winter, she is to prepare a warm bed herself for her parents-in-law; in summer a coolone, and when the parents-in-law have fallen asleep in the evening, she is to go to them once more to see if they are well. If she does all this, her mother-in-law will be pleased with her and everything in the house will go smoothly."

The Chinese, too, are in agreement with this, for they have the proverb : "The spring sky often looks like the face of a mother-in-law."

The idea of the "malicious mother-in-law" (of the husband) is possibly due to a rise in the cultural conditions, and linked with this an improvement of the position of the wife.

In the Aru Islands, as Ribbe records, the young wife's mother towards the evening of the wedding day, comes to her daughter's house and there begins to lament and weep and tell the husband what pain she had had at the birth of the wife, how hard it had been to bring her up and preserve her virginity, and how unwillingly she had seen her leave her parental home. After the son-in-law has let his mother-in-law howl for a time, his heart softens and he gives the mourner a present which consists of gold, porcelain, pearls, cloth, etc., and then she is satisfied.

On Keisar, the son-in-law shows respect to his parents-in-law. In Eetar there is easy friendly intercourse between them.

Among the Santee (Sioux) Indians the young husband has to take care to get his motherin-law's favour, for she has the right, if he does not seem good enough, simply to take her daughter away from him. Among other Sioux the young husband remained dependent on his parents-in-law for a year; in some Algonquin tribes it was until a child was born to him and during this time the new household was entirely united with the older.

On the other hand, with the Kansa and Osage, the eldest daughter, as soon as she married, used to rule over the whole parental household and even over her mother and sisters, the latter of whom were usually married to her husband at the same time. In this way, the parents-in-law not seldom fell into complete servitude to their son-in-law.

The most peculiar relationship between son-in-law and mother-in-law is to be found among

the Indians on the North-West Coast of America, for here it happens not infrequently that the son-in-law marries his mother-in-law for a time. That is to say, the girls here are often promised in marriage on the day they are born, but not really given in marriage until they are 14 or 15 years of age. Now, if the father of such a girl dies before she has reached a marriageable age then her future husband, until she becomes marriageable, takes his mother-in-law as his wife (cf. Jacobsen, Woldt).

Moreover, something similar used to take place among the Eskimo in Greenland. Cranz relates of them that one finds cases, though very few, of a man taking a mother and her daughter by a former husband as wives, which, however, is secretly held in abhorrence.

In this case, one now has the choice of saying whether the daughter-in-law has married her father-in-law, or the mother-in-law her son-in-law.

3. CEREMONIAL

Among many peoples, there is a very peculiar ceremonial in the intercourse between the parents-in-law and the young married couple which, in a number of gradations, yet shows very plainly the aim of keeping both as far apart as possible. They are not allowed to have meals together or talk together; they may not pronounce their names and even similar sounding words, and in some peoples they are not allowed even to see each other either temporarily, or even during their whole life. Andree has devoted his attention very particularly to these circumstances. There can be no question of one people having taken these customs from another, for we come across them in peoples separated from each other by wide seas and continents. Among the Galelarese and Tobelorese living in Celebes, sons-in-law have to show esteem for their parents-in-law, call them father and mother and bow while passing them.

In the Amboina Group, a son-in-law is not allowed to take a meal along with his mother-in-law, whilst the Tobelorese and Galelarese are forbidden only to help themselves before their parents-in-law at meals, or to take food and drink from their pots and dishes. Among the higher castes in the Punjab, a father-in-law does not even take a drink in his son-in-law's house (cf. Merk).

In the Ceram Laut and Gorong Islands, sons-in-law may sit down in the presence of their parents-in-law, but only at a respectful distance from them ; and in Keisar, it is regarded as particularly improper for the young husband to sit down opposite his parents-in-law on the wedding day, whilst the Galelarese and Tobelorese never do this at any time.

The prohibition to call the parents-in-law by name, we find among the Dyak in Borneo, in the Babar Archipelago, and in the Aru, Luang and Sermata Islands. In the last three island groups, it is considered a great insult and an unheard of rudeness. Just as little may an Aru islander pronounce the name of his son-in-law. The same custom is again to be found in the aborigines of Australia, and here even words of similar sound may not be pronounced. In Africa, according to Munzinger, this prohibition is in force among the Bogos, and, according to Kranz, among the Zulus; among the latter, however, it is valid only for women. This makes conversation very complicated and difficult to understand, as just as among the Kirghiz not even the male relatives of the husband may be mentioned by name.

G. Fritsch⁴ says of the Ama-Xosa :

"One custom is called *uku-mlonipa* and consists in a superstitious fear of parents-in-law. According to this custom, a wife may not look at or be together with her father-in-law and his male relatives in the ascending line, or even say their names, so that she is obliged to form new words in order to avoid the radical syllable of the dreaded name. Similarly, the husband fears

CEREMONIAL

the sight of his mother-in-law, keeps out of her way as much as possible and avoids saying her name, yet he is not bound in respect of her female kin in the ascending line. Obviously, the fear of bringing the crime of incest on themselves even in thought is at the root of this custom."

Likewise, among the Omaha Indians in North America, it was, in earlier times, the rule for a husband not to speak directly to the parents and grandparents of his wife. For this, he had to have his wife or child as intermediary. Also a wife might not speak directly to her husband's father but only through her husband and one of her children. If these were not at home, then she might address her father-in-law. This custom still exists, for even to-day a husband does not speak with his wife's mother or grandmother ; they are ashamed to speak with each other, but if his wife should have to be away, then he sometimes asks his mother-in-law for advice, yet only if there is nobody there through whom he could address her.

The rule that parents-in-law and children-in-law must not seek each other at all is particularly widespread, and this law extends sometimes to both son and daughter-in-law, but sometimes only to those of opposite sex, so that, for instance, the daughter-in-law may not be seen by her father-in-law, the son-in-law by his mother-in-law, and the reverse. In the temporal extent of this prohibition, we come across a few variations. For while with some peoples it is in force for life, with others it is valid only during the time of the engagement, and with still others, until the young couple have achieved a descendant.

The last we find in the North-West Australian natives and among the inhabitants of New Guinea; among the Ostiaks and Circassians, the separation lasts till the birth of the first child; and among the Kirghiz for three years; the prohibition, however, is in force for life among the Katschinzes, the Western Hindus, the Bogos and Somali in Africa and the Omaha Indians. Among the Circassians, during the prescribed period the young couple must not be seen by either side; among the Australians, the inhabitants of New Guinea, the Bogos and Somali, the son-in-law and mother-in-law may not meet; among the Kirghiz and Katchinzes, the fatherin-law and the daughter-in-law avoid seeing each other; and among the Omaha Indians and the Ostiaks, the prohibition is reciprocal, so that father-in-law and daughter-in-law on the one hand, and son-in-law and mother-in-law on the other, veil themselves before each other or keep out of each other's way. The fulfilment of this law is most strictly observed. Thus Vámbéry says of the Kirghiz :

"In general, the young wife among the Kirghiz may not show herself to her father-in-law or to the rest of the male members of the family for three years after her marriage, and although she goes into the tent of the former, she does so only with her face turned aside."

Of the Omaha Indians, it is recorded that a woman, if she can avoid it, never appears before her daughter's husband. The son-in-law tries to avoid entering any place where there is nobody but his mother-in-law. The story is told that the Ponca Chief, Standing Buffalo, noticed his mother-in-law sitting down. He turned round, drew a cover over his head and went into another part of the house.

In Port Lincoln in Australia a young husband, when his mother-in-law was approaching, was closely surrounded by the women standing by, and he himself covered his face with his hands whilst the old woman turned in another direction (Wilhelmi). The missionary van Hasselt tells that in Doreh (New Guinea), one of his pupils, a 16-year-old boy, let himself fall like a log under the table during a lesson, because his brother's mother-in-law was passing.

When we enquire into the reason for these strange customs the first thing is to find out what the people themselves can give as a motive for their behaviour in this. In this case, however, the Gabun negroes are the only ones to give us an answer. According to Bowdich, they have a tale of incest in consequence of which parents-in-law and children-in-law were required strictly to avoid each other. According to Fritsch, among the "Kaffirs" likewise the real reason for this strict ceremonial is fear of incest, which would conjure up the spirits of the dead. But whether this view holds good for all the peoples among whom we find the custom we have, unfortunately, no certainty. However, it is possible, since we find laws and memories from an era when the transition was accomplished from sexual communism to the more civilised conditions of a really permanent marriage. Now, in order to guard against relapsing into the old savage conditions on the part of the men, these strict laws as to the intercourse of the two generations with each other may gradually have come into being (M. Bartels).

CHAPTER XIX

WOMAN IN OLD AGE

1. ANTHROPOLOGICAL ASPECTS

THE climacteric is an indication for woman that the period of her vigour is beginning to disappear for ever. With more or less rapid steps, but steps which admit of no return, woman now proceeds towards old age.

[In the preceding section we have briefly considered some of the features of the menopause. The event again brings before us the profound differences between the male and the female. "Woman," Virchow is reported to have said, "is a pair of ovaries with a human being attached; whereas man is a human being furnished with a pair of testes." With the decline of life woman finds herself undergoing the most profound disturbances in her whole endocrine system. With the cessation of menstruation the balance of the blood pressure is changed, and the relationship of the ovary and thyroid becomes important. Feminine characteristics tend to yield to more masculine traits, while at the same time the endocrine disturbances tend towards obesity. Mental characteristics also alter, and in many cases irritability, jealousy and egocentricity make the sufferer difficult to deal with satisfactorily.

In senescence the involuntary process continues. Atrophy of the tissues proceeds; the muscles become dryer and more tough; the functional capacity of all the organs is reduced; and conditions of stasis lead to various disturbances throughout the entire system. There is a delayed and even blunted reaction to stimuli, physical and emotional. Pain is often felt less and mental shocks are more easily borne than before. Memory fails, especially with regard to names, and facts are apt to be confused with reference to time and place. The eye loses its power of accommodation; the ear no longer shows its former power and discrimination; cardiac inadequacy is noticeable; and the lungs are apt to be easily affected by bronchial disturbances. Cell energy becomes more and more reduced, and as the ageing process continues the power of regeneration becomes inadequate to deal with the loss. Death supervenes.]

M. Bartels, in his description, stated that what is perhaps most striking is the rapid and intense atrophy of the subcutaneous fatty tissue, which in old women of ten results in such considerable emaciation, and is also indirectly the cause of the profusion of wrinkles and folds which we see appear on the face and body of aged women. The subcutaneous fat is gradually absorbed; it disappears or diminishes; the skin, however, takes part in this decrease only in a very slight, almost imperceptible manner, so that now it is present in excess as a covering too big for the emaciated body. Since, however, thousands of fine bands of connective tissue connect it with the shrivelling body which it covers, it must of necessity form wrinkles and lie in folds in the various directions. We see this very strikingly in the old native woman from Mariannhill in Natal, shown in Fig. 959. She is called "Great grandmother."

This process of emaciation, which, as need hardly be mentioned, can only accompany a decrease and loss of tissue elements, and which is usually designated as senile atrophy, is by no means only limited to the subcutaneous fatty tissue.

ANTHROPOLOGICAL ASPECTS

Likewise, the muscular apparatus, the brain and the spinal cord, the nerves, the lungs and the liver, the spleen and the other blood and lymph and hormoneforming organs, as well as even the bones, are concerned in the senile atrophy, and,

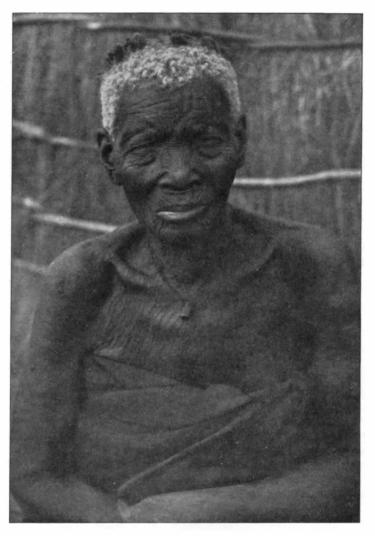


FIG. 959.—A South African great-grandmother from Natal. (Photo by the Trappists at Mariannhill.)

strange to say, apart from the skin already mentioned, only the heart and the kidneys seem to be excepted.

Important changes brought about by senescence are to be found also, however, in the last-named organs. In the skin, the small glands atrophy and, owing to this, it suffers not inconsiderable damage in its elasticity; it becomes dry and easily chapped; the kidneys show important alterations in their finer anatomical structure and the muscular apparatus of the heart gradually succumbs to a fatty degeneration, which to no slight extent supplies the cause of the cardiac weakness and the disorders in the circulation of the blood in old women. Charcot says :

"Les fibres musculaires de la vie organique n'échappent pas à la dégénération graisseuse et vous aurez souvent l'occasion de constater que les parois musculaires du cœur en sont presque toujours atteintes chez les femmes qui meurent à un âge avancée. A cette altération du tissu cardiaque se rapportent les phénomènes d'asystolie qui s'observent si fréquemment chez les vieillards alors même qu'il paraissent jouir d'une bonne santé."

It will at once be evident, even to the reader not versed in medical knowledge,

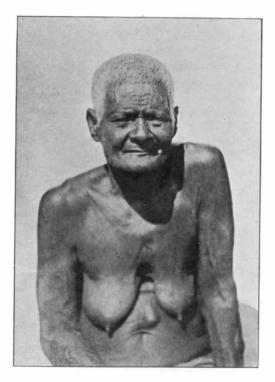


FIG. 960.—An old woman from the Nicobar Islands. (Naturhistor. Museum, Vienna.)

that here we are touching the borders of the pathological, and medical men therefore must subscribe fully to the saying that " old age in itself is a disease."

Then, apart from the already mentioned wrinkles and creases of the skin, we are struck by the bowed and stooping attitude of the body; the wavering and slightly trembling movements of the head and hands, and the stiff and uncertain, almost stamping, footsteps. The straight and upright position of the head is made possible by the uniform action of the flexor and extensor muscles. In old age, the flexor muscles gain the ascendancy and therefore curve the spinal column forwards, and, at the same time, the head is also bent somewhat downwards. The latter, however, now loses the proper support for its centre of gravity and, therefore, following the law of gravity, gradually sinks farther forwards. This curvature of the spinal column due to age is very well shown in Fig. 960, which represents a native woman of the Nicobar Islands.

The trembling of the hands, as well as the uncertainty in the movements of the legs are, likewise, due to senile changes in the realm of the nervous system. In the fingers and toes, the knee cap and particularly in the elbows, there is a great creasing The skin of the abdomen also becomes wrinkled into numerous creases. of the skin. The groups of muscles in the extremities are slack and withered; the roundness of the body disappears; and the rather prominent parts of the skeleton protrude very The fullness and tightness of the buttocks give place to the great markedly. shallow hollows of the iliac fossæ. Owing to this, the lax anus with its loose folds acquires such a superficial position that it is clearly visible, whilst in the young woman it lies deeply set in the gluteal cleft. The mons veneris has now really ceased to exist, for the skin which formerly covered it is now stretched tight over the symphysis publs, whilst the cushion of fat which used to form it has completely disappeared. Some hair, however, remains, and the individual hairs seem even longer, thicker and stronger than before. Laterally they are often bristly, although they have to a great extent lost their pigment, and assumed the grey colour of old age. They seem, in the main, to have a greater degree of resistance to old age than the hair of the head, although this, too, as we saw above, is accustomed to be retained for many years longer in the female sex than in the male. The vulva has lost all tonicity. Prolapse is common. The ribs and the shoulder blades become prominent whilst the intercostal spaces and the clavicular fossæ become deeply sunken. The breasts likewise lose their fat and hang down on the thorax in the form of larger or smaller cutaneous flaps (Fig. 960), or they disappear almost entirely with the exception of the big and often discoloured nipples.

The process of the "falling in" of the cheeks, as we may express it, assumes in old age considerable dimensions. The skin of the cheek hangs down like a slack sail, and the contours of the jaw show plainly. The actual curve of the cheek is situated so far down that it hangs as it were at the lower edges of the lower jaw, forming a narrow semi-cylindrical swelling. The naso-labial groove has become considerably deeper and very often extends to the lower edge of the lower jaw. Owing to this the nose seems narrower at the root than before, but it has increased considerably in length; whilst the point and the wings have acquired a certain coarseness. Owing to the naso-labial groove extending so far downwards, the chin also is distinct from the cheeks and now gives the impression of a little hemisphere specially fixed to the lower part of the face.

The mouth has lost its teeth, and the alveoli which used to house them, have gradually disappeared completely. The upper jaw, as well as the lower (apart from the loss of the teeth) have become a little lower, and when they rest with their masticatory surfaces on one another, the whole face loses something in height; whilst the lips sink in like a flat tunnel forming a veritable halo of wrinkles round the mouth. The chin, also, which has become nearer the nose, protrudes quite a distance forwards beyond the vertical median line of the body as in earlier days.

The colour of the face is generally pale or sallow. This is due to the imperfect regeneration of the blood in old people, which has already been discussed, and the disorders in circulation so common with them. Sometimes, however, we find the cheeks animated with a rosy glow. This animation, however, is only apparent, for the cause of this redness of the cheeks is to be found in the vascular engorgements in the more superficially situated capillary vessels of the skin. The eyes are generally dull, often red and watery owing to chronic catarrh of the connective tissue and, owing to the appearance of the so-called *arcus-senilis* (a ring-shaped yellowish-white discoloration of the cornea round the outer periphery of the iris), make a peculiar,

strange impression. Here and there in the face, but particularly on the chin and at the lowerlip, strong bristly hairs appear, and it is not rare for quite a regular though rather sparse beard to develop in women in old age.

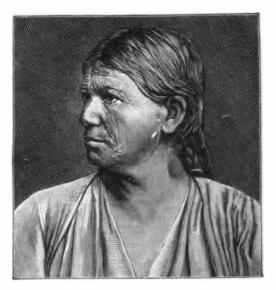


FIG. 961.—A gipsy of 29 from the Zeravschau district of Turkestan. (Photo : Kosanski.)

Perhaps I may quote here the description of an old woman given by the old Hindu writer Dāmodaragupta in his "Lessons of a Bawd" (Kuttanīmata, p. 3).



FIG. 962.—Indian woman of 38 from Surinam, already exhibiting signs of age. (After Prince Roland Bonaparte.)

"She beheld the old woman sitting upon a stool of straw. Her thin-sown teeth rose up within her mouth, and her chin had fallen away; her pug nose was flattened broadly, and her belly with its soft and bloated flesh was hidden beneath her mass of ruinous breasts; her sunken eyes under their fallen lids were blear and



FIG. 963.—Californian Indian woman of 107 years of age. (Photo by the Herrnhuter Mission, Niesky.)

red, and the lobes of her ears hung down unjewelled ; her rare white hairs dropped on to too long a neck, ploughed with a knot of veins."

The reader will see that this description emphasises many pertinent points (M. Bartels).

2. ANTHROPOLOGICAL SIGNIFICANCE OF SENILE CHANGES IN WOMAN

In the previous section were sketched the very considerable changes and transformations which old age brings about so characteristically in the whole external appearance of woman. If we observe in closer detail the considerably altered appearance which woman now offers, we cannot exclude a few highly signifi-



FIG. 964.—Old Bets. A Sioux Indian from Minnesota of 120 years of age. (Photo: C. A. Zimmermann.)

cant facts which M. Bartels has discussed briefly at this point. The first of these facts may be formulated as follows :

The changes of old age obliterate the sex characteristics of woman.

The reader may realise that what we are accustomed to designate as the female constitution does not signify a congenital state. To tell the sex of a new-born child at a glance without, of course, looking at the genitals, is difficult, and little girls retain the inter-sexual type for a longer or shorter time according to their constitution. Sometimes, certainly, the greater fullness of the upper thoracic region and the rounded shape of the buttocks, the thighs and the calves make it possible plainly to recognise the female sex. In all circumstances, however, the female constitution is not something complete from the beginning, but something growing, gradually developing.

The nearer the time of puberty approaches, the more clearly is the distinction in sexual constitution apparent, and it is always to be considered an abnormality if, in human beings who have arrived at puberty, the sexes can be mistaken for each other. This remains true in the same way also of the greater part of later life.

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Old age, however, then approaches and causes the rounded contours of the female body to disappear, makes all the limbs dry and lean, and draws deep furrows in the once full face. Now again it is more difficult to distinguish the sexes but for the particular fashion of wearing the hair or the character of the clothes or the



FIG. 965.—"Donna Marianne," from Lambary, Minas, Brazil, at the age of 131. Born 1764. Photographed 1895. (From R. Virchow's Collection now in the possession of the Berl. Anthrop Gesellschaft.)

adornment of the body. Moreover, as we have seen, a sparse beard often sprouts on the face of old women, whilst in old men the beard not seldom loses its former thickness and the voices of old men almost always become higher and squeakier than before, whilst old women are accustomed to get a rougher and deeper voice more like that of the male. However, another fact of anthropological importance faces us, which we may express as follows :

The changes due to old age obliterate the hitherto assumed racial characteristics. Now it is quite impossible to make a statement as to the actual time at which old age can be expected to set in even approximately applicable to all cases. For in regard to this, the greatest fluctuations prevail, not only among the different races, but also among isolated individuals according to their constitution. Some are well preserved, others age early. Who would have estimated the age, *e.g.*, of the Indian woman from Surinam portrayed in Fig. 962, at only 38 years? Who could tell by looking at the gipsy in Fig. 961, with her innumerable little wrinkles, that she is only 29 years of age? And similar examples could no doubt be found without too much trouble in the North German rural population or among the proletariat in our big cities.

We saw that among peoples where women are excessively burdened with labour and cares, they always grow old early, and in our highly civilised nations also we find the same phenomenon in the case of overworked wives of the peasant and the proletarian.

Now, if once the anthropological type of old woman had been reached, it would be quite hopeless to try to make a close diagnosis and estimation of her age. This also Figs. 963, 964 and 965 teach us. The first shows us a Californian Indian who has attained the respectable age of 107 years; the Sioux Indian in Fig. 964, Old Bets of Minnesota, is reputed to be 120 years old; the old woman, "Donna Marianne" of Lambary, a town in Minas in Brazil, according to a note of the author, written on the photograph (Fig. 965) was in her 132nd year when the photograph was taken. This photograph, which came from the property left by Rudolf Virchow, is now in the possession of the Berlin Anthropological Society. Anyone who examines these old women must recognise that they cannot by their appearance be distinguished from other old women, whether they are 90, 80, 70 years old or even less. This fact justifies us in drawing up a third anthropological theorem :

The changes of senescence obliterate and destroy the signs and characteristics which are decisive in determining age.

For we must not forget that in the whole of the rest of a woman's life it is usually extremely rare for an untrained eye to find enough anatomical characteristics to be able to determine the age of a woman with a certain degree of accuracy. In old age, however, it happens as we have just seen, that we can be wrong by whole decades in our estimate.

CHAPTER XX

WOMAN IN DEATH

1. NATURAL DEATH

WE have so far accompanied woman from her first existence in the womb, through the years of childhood up to puberty, through the period of fertilisation and pregnancy to the later years and, finally, up to old age, and the reader might well think that these discussions might reasonably be concluded with this. Our task, however, would be carried out only imperfectly if we were not also to direct attention to woman in death and even after death.

The previous chapters have taught us how many and various are the ways of acting and treatment, the obligations and duties of woman among the different nations and races; what extraordinary conformity in the views and ideas; on the other hand, we were able to ascertain even when there was absolutely no tribal and racial relationship. And hence, after these experiences, there can be no doubt that in everything that concerns woman in death, we shall also come across ethnological parallels and diversities which are not uninteresting.

Now, if we visualise again how throughout life the female sex, in anatomical and physiological as well as pathological and psychological respects, and in its whole physical structure, thought and feeling presents very considerable differences from the male sex, then we shall be able to understand and even be obliged to expect *a priori* that also the extinction of the functions of life and the entrance of death in woman must present important and interesting deviations from analogous phenomena in the male sex. This, too, has not escaped the observations of scientific investigators in the sphere of the life of woman, and what D. W. H. Busch has written from his own and Vigaroux's observation on the subject which interests us here is instructive and worth knowing :—

"The sexual distinction between man and woman is manifest also in death. In general, a woman's life is longer than that of a man, and therefore it is a natural phenomenon that she fears death less than he. Vigaroux tries to explain this from the peculiar constitution of woman: according to him, woman's greater sensibility is not a disadvantage but rather proves an advantage; the more intense the sensations, the less lasting they are, and that because the softness and suppleness of the solid parts can oppose but little resistance to them. In man, on the other hand, the rigidity and strength of the solid parts necessitate a greater energy and a far higher degree of intensity in the motives influencing them; the effect, however, is then also more stubborn because the resistance of which these parts are capable is much stronger but often involves the cause of defeat. This writer compares woman in this respect to a delicate reed which, incapable of resistance, humbly bows its head before the approaching storm and gently raises it again when the storm has passed; but man is like the tall oak which is swept away only because it is strong enough to resist. Man often sacrifices his life for an idea, and is indifferent at the death of others, but sets great value on this contempt for death, and regards it as something splendid and manly and is afraid of the death which might overcome him in illness. Woman, on the other hand, although deeply affected by the death of others, cannot understand how man can sacrifice his life for an idea, thinks lightly of her own life and in illness is more careless of the outcome. We find in women not so many examples of contempt for death and

UNNATURAL DEATH

a calmer, more composed attitude at the moment of death than with men, but also never such an anxious worry about preserving their life when it is endangered by illness and its sacrifice is purposeless. Man fights against death more calmly, woman looks death more calmly in the face, but when man has no chance of fighting it he is afraid. In great epidemics, one always observes that men appear more afraid than women; that they try to avoid the influence of the epidemic disease in every possible way, while women alter their manner of living less and subject themselves fully to its will. In woman, death takes place more gently and gradually, and represents more an extinction of life, or in other words, a kind of uniform exhaustion, whilst, in man, death proceeds more from the individual organs and calls forth a stronger or weaker reaction."

The reader may be reminded again at this point of what was set forth in our earlier chapters about the mortality of the female sex. Further, let him not forget that as a matter of course, the whole manner of living and the difference in the position which the two sexes have to occupy in nature must also involve quite different dangers to life for woman than for man. Thus we come across sexual distinctions also in death, the anthropological significance of which should in no way be under-estimated.

Among the gipsies, the death of a witch requires a peculiar preparation. We read of this in v. Wlislocki 6 :—

"Now when such a witch becomes old and decrepit, she prepares herself for her journey to the kingdom of the dead by letting the nails of her fingers and toes grow. Popular belief has it that it is hard for a witch to enter the realm of the dead ; and she can only hold fast with her long nails to the rocky walls which she has to scale in order to reach the other world after death.

"When a woman dies who has become a witch by intercourse with a *Nivashi* (water sprite) or *Pçuvush* (gnome), then a flash of lightning goes into the water and is caught by the Nivashi folk."

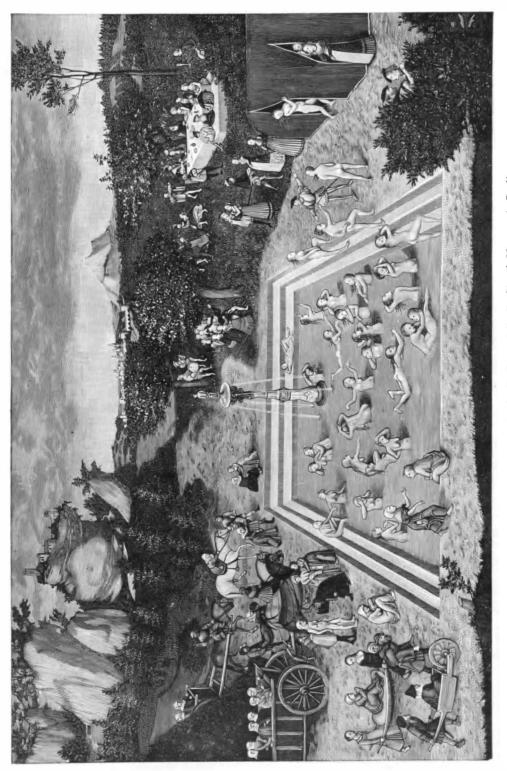
M. Bartels thought that at the root of this belief was the idea that the snake, which is left in the womb of such a woman after intercourse with one of the said elementary spirits, becomes free again with the death of the witch, and has to return to the water sprites in the form of a flash of lightning; it is not clear, however, how he arrives at this idea.

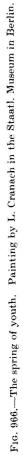
2. UNNATURAL DEATH

With the difference in the manner of living of the two sexes is also involved the fact that an unnatural death overtakes men considerably oftener than women. They are killed in open battle or by the treacherous weapon of the rival or the head hunter; they fall victims in their dangerous hunting or they perish in their occupation with machines or with the elements. It is quite different with the female sex; it also is not spared from unnatural ways of death, but the causes bringing about this unnatural death are of quite a different kind.

We have already learnt in earlier sections of two of these causes and of various examples of unnatural death in the female sex : one based on the rights appertaining to the husband of killing the adulteress and the other was the killing of widows. But it is not always sufficient for the arrogance of man to give the dead man only his widow with him in death. In the life beyond, he and she would lack the necessary service * if no maids stood by them and hence, in addition to the widow, sometimes a number of other women suffer death as well.

* [Cf. the burials recently discovered in the Near East.]





UNNATURAL DEATH

Avebury records that when a chief of the Fiji islanders died, it was customary to "send" a few of his wives and slaves with him. On the death of Ngavindi, Mr. Calvert went to Mbau in the hope of preventing the strangulation of the wives. He arrived too late, however. Three wives were murdered. Thakombau, in accordance with custom, had made a proposal to strangle his sister who was the deceased's first wife, but the population of Lasakau had wished her to remain alive so that her child should become their chief. Ngavindi's mother offered herself instead and was strangled. The dead chief lay in full state on a board at the side of a dead wife, the corpse of his mother lay on a bier at the foot and a murdered woman slave on a mat in the middle of the house. On the floor of a neighbouring hut they placed first the corpse of the maid-servant and then the three other corpses covered over and wrapped up together. On these occasions the women are prepared to die willingly, for they believe that only in this way can they get to heaven.

Thus Kund too records from the Congo :---

" It may be said that almost from the Pool to the Falls no free man of good standing dies without a few wives and slaves being killed. Sometimes, especially higher up, this madness when a man dies is said to draw over a hundred others with him into the grave."

The following custom from China is recorded by Katscher which, to be sure, is not killing outright but is a kind of burying alive :—

"The interior of the tomb is very tastefully decorated. It used to be customary to put carved images of servants and female slaves beside the coffins. Confucius, in one of his works, declared this custom to be ridiculous; instead of giving it up in consequence of this, the words of the great sage were misinterpreted to mean that it would be better to put living servants at the disposal of the dead regent. And so for 2300 years (from 500 B.c. to the end of the century before last), the custom was preserved of giving each deceased emperor a married couple in the grave with him to serve him. The main duties of these poor wretches consisted in burning incense and in putting lights twice daily at the head and foot of the coffin. There were always to be found impecunious people ready to spend the rest of their lives in the imperial mausoleum in return for a sum of money secured to their families by the government."

We have already seen that in Massaua, a father is obliged to hang his daughter if she becomes pregnant before marriage.

Also the killing of old women was mentioned in an earlier chapter, and we find a very interesting contribution on this matter recorded by Avebury :—

He stated that a missionary named Hunt once received from a young Fiji islander an invitation to the funeral of his mother. Mr. Hunt accepted the invitation. When the funeral procession started off, to his surprise, he saw no corpse. When he asked about it, the young savage pointed to his mother, who was walking with him, and was just as gay and lively as all the other guests and seemed obviously to be enjoying herself. He added that he was treating his mother thus for love of her and because of this love he was now about to bury her, and that only her children and nobody else might perform such a sacred service. She was their mother and they, her children, and therefore it was their duty to kill her. In such cases, a grave about 4 ft. deep is dug. The relatives and friends lift up their voices in lamentation, take a touching leave of the poor victim and bury her alive. It is remarkable that Mr. Hunt maintains, in spite of this, that the Fiji islanders treated their parents kindly and affectionately. And, in reality, they regarded this custom as such a great proof of their love that nobody but the children could carry it out. That is to say, they not only believe in a future existence, but they are also convinced that as soon as they depart from this life, they awaken again beyond. They have therefore a very cogent reason for abandoning this world before they are decrepit.

It must here be recalled to mind that in many nations a woman in certain circumstances incurs the death penalty to explate certain crimes. Thus a Chinese

UNNATURAL DEATH

water-colour drawing reproduced in Fig. 967, shows us a woman being strangled. Here we have, as the inscription indicates (according to Professor Grube's translation) not an attempted murder but a judicial execution. However, an execution of this kind is in China carried out on men as well as women. In certain crimes, detectives are sent out to arrest the criminal in the street. They then put a cloth round his neck, put a stick through it from behind and, by twisting this several times, the



FIG. 967.—Strangulation of a Chinese female criminal. (From a Chinese painting in the Museum f. Völkerkunde, Berlin.)

cloth is fastened tight. In this way, the criminal is strangled. This is depicted in Fig. 967. However, we have in the course of our discussions encountered other examples in the case of women and men. And that death by fire, by hanging or drowning, stoning, etc., are not peculiar to the male sex is shown by Fig. 968, which depicts a section of the place of execution in Yokohama. We see here three women's heads exposed on a high wooden scaffold in the foreground. They have had to expiate some serious crime. Only the walling up alive, as we learnt above, seems not to be done to men.

A strange form of death is portrayed in a Chinese water-colour drawing (possessed by Frau O. Neuhauss, of Berlin). A woman, who is almost entirely undressed, has been bound fast by her hands and feet to a pole and, at the same time, hung on this pole by the hair. Breast, belly and arms are quite bare, a long skirt covers her hips, genitals and thighs and reaches half way down the calves; the lower part of the legs is uncovered but the tiny stunted feet are in high boots with thick soles. From the smallness of the feet, one must conclude that a lady of high degree is concerned.

In front of the bound woman, the expression of whose face betrays fear of death, stands a constable with a sharp sword, which he is just going to thrust into the



FIG. 968.—A place of execution in Yokohama. (Anthrop. Gesellschaft, Berlin.)

unfortunate woman's right side. In his left hand he is holding a fan which he seems to be setting in motion. Presumably he is fanning the air towards the wound to make dying less painful. From the delinquent's head, a staff rises up which seems to be stuck into her hair. In it, after the fashion of a quill pen, a long narrow paper is fastened which is covered with written characters. Probably these give particulars of the unfortunate woman's crime (M. Bartels : see Fig. 969).

The dread of providing for old age may also cause the killing of women. Thus Cranz says of the Eskimo in Greenland :—

"Many widows who are old and ill and have no well-to-do relative who can provide for them without difficulty are also buried alive, and the children do not consider this cruelty, but kindness, because they spare them the pains of a long sick-bed from which they will not rise again, and themselves trouble, distress and pity."

3. SUICIDE AMONG WOMEN

Among civilised peoples, we have a not inconsiderable number of examples, which show that women, impelled by despair, are not afraid to take their own lives. Unrequited or lost love is by far the most common motive for this act. But also the heroic resolve to save their chastity from violation has, as is well known, driven not a few women to death by their own hand.

In a previous chapter of the present book, we have already discussed the suicide which we put in comparison there with the so-called "abnormal" marriages. The



FIG. 969.—Execution of a Chinese woman. (From a Chinese water-colour.)

following lines will, on the other hand, be occupied with the ethnography of suicide among the female sex.

Suicide among women is by no means to be regarded as a deplorable acquisition of civilisation. It occurs as well among the so-called primitive peoples, although it appears to be less frequent, and in this matter, also there is another extensive field open to ethnological research. We know of American Indians who, because unlucky in love, have thrown themselves from rocks; we have learnt that many widows among the Tautin Indians in Oregon die voluntarily in order to escape the humiliation and torment which, in accordance with the custom of the country, were associated with their widowhood. Of the Wahpeton and Sisseton Indians, McChesney records :—

"Twenty or more years ago it was quite a common occurrence when a woman's favourite child died for her to hang herself with her lariat on the branch of a tree. This seldom happens now." Then we hear of the Munda Kol in Bengal, through Nottrott, that here, women, for quite trifling reasons, sometimes end their lives by hanging.

The Dyak women in Borneo, according to Ling Roth, are not infrequently driven to suicide by an unkind word. They try to poison themselves, but often the dose is too small and an emetic, which they are forced to take, restores them to life.

Of the Wakinga (East Africa), the missionary Hübner (in Fülleborn ²) records similar cases. Now and again it happens that a woman takes her own life merely from annoyance, to avenge herself on her husband for bad treatment, to be particularly spiteful to him, and to cause him sorrow for the loss of property entailed by her death.

The same thing happens in New Guinea. The missionary Keysser says that with the Kai, suicide occurs more frequently among women than men, and then it



FIG. 970.—Execution scene. Rudolf von Ems. fourteenth century. (From a MS. (cod. germ. 6406) in the Bayr. Landesbib., Munich.)

is an act of revenge rather than of despair. That is to say, the women, by their deed, which certainly costs them their lives, cause their husbands no little embarrassment, for the wife's relatives make him responsible for her death and demand compensation.

J. L. Gottfried in the seventeenth century told of a kind of mass suicide which takes place in Java. He says that "it was their custom when the king died to burn the corpse and preserve the ashes; five days afterwards, the wives of the king went to a certain place and the foremost among them threw a ball, and where now this came to rest they all proceeded, turned their faces towards the east and pierced their own hearts with a dagger. Bathed in their own blood they fell on their faces and died" (cf. Fig. 971).

Jacobs ² says of the women of Achin :

"Suicide among the Achinese occurs hardly at all: in any case, it is most exceptional. The few cases which they could tell me about concerned young women or girls who were betrayed by promises of marriage which were not fulfilled." That young widows in India often take leave of life willingly to avoid the unspeakable torments and slights which their fellow countrymen impose upon them, was mentioned above.

Likewise, among the girls of the Chevsurs, as we have already seen, suicide is not unknown when they have not had sufficient power of resistance to keep their



FIG. 971.—The wives of the Javanese king commit suicide together. (After J. L. Gottfried, 1655.)

chastity inviolate. In this case, too, death by hanging is the most common; it happens also, however, that the girls shoot themselves.

A forced marriage sometimes drives Basuto girls to commit suicide. Merensky says :

"Many girls who know no other way out take their lives in despair rather than marry the man they dislike. Mostly they resort to the rope and hang themselves in the woods."

In Angola, as already mentioned, childlessness brings women to take their own lives.

The most thorough information about suicide as the representatives of the

female sex practise it, Doolittle has given from China. He records the following on this subject :

"Some widows, on the death of their husbands, resolve not to survive them and proceed to take their own lives. Chinese sutteeism differs from Indian sutteeism in that it is never performed by burning. The manner of doing it is various. Some take opium and lie down and die by the side of the corpse of their husband. Others commit suicide by starving themselves to death or by drowning themselves or by taking poison. Another method, sometimes practised in this place, is by hanging themselves in public near or in their own houses, having given notice to that effect so that those who desire may be present and behold the act.

"The real reasons which induce some widows to practise sutteeism are various. Some, doubtless, are moved in a great degree to do it by a devoted attachment to the dead; others by extreme poverty of their families and the difficulty of earning an honest and respectable living; others by the fact or the prospect of unkind treatment on the part of their husband's relatives. Occasionally when poor, the brothers of her deceased husband advise or insist that the young widow shall marry again. In one of the cases which occurred here about a year ago, the inciting cause why the young widow decided to kill herself by public hanging was that a brother-in-law insisted that she should marry a second husband. On her refusing to do it, he insinuated that the only way for her to gain a livelihood in the indigent circumstances of the family was by her becoming a prostitute. This unkindness maddened her and she resolved to commit suicide-She appointed a certain time for its accomplishment. On the morning of the day appointed, she visited a certain temple erected to hold the tablets and perpetuate the memory of 'virtuous and filial 'widows and located near the south gate of the city. She was borne to and fro through the streets, seated in a sedan carried by four men dressed in gaudy clothing and holding in her hand a bouquet of fresh flowers. After burning incense and candles before the tablets in this temple, accompanied with the usual kneelings and bowings, she returned home and, in the afternoon, took her life in the presence of an immense crowd of spectators. On such occasions, it is the practice to have a platform erected in the house of the widow or in the street before it. At the appointed time, she ascends the platform and sprinkles some water around on the four sides of it. She then scatters several kinds of grain around in the different directions. These things are done as omens of plenty and of prosperity in her family. After being seated in a chair on the platform she is generally approached by her own brothers who worship her. This is oftentimes accompanied by the offering to her of tea or of wine. When everything is ready, she steps upon a stool and, taking hold of the rope which is securely fastened to a high portion of the platform or the roof of the house, adjusts it about her neck. She then kicks the stool away from under her and thus becomes her own murderer.

"Formerly, certain officers of government, if the current report is trustworthy, used to sanction the self-destruction of widows not only by their presence on the occasion, but also by their taking part in the worship. Once, it is related, a woman, after the honours had been paid her, instead of mounting the stool and adjusting the rope about her neck and hanging herself according to the understanding, suddenly recollected that she had forgotten to feed her hogs and hastened away promising to be back shortly, which promise she omitted to keep. Since that hoax, no mandarin has been present at a suttee at this place.

"A public suicide by a widow always attracts a large crowd of spectators. Public sentiment encourages the practice enough to make it considered honourable and meritorious though not to make it a very frequent occurrence. The brothers and near relatives of a widow who thus immolates herself soon after the decease of her husband regard it as an honour to the family and not infrequently feel gratified in having themselves referred to as her brothers or relatives.

"Sometimes a girl who has been betrothed to a man who dies before the marriage day resolves to take her own life by public hanging in view of his death rather then be engaged again in marriage or live unmarried. If she cannot be persuaded to take a different course, she is allowed to appoint a day for her suicide, visits the temple referred to above, if not too far distant, mounts the platform provided at the house of her affianced husband and launches herself into eternity in much the same manner as do those widows who resolve not to survive the loss of their husbands. The coffin of the girl in such cases is interred by the side of the coffin of the betrothed and at the same time.

"The widows and girls who take their lives as above described may have their names recorded on the large general tablets erected in the temple which they visit before they commit suicide or they may have a separate tablet made in the usual shape but as costly as they please to make it, placed among the other tablets at the temple on the payment of a sum of money for the current expenses of the institution or as a present to its keepers or managers. The sum demanded is graduated by the social standing or wealth of the family of the person whose memory the tablet is designed to commemorate. Incense and candles are burned in this temple on the first and the fifteenth of each Chinese month in honour of these 'virtuous and filial'



FIG. 972.—Japanese woman cutting her throat with a sword. (From a Japanese woodcut in the Museum f. Völkerkunde, Berlin.)

women by some of the gentry of the city, and it is the official duty of certain mandarins, either in person or by deputy, to offer oblations at this temple in the spring and autumn of each year."

That inscriptions on memorial arches are made in memory of these women was mentioned above.*

Katscher also speaks of Chinese women's great propensity for suicide. According to him, the polygamy in those Chinese families which embrace it produces "envy, malice, uncharitableness and hate," and drives many jealous women to suicide. No wonder then if many Chinese women resist marriage. To escape it, many girls become nuns; others prefer to commit suicide. During the reign of the

* Cf. in respect of this, the chapter "Freiwillige Witwentod "in B. Navarra, China und die Chinesen, Bremen, 1901.

Emperor Taukwang, once no fewer than fifteen virgins decided to take their own lives because they had learnt that they had been betrothed by their parents. They threw themselves into a tributary of the Canton in the vicinity of the village where they lived and were buried in a common grave which people call "the Virgins' Grave." A similar case occurred in the year 1873 in a village near Whampoa. Eight girls put on their best clothes, tied themselves together, and jumped into a tributary of the Canton.

We referred above to a statement of Freiherr v. d. Goltz to the effect that in



FIG. 973.—Japanese woman cutting her throat with a dagger. (From a Japanese woodcut in the Museum f. Völkerkunde, Berlin.)

the Chinese Province of Kwangtung, young girls form societies, the so-called Golden Orchids Society, in order to live unmarried. v. d. Goltz then writes :

"According to an article in the Tientsin newspaper Shih-pao, of January 3rd, 1888, many unmarried girls living in the district of Shunté in Kwang-Tung pledged themselves not to allow intercourse with their future husbands till every single member of the society was married. In accordance with this, they returned to their parents on the third day after marriage, without having fulfilled their conjugal duties. When force is applied, the members of this society of virgins always resort to suicide. In this it is customary to commit suicide with six others, that is, in sevens. When these girls, who have sworn that they intend to remain virgins for ever, find that their parents have procured husbands for them, then they join with six others, steal secretly from their homes at midnight and seek death hand in hand by throwing themselves into the river. Once seven of these girls were standing on the bank of a river at midnight ready to throw themselves into the flood. At a given sign six of them did this, but the seventh had withdrawn her hand at the critical moment and thus saved her life. Consequently, six mourning ghosts haunt the water's edge regretting their unfaithful sister."

The statements of Doolittle, v. d. Goltz and Katscher give us a deep insight into the mind of the Chinese woman. It need hardly be mentioned that further information in this direction about other peoples also would be of quite outstanding importance for natural psychology.

In Japan, suicide among women is very common; the percentage, according to R. Gaupp, is much higher than in white races, being 1:1.8.

In the other methods of committing suicide, one can, as is well known, recognise on the whole certain sex differences. Death by shooting, cutting the throat, opening

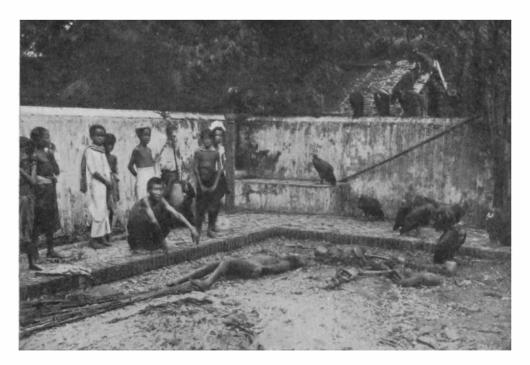


FIG. 974.—A corner of a Siamese place of execution. (Völkerk. Museum, Dresden.)

arteries, and by knife or sword are used chiefly by men; poisoning, drowning and hanging are preferred by the female sex.

According to a summary given by R. Gaupp, there killed themselves in Prussia in the year 1898 :

By hanging	61.3%	of the male,	44.5%	of the	female	suicides.
By drowning	14.0%	,,	38.2%	,,	,,	,,
By shooting	16.2%	,,	2.5%	,,	,,	,,
By poisoning	$3\cdot 2\%$,,	7.1%	,,	,,	,,

In Japanese heroic tales suicide, by cutting the throat, seems to play a prominent part; at least there are several Japanese woodcuts which depict such scenes. One is reproduced in Fig. 972. Sometimes, several women killed themselves at the same time, and the instrument used by them is not some convenient knife, but a big sword. However, the dagger is also used for piercing the throat, as we see in Fig. 973, which, like the foregoing illustration, is taken from a Japanese romance and is in the Ethnological Museum in Berlin. Fig. 974 represents a criminal section in a Siamese burial ground from a photograph by the Imperial Siamese Court photographers, Schumann and Heinelt, in Dresden.



FIG. 975.—Life and death. (From a painting of about 1490 in the Germ. Mus., Nuremberg.)

4. FUNERAL RITES FOR WOMEN

The inferior position, in a social sense, which woman is accustomed to occupy in many nations, makes its influence felt far beyond the grave.

The separate position which woman occupies we recognise also from the fact that in many places quite a special and separate place is assigned to them in the common burial ground. The world-famed cemetery at the Certosa of Bologna consists substantially of four connected, square cloisters in which people of high rank are laid to rest. The square spaces enclosed by these cloisters, which are open to the sky, are the burial ground of the poorer population, and one square is for men only, another for women, the third for boys, and the fourth for girls. And it is the same in many other parts of Italy. All must perish! This idea is often represented in pictorial art. An example is the painting of *circa* 1490 in the Germanic Museum in Nuremberg (Fig. 975). The same idea in another form is expressed in the ossuary, likewise in the Germanic Museum (Fig. 976).

Among the Parsees in India also, it is a rule that female corpses be separated from male. Their burial places, which are called *dakhmas* or "Towers of Silence," are in very wide, low, round towers, situated on lonely heights covered with beautiful vegetation, and are quite open and uncovered at the top. The interior is divided into three concentric sections by quite low step-like walls, whilst the middle point is



FIG. 976.—An ossuary. (From a painting in the Germ. Mus., Nuremberg.)

formed by a wide, round, walled hollow. Similar walls, arranged radially, divide the concentric rings into individual sub-sections. In these, the corpses are placed, and the central concentric circle belongs exclusively to women whilst the inmost is reserved for children's corpses, the outermost, and, of course, the biggest, for the corpses of men. The corpses are bare : "naked we come into the world, and naked must we leave it again," say the Parsees. Flocks of vultures sit waiting on the edge of the enclosing wall and fall upon the new arrival immediately the bearers have departed from this place of horrors. In a few minutes (in one or two hours, according to Patell) the soft parts are devoured, and only the skeleton is left. Horrible as this kind of burial seems, yet it has its advantages ; the smell of decomposition is, at any rate, prevented as far as possible. Yarrow has given a picture after a drawing by Holmes of such a tower of silence, and this is reproduced in Fig. 977.

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Niebuhr relates the following about the *dakhma* near Bombay. "The Parsees have a special method of burying their dead. They do not want either to decay in the earth, like the



FIG. 977.-Tower of Silence (Dakhma). Parsee burial place. (After Yarrow.)

Jews, Christians and Mohammedans, or to be burnt like the Hindus, but they let their dead be devoured by birds of prey. They have at Bombay a round tower on a hill some distance from the town, which has boards laid over the top. On these they place their dead, and after the w.-vol. III.

birds of prey have devoured the flesh, they put the bones in the tower below and the bones of women and men in separate compartments. This building is now closed, for it is said that on one occasion a young and beautiful woman, who died suddenly and, according to the custom of the East was buried immediately, was visited in this graveyard by her lover."

In 1890 there were, according to Patell, 115 towers of silence in India ; of these 67 were founded by public collections among the Parsees, 45 by individual men, and 3 by individual women.

At the close of the world-famed International Hygiene Exhibition in Dresden, in 1931, Frh. v. Reitzenstein, as director at that time of the ethnological section, and on the strength of the material then known, had made in his workshops a model

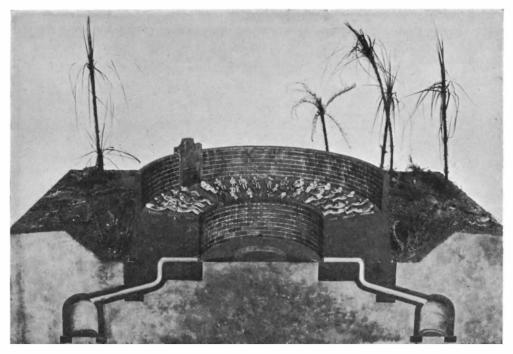


FIG. 978.—Dakhma. Section through a model at the Hygiene Museum, Dresden. (From a plan by Frh. v. Reitzenstein.)

of one of these towers for the Hygiene Museum in Dresden. With the permission of the present director, we give in Fig. 978 a picture of this model.

The custom of giving the deceased in death the objects in use by him in life is ancient and widespread. Thus, *e.g.*, according to Mantegazza, a rice pounder, a sickle, a sieve, a sunshade and the ear-rings such as are worn every day were burnt with a dead Kota woman (Nilgiri Hills). With men, they burnt different things. Also in the section dealing with women who have died in childbed, we have had to speak of many such additions to the dead.

One such woman's grave is given in Fig. 979. It belongs to the Sakai in Perak. Here, too, objects used by the dead, like necklaces, ear-rings and the like are also put with them.

Toeppen, writing in 1867, states that in Masuren, no hairpins might be put in

the grave with the corpse because otherwise the relatives left behind will get the most violent headaches and will not get rid of them till the corpse is dug up again and the hairpins removed. A case of this kind occurred in Hohenstein.

An interesting discovery was made by the Swedish archæologist Nordin. He discovered an extensive graveyard of the earlier Scandinavian iron age at Bjers in the island of Gothland and found that there all the women were cremated but not the men.

The sex of the buried person in certain Egyptian sarcophagi and in many Etruscan cinerary urns is extraordinarily easy to discern. Apart from the inscription, the former, as is well known, sometimes imitate the form and face of the dead person and in a number of mummies from the third to the seventh centuries of our era, which Flinders Petrie excavated in Achmim-Panopolis, the painted image of

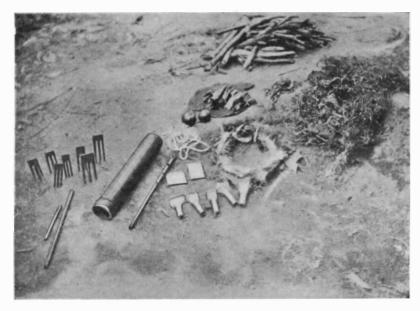


FIG. 979.—Sakai (Perak) burial ground for females. The combs, necklaces and other objects are for the use of the spirits of the deceased. (After Skeat and Blagden.)

the dead person was in each case put into the swathings of the mummy. A coloured illustration is to be found, *e.g.*, in Springer's *Kunstgeschichte des Altertums*, 10 Aufl. (Leipzig, 1915), Plate XVII.

In very many Etruscan cinerary urns, the dead person is portrayed in full figure, and often unquestionably with a certain likeness, on the lid of the alabaster or clay urn. The Museum in Volterra, in particular, is rich in such finds, but very characteristic examples are also to be found in the very interesting Museo Archeologico in Florence.

We would mention here a particularly delicate and finely felt example of a sarcophagus lid in alabaster from Vulci in Etruria. It is reproduced in Fig. 980.

In Brazil, in the country at the estuary of the Amazon, the Rio Maracá and other rivers and in the Cunany, the coast district at the Brazilian-French frontier, large cinerary urns in human shape have been found; the Museum Goeldi in Pará possesses a fine number of these. According to Koch-Grünberg who studied this collection when he happened to visit the Museum Goeldi, they may, as he says, referring to Ehrenreich and Goeldi, "no doubt be traced back to Aruak tribes who, like the Aruan in Marajó, not extinct till towards the end of last century, inhabited the islands at the estuary of the Amazon and the northern strip of the coast, and whose kin still do remarkable work in decorative pots." Often the sex of the figure portrayed is clearly recognisable; Goeldi and Koch-Grünberg are of opinion, for which there is much to be said, that the use of these urns may vary according to the sex



FIG. 980.—Representation of a married couple on the lid of a sarcophagus from Vulci. (After Springer.)

of the person enclosed in them. The illustration given by Koch-Grünberg of the anthropomorphous urn from Maracá is a "female" urn (cf. Fig. 981); in it, as in most of the urns, a human form squatting on a low stool is portrayed, the arms of which rest on the knees "in a remarkable rectangular position." "The sex," says Koch-Grünberg, "is plainly marked, likewise navel, breasts, clavicle, spine, fingers, toes, wrists, elbows, ankles, knees and vulva are emphasised." Such urns were produced by various peoples.

Among many peoples, too, we are able to ascertain that many differences may

be observed in the way people mourn for women and accompany them to their last rest and the customs usual in the case of the death of men. A few examples of this are to be given. Thus, according to Sauer, people in the Aleutian islands observe fewer ceremonies with women in burial than with men, and of the Ostiaks, Pallas says: "Male corpses are taken to the burial places by men only; female ones by women. The graves are generally made on heights and in the case of women, a few men go along to make the grave."

We have to thank McChesney for fairly detailed information about the Wahpeton and Sioux Indians.

At the burial of the dead children, he states, cooked food is placed at the head end of the

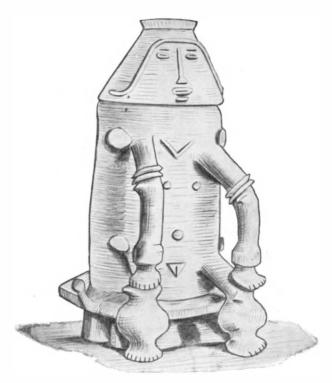


FIG. 981.—Funereal urn. Maracá, Brazil. (Museum Goeldi, Pará. After Koch-Grünberg.)

grave and when a girl is buried, then all the girls of the same age come and eat up the food. (In the case of boys, the ceremony is carried out in the same way by boys.) Before death, the face of a woman whose death is expected, is painted with a red pigment. If this is not done before death, then it is done afterwards : the corpse is then buried in a grave made for its reception, and in the same way as was described for warriors, but in place of weapons there are cooking utensils.

A lock of hair is cut from the left side of a dead woman's head and carefully preserved by one of the relatives. It is then wrapped in calico and muslin and hung up in the house of the dead woman and is regarded as the spirit of the dead. (In the case of braves, the same is done with a lock of the scalp.) To this packet, a cup or dish is tied, into which the food for the spirit of the dead is put. Before 1860, on the death of women and children, the women cut off their hair, hacked their bodies with flints and sharp sticks and pushed the latter through the skin of arms and legs, meanwhile crying as for a brave. Among the Chinese, daughters are not admitted to the ancestral tablets of their parents. If they have married, then they have to pay religious respect to the ancestral tablets of their husbands' families. After their death, their tablet is added to the tablets which belong to their eldest sons, but never to those honoured by their brothers' families (Doolittle).

Our thanks are due to Jacobs ² for a very thorough description of the measures customary in Achin in cases of death. The corpse is washed clean in the room where death took place, and later undergoes a ritual washing in the passage as well. In the case of corpses of the female sex, the first washing is done by women only, and men are not allowed to be present. The ritual washing which, in the case of men, the village priest undertakes, must, in the case of women, be done by the wife of a priest. These cleansings are so thoroughly done that even the vagina is included ; after the ritual washing, it is then padded with camphorated cotton. The grave is



FIG. 982.—Ingalik female grave from Ulukuk. (After Yarrow.)

made of such a depth that it reaches to the armpits of a woman standing erect; a man's grave is reckoned to the height of the nipples of a man standing upright. They suppose that the soul of a dead woman tarries for 100 days in the family circle before it betakes itself to the land of souls. For this reason the division of the inheritance also does not take place before the hundredth day.

Among many peoples is to be found also the custom of making women's graves distinguishable from those of men by certain external signs. On this point, Dall writes of the graves of the Inuit of Yukon in Alaska :

He states that a woman's coffin is easy to know by the kettles and women's gear hung on it. Otherwise there is no difference in the mode of burial of the two sexes. After the death of a woman, there is no fishing in the village for four days; after the death of a man, none for five days.

The same is true of the Ingaliks (Kaiyuhkhotana) of Ulukuk ; one such woman's grave is shown in Fig. 982 (according to Yarrow).

According to Gibbs, the women's graves of the Indians of the Oregon and Washington Territory (canoe graves) are distinguishable by a basin, a kainas-stick and other utensils of their occupation and parts of their clothes.

Likewise, men's and women's graves (according to de Jong in Schmeltz) in New Guinea are easy to distinguish externally by the fact that a water container made of coconut is put on a woman's grave and on a man's, big lassoes made of *rotang*, arrows and spears.

The graves of the two sexes are particularly easy to distinguish among the Ainu, for they mark this distinction in the most natural way, by depicting the genitals (see v. Reitzenstein¹⁵, *Das Weib bei den Naturvölkern*, Berlin, 1923, p. 301). Here is shown a woman's grave of the Dusun from Papar in British North



FIG. 983.—Dusun female grave, Papar, British North Borneo. (Mus. f. Völkerkunde, Dresden.)

Borneo (Fig. 983), as well as the lying in state of Queen Anne of France (sixteenth century) (Fig. 984). And, finally, we show the gravestone of the famous Gräfin Orlamünde (The White Lady, +1382) in the Himmelkron Convent in Upper Franconia (Fig. 985).

Concerning the graves of the Turks, we read in Sonntag, that a flat gravestone is erected at the head and at the foot. The upper part of the head end forms a turban, a fez or a Dervish hat. The gravestones for women have either no headstone or they run out into a leaf, a shell or some kind of arabesque. This difference in the gravestones according to the sex of the deceased can be seen in Fig. 986. This represents a Turkish cemetery in Sarajevo, and in Fig. 987 we see another part of such a cemetery, likewise in Sarajevo. The canopies cover the graves of saints, the high arrow-like stones mark the resting places of men, and some show the turban plainly, and through the pillars of one canopy one catches a glimpse of a gravestone with the Dervish hat; here a Dervish has been buried. Women's graves are right in the foreground.

We see such Turkish women's graves better and more clearly in Fig. 988. Here a small section of the great Mohammedan cemetery in Scutari is represented. We see what Sonntag described : the flat gravestones adorned with flower arabesques of the women, as well as the graves of men with the turban or the fez; among the latter, some officers are buried. A few Turkish women are sitting on the graves.

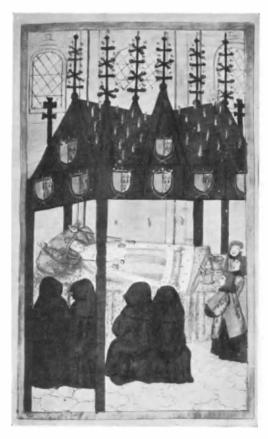




FIG. 984.—Queen Anne of France is laid on her bier. Sixteenth century. (From a MS. (cod. gall. 20) in the Bayr. Landesbibl., Munich.)

FIG. 985. — Tombstone of the "White Lady," the Countess of Orlamünde, in Kloster Himmelkron (Oberfranken).

M. Bartels received by letter from F. S. Krauss very noteworthy information about the graves of the South Slavs :

"Among the Bulgarian Serbian peasantry, only the man gets a real funeral. As a rule, too, a gravestone is put up for him, whilst, for a woman, especially the deceased head of a joint household, they place a wooden cross on the grave. The graves of virgins are adorned with wreaths of beach grass and basilicum and now and again also with myrtle wreaths. Men keep away from the funeral ceremonies of women; only the father and brothers lead the procession of mourning women. A girl's playmates all dressed in white follow the coffin, for white is the traditional mourning colour. At the funeral feast of a girl, all her former playmates are present.



FIG. 986.—Turkish cemetery in Sarajevo. (From a photograph.)



FIG. 987.-Mohammedan cemetery in Sarajevo. (From a photograph.)

"In Bosnia I have seen in Catholic churchyards exceptional cases of memorial stones on women's graves. On each stone two breasts are crudely chiselled in high relief. The grave of a virgin has in addition a wreath, but no cross. The big old Bosnian gravestones belong only to men, whilst the old graves of women show merely thick and rather broad slabs without



FIG. 988.—Turkish women at the Mohammedan cemetery in Scutari. Graves of women are to be distinguished by the tombstones having floral designs or flat or slanting tops. (Photo: C. Berggren.)

inscription. The period of mourning for a woman does not last longer than at most eight days. To shed tears for a woman is regarded as extremely disgraceful."

In the Samoborer hill country, as late as some 20 years ago, the funeral ceremonies for the housewife differed from those for the master of the house in this way : that the funeral meal at the departure of the latter began with twelve soups, but at the death of the housewife only with ten soups (F. S. Krauss).

In many peoples we have direct information that in general dead women are buried just like dead men, only that the whole outfit is smaller. This is reported, *e.g.*, by Ribbe about the Aru Islanders.

We hear of a peculiar form of women's funeral from New Guinea through Kühn. He relates :

"On the same day another misfortune happened, a young woman slave ate a poisonous fish and died of it. Amid loud howling, the corpse was set upright in the boat in front of the



FIG. 989.—Female burial place in Arup. (After Neuhauss.)

house (built on piles) and decked in a new dress. As she had died in the open air, she must not be taken into the house so that no disease should be smuggled in. The whole night long, monotonous lamentations, interrupted by sudden howling, were sung, and next day the corpse was buried on a little piece of level shore near the village and a light covering of leaves put over it."

Fig. 989, which, with the kind permission of Neuhauss and Vohsen, is taken from the former's book, shows a woman's grave in Arup (New Guinea). The dead woman's cooking utensils and clothes have been hung on the fence round the grave.

Among the Ossetes in the Caucasus, according to Jankó, only the women are buried. The corpses of men are sewn into a buffalo skin and hung on a sacred tree (see Zichy). But we must call to mind still another way of laying aside corpses : the drying and mummifying in which the Egyptians were so proficient but in which other peoples, too, are fairly accomplished.

The Indian tribes had learnt the technique from the preparation of food and

FUNERAL RITES FOR WOMEN

the worship of the dead. Thus, Krickeberg, in his excellent work on "America," in Buschan's *Illustrierte Völkerkunde*, mentions that in the preparation of fish and meat, a peculiar method of conservation has been learnt, which achieved its purpose by roasting on pyramid-shaped roasting stands what, in the Tupi language, is called *bukeng* from which the word *bukanieren* is formed. von Martius (*Zur Ethnographie Amerikas*, Leipzig, 1867, Vol. I.), records of the Mauhé, a South American Indian tribe, that the "corpses of their leaders, with the extremitics outstretched, are bound to laths and dried to mummies by fire applied all round them," and in another passage he says that "of the Pauixiana, the Amaripa and Uaiuru, it is related that they show honour to the corpse of their chief in a fashion similar to that stated of the Mauhé. Round about the dead body, which is fastened to posts,

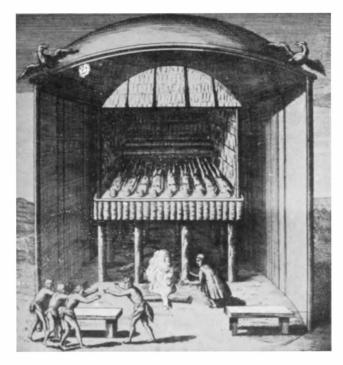


FIG. 990.—Chamber for drying corpses, Natchez, Louisiana. (After Lafitau.)

fire is kept going at a suitable distance; two Indians are always busy removing all dampness and bringing the fire, the smoke of which is increased by burnt tobacco leaves and resin, ever nearer till a perfectly dry mummy is made which is at once committed to a clay urn.

The Iroquois and the Huron had attained great proficiency in this as, Lafitau (*Mœurs des Sauvages*, I., Plates VI. and XXII.) describes. Of the Natchez in Louisiana, he gives Fig. 990.

Also until quite recently, the results of this knowledge were not yet extinct (cf. Fig. 991). In Peru it was very far advanced (e.g., for a female mummy, see Fig. 992), and also among other peoples, this drying is in use : thus in Australia (cf. Fig. 993); and in Ambuclao in Benguet, Luzon. Fig. 994 shows one such woman laid out on a bier.

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5. CONFINEMENT OF DEAD WOMEN

We have already discussed in an earlier chapter of this work the methods adopted to bring the child into the world after the decease of the mother during labour. But in the cases where such attempts have been omitted, it has sometimes been possible to observe that some time after death has taken place, the child has



FIG. 991.—Mummy of young woman of 18 to 20 years of age from Western Colorado. Ute Indians. (Museum f. Völkerkunde, Dresden.)

FIG. 992.—Peruvian female mummy. (Museum f. Völkerkunde, Berlin.)

been born and, to the great astonishment of the relatives, found between the legs of the dead mother.

Thus, e.g., Valerius Maximus (I., 8) tells of a Gorgias Epirota who was put into the coffin before he was born. For his birth took place in the vault into which had been put the dead body of his mother who had died during her confinement.

Also among the Grafen von Mansfeld, there is one of whom a similar story is told. Johann David Koehler tells a similar story in speaking of a Georg-thaler, which bears on the reverse St. George on horseback and on the obverse the galeated arms of Grafen von Mansfeld and the year 1524 along with the following inscription : "G. HOJGER VGEBORN. H. H. K. S. VLORN."

He says :

"I consider, however, that it was not the said Count, but all the Counts of Mansfeld who had this thaler struck, and with it caused to be revived the memory of their ancestor Count

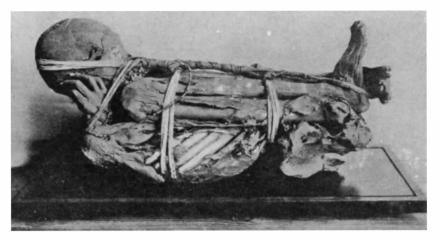


FIG. 993.—North Australian mummy (Ethnog. Museum, Munich.)



FIG. 994.—Philippine woman on her bier in Ambuclao in Benguet, Luzon. (Museum f. Völkerkunde, Dresden.)

Hoier the First, King Heinrich the Fifth's commander-in-chief, who in the battle of Welfelsholtz in 1115 against Herzog Luthern of Saxony, slew Graf Wiprecht von Groitsch. For this warrior had often been in the habit of saying : 'I, Graf Hoier unborn, have yet no battle lost.' Inasmuch as he is supposed to have crept out of a dead mother's womb by himself, vid. Tentzel's Monatliche Unterredung, 1689, M. Aug. p. 872, the great battle sword wielded by him shall, like an image of Pallas, be preserved in the armoury in the castle at Mansfeld."

Jacobs, too, speaks of the confinement of the dead which sometimes took place on the island of Bali. We saw above that to die in labour is regarded there as a great disgrace, so that the poor woman is not even granted an honourable burial.

"If the pregnancy was already at an advanced stage," continues Jacobs, "then it often happened with multiparæ that the fœtus was yet expelled by the pressure of the gases developed in the abdomen by labour. In this case, the disgrace was wiped out and then the corpse could be granted the honour of being burnt in the usual way."

For these people delivery of the dead is nothing to fear, but even has an expiatory character.

It can unquestionably be proved that from a certain point in the act of delivery, the abdominal pressure alone completes the delivery. If its activity is eliminated, the act of delivery comes to an absolute standstill. Such a total stoppage of the action of the abdominal pressure, however, is naturally brought about also by death, and the act of delivery then ceases. There will, however, certainly be not a few cases where the delivery would very soon have reached its conclusion if the abdominal pressure had been able to exert its activity for a little. Now though it can no longer do so actively, yet sometimes certainly such action of the abdominal pressure may be caused passively, if in the usual washing and changing of clothes and putting in the coffin, changes in position are made in which the uterus of the dead woman undergoes pressure directly from the hands of those occupied with her or by advancing the thorax towards the abdomen. And then, especially if a more or less forcible raising erect of the dead body takes place, the child must naturally be able to leave the maternal genital organs and come into the world. It goes without saying that for a number of cases, however, the expulsive agent will be found in the intra-abdominal development of gas.

To this, Frhr. v. Reitzenstein added in "Geschlecht und Gesellschaft," X., Sexual-Reform, p. 77:

Coffin birth : In its fortieth number, the scientific weekly Umschau, edited by Prof. Dr. I. W. Bechhold, records one of these rare cases of coffin birth. A report about the case was sent in to the section for forensic medicine at the meeting of scientists in Nauheim by the Berlin medico-legal officer, Professor Dr. Strauch. A woman died in the hands of the midwife before the birth of the child. Because the cause of death could not be ascertained, the corpse, which had already been taken to the cemetery chapel, was seized. Six days after death, the forensic examination took place—in the coffin, in addition to the woman, lay the dead body of a new-born child. The birth had taken place owing to the effect of gaseous pressure due to the decomposition. Strauch adds particulars of other cases where, without decomposition, after the death of the mother, the uterus went on living, as it were, independently, and by contractions resembling labour pains was able to expel a viable child after almost an hour. Such children have even continued to live, as was proved by a few examples from history. In such cases, the legal question whether and how far such children are capable of succeeding to an inheritance is interesting. According to law, the succession is at least doubtful, since, after the death of the mother, the inheritance passes to living and existing children only, and such a child has not co-existed with the succession in the outside world.

Nevertheless, both questions are really quite clear. They depend upon the right or wrong answer to the question as to the nature of death. On the strength

of the old psychology, death is regarded as having taken place when, by some occurrence, the external signs of life in a human being seem destroyed. This religious view, in consequence of which the soul is supposed to have left the body at this moment, has for thousands of years done harm to mankind, because it prevented all investigations into the nature of death. On the strength of our modern knowledge, death, however, is not a sudden cutting off of human beings from life, but falls into two parts. First, an incurable injury to the life processes sets in and this stops their activity. But now the body as such is not the seat of life but the life processes are linked with its elements, the cells. The body in its entirety is not dead until the life processes of the individual cells are extinct. This proceeds slowly, and thus death is not an instantaneous phenomenon but a process of evolution, a necrobiosis which begins with the injurious causes and ends with the disintegration of the last cell. Hence the cases discussed above have nothing to do with each other. The case in which the foctus in its deceased state is expelled by gases of decomposition is not a vital but a mechanical process, somewhat like what takes place in the gun-barrel when the bullet is expelled. The case in which during necrobiosis, the cells of the womb, etc., have not yet been reached by death, that is, their functions are not yet destroyed, is different. In this case, during necrobiosis, a living child is born which is also not reached by the poisons of the mother caused by death, because the placenta acts as a filter. Thus the legal case is also clear if forensic science will take its stand on the ground of modern scientific thought and not religious ideas. The time the necrobiosis lasts in the mother is to be reckoned as appertaining to "life," especially if during this period such an important physiological act as that of birth is accomplished. It might be conceivable that advancing science may yet learn to eliminate the present-day "incurable injury" at the beginning of necrobiosis.

6. SEXUAL INTERCOURSE WITH THE DEAD

Innumerable and inextricable are the much-tangled threads which human phantasy has spun to act as guides in the satisfaction of insatiable sensuality. What provides blissful ecstasy and the highest sexual satisfaction for one may fill the healthy human being with only disgust and loathing and the doctor with the most profound pity. These circumstances (usually called the dark side of human nature) in which, owing to an unsuitably applied sense of morality, neither judges, nor, very often, doctors, are sufficiently instructed, merit the fullest measure of the attention and observation of anthropologists. To this field belongs the so-called *necrophilia* or sexual intercourse with corpses (see Kobudzinski).

As we have said already, it must remain incomprehensible to us how lewd desire cannot even spare the corpse of a fellow being. For purely physiological reasons, which need scarcely be discussed fully, in these cases naturally only the coitus of a living man with a dead woman can come into question.

We read in v. Krafft-Ebing that :

"Brierre de Boismont¹ tells the story of a desecrator of corpses who, after bribing the watchers by the corpse, has stolen to the dead body of a young girl of good family. In the night a noise was heard in the death chamber as though a piece of furniture had overturned. The mother of the dead girl went in and noticed a man in his night shirt jumping down from the bed of the dead girl. It was thought at first that it was a case of a thief, but soon the true state of affairs was realised. It turned out that the desecrator, a man of good family, had often before profaned the corpses of young women. He was condemned to imprisonment for life."

A French sergeant, Bertrand, had repeatedly dug up corpses, dismembered them, torn out the entrails and buried them again. With one of these corpses the desire came to him to have sexual intercourse with it. He himself writes about it to the medico-legal officer (a kind of coroner):

"I covered the corpse with kisses, pressed it madly to my heart. Everything that one can enjoy in a living woman was nothing in comparison to the enjoyment I felt. After I had tasted this for about a quarter of an hour, I dismembered the corpse as usual and tore out the entrails. Then I buried the corpse again " (see v. Krafft-Ebing and Michéa).

Later he acted in the same way with a number of corpses which he dug out partly with his nails till the arm of the law reached him. He then says of himself further :

"The urge to destroy was stronger in me than the erotic monomania, of this there is no doubt. I believe that I would never have taken such a risk with the sole purpose of raping a corpse if I could not have dismembered it later "(cf. Tarnowsky).

We shall assuredly acknowledge v. Krafft-Ebing to be right about these cases when he says :

"The cases of desecration of corpses occurring in literature made the impression of being pathological, and with the exception of the famous case of Sergeant Bertrand, they are far from being accurately described. In their motives they seem to belong to the category of murder preceded by rape in so far as a similar idea, horrible in itself, from which a healthy person shrinks in horror, is emphasised by feelings of lust."

There were also cases where monks, to whom the watching by the corpses was consigned, used the dead woman to appease their desires. With this ranks that case which, as Niebuhr was told, led to the burial tower of the Parsees at Bombay being closed. A virgin had died and was visited by her lover in this place of horror, and profaned. Likewise the report of Herodotus (II., 89) about the customs with the dead of the ancient Egyptians :

"The wives of men of rank when they have died are not immediately handed over to the embalmer, also not those women who are very beautiful and of still higher rank; only after two or three days have passed are they handed over to the embalmers. This is done so that the embalmers may not have sexual intercourse with the women. The story is told, for instance, that one of these embalmers was caught in the act of having intercourse with the fresh corpse of a woman but was betrayed by his comrades."

Other cases, too, do not belong to those which v. Krafft-Ebing speaks of.

Thus it is said to have been customary until lately in the country in Hunsrück that if a bride had died the bridegroom solemnised the bridal night with her corpse.

Further, we find in Africa a horrible custom which appertains to our subject. That is to say, if a Kibamba woman dies and, for some reason, there is a hæmorrhage from her genitals, then a strange man had to be with the corpse the next night. In the morning he finds a milch-cow tied up near-by. This custom is kept secret and only practised in secret.

Perhaps the following case also is not out of place here. It is reported by v. Wlislocki⁷ from a South Hungarian town :

"There lived there a widow whose child was a hermaphrodite. The latter was already 20 years of age, went about in women's clothes, smoked tobacco and did men's work. He was the butt of the street urchins. In the carnival of the year cited (1861) it occurred to him to want to marry. Then his mother resorted to a magical means of settling the sex of her child. Late at night she went with the hermaphrodite who was, moreover, robust in build, to the churchyard, and the two there opened the grave and the coffin of a virgin buried a short W.-VOL. III.

time before. The mother now bade the hermaphrodite to lie down beside the dead maiden and spend the night there. The hermaphrodite did so without any fear or horror, after the mother had given him in the grave various secret potions for the night which were found next morning in the grave beside the dead hermaphrodite. In what way the hermaphrodite died they could or would not make publicly known; so much is certain, however, that he had done a misdeed on the corpse in order thus to settle his sex. The mother hanged herself on the following day after she had confessed to her acquaintances that she had intended to make her child 'a proper man' by this means."

7. THE DEATH OF THE MOTHER MEANS THE DEATH OF THE CHILD

We must here call to mind still another view which is unfortunately very widespread; this is the conviction that a child from whom the mother is torn away at such a very tender age could not itself live longer. Therefore it was best for the little arrival not to be separated from its mother at all.

Thus Bancroft records :

That among the Dorachos, an Indian tribe of Central America, if a mother dies who is still nursing her child, then the child is placed on her breast alive and burnt with her so that she can go on suckling it with her milk in the future life.

In the same way, according to Avebury, among the Eskimo in Unalaska, a child which has had the misfortune of losing its mother is normally buried with her, and Cranz, too, reports the same thing.

A similar custom appears to have been prevalent in Brittany, for in the old Breton graves archæologists often found the bones of a woman and of a little child together, and because of this they have come to the conclusion that, if a woman died in childbed or during the nursing period, the child was buried alive with her.

Among the Australian aborigines, if a mother of a suckling dies, then, as Collins and Barrington record, the child is placed alive in its mother's arms and then buried with her. But here a reservation is made, for it is added : "If no foster-parents can be found for the poor creature."

For fairly similar reasons, with the Baining in New Britain, the child is killed if the mother dies in childbirth "because otherwise there is nobody who would take charge of it, feed it and bring it up" (see Parkinson²).

Of the Bushmen in the Kalahari, Passarge tells that when a woman dies in childbirth, they bury mother and child together. From the context it seems to emerge that the latter is possibly buried alive, the motive appearing from the context being the impossibility of rearing it.

Among the Ama-Xosa also, it is permitted to kill the surviving babe; but use is not always made of this permission, for Kropf reports:

"If a woman dies in childbed, the child is not killed in every case. It is given milk in a nipple shield which is made of antelope skin."

The idea has so far been that the surviving child would have to die miserably without the feeding and care of its mother, yet we come across other ideas which result in the death of the suckling. That is to say, people sometimes believe that a child which has met with such a misfortune will itself be a bringer of ill-luck to its fellow-tribesmen.

Thus Kropf records likewise of the Ama-Xosa :

"A mother had milk fever. On the day of her death, she stood up and said, pointing to the clouds: 'To-day a thunderstorm will come.' Because of this, people believed she was

bewitched. In the afternoon she died. They buried her child alive with her in the belief that it, too, was bewitched."

In Achin, if a woman dies in labour nothing is done to save the living child. The midwife, on the contrary, by constant application of cold wet towels to the dead woman's abdomen, tries to kill the child also $(Jacobs ^2)$.

Also in Nias they kill the child which has lost its mother in childbirth or childbed, for they believe that it is destined to become a terrible and dangerous individual. For this reason the child is put into a sack which is hung on a tree and so remains in this way in the woods, left to its cruel fate (Modigliani).

The Mentawei islanders, according to Maass,¹ bury a woman who has died in childbed and her child also, even if still living, together in the same mat, and then, to be precise, the mother holds the child in her arm on the right hip. In another passage Maass¹ says :

"If, on the other hand, the mother has died in childbirth and the child come into the world alive, it is killed by the father and then placed on the dead mother's breast and buried with her. The natives kill children orphaned in this way by compressing the head and holding the nose and mouth shut. This (to us) cruel method, the natives justify by saying that the child would get no milk for food, and for this reason would die anyway, and besides that, it is regarded as an unlucky child."

From a Chingpaw in Upper Burma, Anderson heard that "a custom used to exist that when a lying-in woman died within a month after delivery the surviving child was burnt unless somebody offered to adopt it. The father was not permitted to claim the child for himself" (cf. Wehrli).

In other cases it suffers death because it is regarded as the murderer of its mother. This view we find in Madagascar. This is the reason given as to why the poor little creature is buried alive together with the woman who has died in childbed (see *Globus*, 44).

The Dyaks in Borneo likewise punish the new-born babe with death if the mother loses her life in her confinement. Roth has put together the following reports of Legatt and the Rev. Mr. Holland concerning these facts. He states that with the Sea Dyaks custom required (till a civilised government prevented such horrible murder) that if the mother died after her confinement the child had to suffer death because it was the cause of the mother's death and therefore nobody could be found to suckle and nurse it. Therefore the child was put alive into the coffin with its mother and the two were buried together, not infrequently without asking the father, who had the power to prevent this custom from being carried out and to keep the child. No woman could be found willing to suckle such an orphan as it would bring misfortune to her own children. "He knew a case where, in the absence of the husband, a woman was delivered of twins and died immediately afterwards. By order of the grandfather (on the paternal side) both children were buried with the mother" (Legatt). Holland states that in one case a young wife died after she had given birth to twins. One of the babies died immediately after its birth, but the other was a perfectly healthy child. Early next morning the living child was tied along with the two corpses and taken to the burial ground, where the living was buried with the dead. The little creature was heard crying as it was borne down the river to the jungle, but its cries of woe were met by none but deaf ears and hearts, and not one was to be found who would have brought the child back and adopted it.

CHAPTER XXI

WOMAN AFTER DEATH (SUPERSTITIONS)

1. THE DEAD VIRGIN

HUMAN beings everywhere, even when they are not at a very advanced stage of civilisation, have a fine and very well-developed perception of any conditions which are exceptional in the ordinary course of life, and we have already learnt of a great many examples of this. It cannot surprise us therefore when we see displayed special manners, customs and superstitions at the death of a person who has remained unmarried, or of a woman who has died during pregnancy, in labour or in childbed.

A girl who has reached puberty and does not contract a marriage leads an unnatural life according to the ideas of many peoples, a *vita praeter naturam*, and so, as she has been different from her companions in life, in death also she has to occupy an exceptional position. After her death, such a virgin therefore goes to hell without hope of rescue. We learn from a statement by du Perron that the modern Parsees still have quite a similar view.

While, in this case, the unmarried woman goes to hell, according to Christian ideas, on the contrary, heaven is opened above all to the immaculate and chaste virgin at her death. Even nowadays, in many places, her corpse as well as her coffin and grave are adorned with the bridal wreath to indicate that she has now become a bride of Jesus and that she has now been united to her divine bridegroom. Naturally, the holy virgins of God who have been betrothed to the Savjour in their life have first claim to such a union. Hence we find the last resting-places of nuns and female beings corresponding to them are always separated from the graves in which the children of this world are buried.

But woe to the bride of heaven who has been tempted by "fleshly lusts" to break her vows. She was buried alive or walled up and left to die a lingering death from suffocation and hunger.

"The nun's hole at Mönchgut in Rügen" says Sepp, "is unfathomable; there fallen nuns from the town of Bergen were brought at night and thrown in; and, therefore, wailing forms still wander there."

In many parts of Germany, people also believe that convents are submerged in certain lakes because the Abbess turned a beggar from the door. They sometimes hear the bells ringing, and anyone who puts his head into the Gremasee, for example, at midnight can also hear the nuns singing. Such convents, for example, lie in the lake at Tiefenau, in the Nonnensee at Katzenhopf in Upper Swabia, at Neukirchen in the Odenwald, etc. (cf. Sepp).

Sometimes, too, they are virgins ravished by force who have to haunt one of these lakes :---

"The Jungfrauensee," states Sepp, "has engulfed the castle at Flensburg, the knight of which was an abductor of girls. One still sees the top of the tower and hears the sound of bells from the water. At midnight, the virgins who were dishonoured dance and wail about the banks."

In Siam, the souls of dead virgins hold their dances in the twilight and kill anybody who surprises them at it; they also kill little girls and women. These ghosts of virgins which kill children are also known to the Greek population in the Gello (see Haberland).

Popular belief and wit, however, describe especially well the fate of the poor despised old maids. In England, it is said that old maids have to guide apes to hell; and in East Prussia, at the beginning of last century, people maintained (and perhaps still do) that they do not get to heaven but have assigned to them as their stopping-place the green meadow in front of it. In this, it is their destiny to gather up sheep's dirt through all eternity. In many other parts of Germany also, as Haberland records, the old maid, because her life was useless and a failure, is given an occupation after death which is just as useless and never fulfils its purpose. In Strassburg, she has to help to put a cover round the citadel, and in Basle it is the church tower; in Vienna she has to scour and clean St. Stephen's Tower, in Frankfurt "to polish the Parthorn," in Nuremberg to sweep the white tower with the beards of old maids, in Tyrol to measure the Sterzinger Moos by spans with her fingers, and she is also said to have to offer tinder for sale in hell (see also Fig. 910).

Haberland states that "these ideas that human destiny is not fulfilled without the procreation of offspring are ingeniously expressed by the Munich custom of putting a wisp of straw before the doors of unmarried dead people because they have given no grain."

Heyl reports from Tyrol: "Virgins of the Völser neighbourhood after their death have to go to the Tschavon to act as 'virgin-bawlers' there. Therefore they are often very much afraid of dying. But if one has had the will to marry but no opportunity to do so, then she is set free from the bawlers." In Switzerland, old maids are said to go to the Rottales glacier to which a number of other unhappy ghosts are also banished as well (see L. Tobler).

An unmarried Mohammedan woman cannot get into heaven in any circumstances, for a woman gains admission only through her husband. It runs in the Koran :—

"For a woman, paradise is under the soles of her husband's feet." As to the fate of widows, old maids and young girls, the Koran is silent; they are creatures who can claim no notice at all. Only as wife does a woman occupy a certain position; unmarried, she will always be a despised creature whose prayers and offerings God accepts only with repugnance (cf. Osman-Bey).

The ideas which prevail in Upper Italy are more poetic. In the districts of Treviso and Belluno, it is believed that young girls who have died have to gather roses in Paradise and therefore the country people do not omit to put an apron into the coffin with them (see Bastanzi).

In Tyrol, according to Heyl, two virgins have to keep the death watch in the case of a young girl who has died. This lasts from eight o'clock in the evening till six in the morning, and meanwhile the corpse is now and again sprinkled with holy water. In Stubai, decked-out virgins have to carry such a corpse to the grave.

The mourning of heaven over the death of a virgin is well expressed by the following superstition which prevails in the Province of Bari in Apulia. They say there, states Karusio, that when it is raining at the death of a young girl then it must go on raining for nine months.

The charm which the virgin diffuses about her is not lost in death, according to the belief of the inhabitants of Upper Bavaria. Thus, we read in Höfler :—

" A few years ago in the churchyard at Tölz, an attempt was made to open the

THE DEAD BRIDE

grave of a 'pure virgin' at night; the people regarded as sinister those who had hoped to attain great wealth by the possession of a part of the corpse and drove them away."

"The old woodman by the Arzbach along with others wanted to steal the cash box of the Tölz revenue office. For this purpose they sought to make certain by the possession of the left second finger of a pure virgin whose grave they opened at the hour of midnight. They had an earthen mirror (a magic mirror made in a special way) with them and held it in front of them. But, as the devil stood before them and looked at them from the mirror, they had to take flight and so got none of the money from the revenue office cash box."

Likewise, among the Hungarian tent-gipsies, a dead virgin has to give some of her blood for a charm. With this a wife secretly smears the *membrum virile* of her husband, so that he shall be as cold as the dead towards women, *i.e.*, that he may not run after other women (see v. Wlislocki⁴).

2. THE DEAD BRIDE

The death of a full-grown girl arouses the deepest sympathy far outside the immediate circle of sorrowing relatives and friends. All the more affecting must the sad occurrence be if the dead girl has been betrothed. The position of a betrothed girl is, in any case, regarded among the masses as something quite special, and so we might well expect that all kinds of curious customs and mystic ideas are attached also to the death of a betrothed girl.

Surprisingly enough, however, there is only too little to be found in literature about what popular belief and custom connect with the death of a girl engaged to be married. We have just seen that in many places, a virgin is buried with honours differing from those in the case of other people who have died. These distinctions then naturally fall likewise to the share of the betrothed girl. Here and there in Germany and in the adjacent Alpine countries, it seems also to have been the custom to place the bridal wreath or crown on the coffin or on the grave of the betrothed girl.

In Carinthia, virgins are laid out in white dresses. But, if they have been betrothed, then, states Waitzer, their wedding dress is put on.

We shall hear of a similar custom from White Russia in section 11.

Among the Bulgarians, according to Strauss, the coffin is generally borne to the grave on a buffalo waggon; the coffin of a girl engaged to be married, however, must be borne by the bachelors.

It runs thus in a Bulgarian song :---

"So the mother laments Her beautiful Tenka; Then sends to the bazaar, Has the young men called, That the young men may Soon carry Tenka. To each one she gives A fine white kerchief When they to her come, And they carried Tenka Away by the bazaar Through the bazaar away The young men bore her And the clergy sang. They came to the church And they sang also there. Then they bore her, bore Tenka to the churchyard. When they had buried her, They came to the feast," etc.

For this last service of love, the young men received a souvenir of the dead girl which, as we saw in the above song, was handed to them before the funeral and which they had to wear in the funeral procession. The dying bride Tenka charges her mother :—

"Get up mother, get up ! And light the lamp ! Heavenly voices I hear. Please, mother, please, Do it for my sake, And do not grieve for me ! Now open my chest, Chest full of presents, Which I have sewn, Made for my wedding. I am dying, mother, And shall never return. I am going very far away Into the black earth. Mother, don't grieve But bring hither The best young men; To them give presents, My white kerchiefs, Which I myself have sewn, They are to carry me Walking before the clergy And bareheaded all. Me, the pure virgin, As the bride, the young one They are to bury.'

Rosegger ¹ reports a horrible superstition from Styria :---

"My grandmother had seen a man hanged who had murdered six betrothed girls because the story went that eating the hearts of seven betrothed girls *made one invisible*. The monster already had the seventh victim also in his clutches, but she escaped from him and brought the villain to justice." Similar ideas which do not concern exactly betrothed girls but intact virgins or pregnant women and have caused such evil, we have already learnt of from Styria.

Among the ideas about the death of a betrothed girl, one feature in the belief of various peoples is striking, namely, that the spirit of one, who by an unexpected premature death is torn away from an imminent happiness of life, is filled with envy of more fortunate mortals, and that now as a wandering demon it tries to bring harm and misfortune to the latter. Thus, the Serbians believe that the souls of betrothed girls, who have died before their marriage, cannot rest, but that they become evil spirits who set traps for young men and whirl them to death in dances at night. The Hindus suppose that the spirit of the dead bride passes into the wife married later by her former *fiancé*. She then alienates from the former the consciousness of her own self and the woman possessed now talks as if she were the dead woman and abuses herself with the other's words (cf. Haberland).

3. THE DEAD MENSTRUATING WOMAN

It is interesting to see how menstruation is regarded by many tribes as such a special condition that the exceptional position in which it places woman makes itself felt even after death. Thus one reads in Crooke² that in India the belief is wide-spread that a woman who died during the prescribed period of her uncleanness later lives as a ghost. This ghost is called Churel, and in Bombay, Jakhôi, Mukâi or Navalâi. This superstition has its origin in the great dread of blood which all primitive peoples feel, and they have this dread of touching even a woman who is "ceremonially impure."

The Churel is particularly harmful to its own family, but also to others. It appears in various forms. Usually it assumes the form of a beautiful young woman and leads young men astray at night, especially those who are good looking. She takes them out of their realm into her own and keeps them there till they have lost their manly beauty. Then she sends them back into the world as grey-haired old men who find all their friends long dead.

Sometimes the Churel appears beautiful from the front and black from the rear; she always has feet turned the wrong way round with the heels in front and the toes behind. Crooke had a servant who told him a vivid tale of how he had once only just escaped being bewitched by a Churel which dwelt in a pipal tree near a burial place. He saw her in the twilight sitting on a wall and got into conversation with her, but, fortunately, he noticed the betraying feet, and then he ran away. But since then he would never go that way without company.

The Patari and Majhwár also believe that a woman who dies during her menstruation becomes a Churel. In this case, she appears as a pretty little girl in white clothes, and leads her victim away to the mountains till the Baiga is called in, and he sacrifices a goat and sets her victim free.

To prevent such an unfortunate dead woman becoming a Churel the Majhwár of Mizapur do not burn her corpse but bury it; then they fill the grave with thorns and pile heavy stones on it to keep back the ghost.

In the Hills, if a woman dies during menstruation her corpse is anointed with the seven products of the cow, and certain texts are recited while this is being done. A very small fire is then burnt on the coffin which is afterwards either buried or thrown into running water.

Another device consists in hammering little round-headed iron nails specially made for the purpose into the four fingers and toes of the corpse, whilst the thumbs and big toes are fastened together with iron rings. The earth on which the woman has died is carefully dug out and taken away. Then the place is sown with mustard which is also strewn along the path on which the corpse has been taken to the place of burial. The reason for this is twofold : first, mustard blossoms in the realm of the dead and its sweet scent comfort the spirit and keep her content there. Secondly, however, if the Churel leaves her grave at nightfall to visit her house she sees the little mustard seeds strewn outside and then she bends to pick them up. Whilst she is busy with this, cockcrow comes, and she has to return to her grave (see Crooke 2).

4. THE DEAD PREGNANT WOMAN

When we are dealing with dead pregnant women it is easier to leave out of consideration those cases of death which have taken place during labour. If death comes upon them before the child has seen light they have, strictly speaking, died during pregnancy. But, nevertheless, they occupy a separate position and for this reason a special section is to be devoted to them.

If a Guinea negress dies during pregnancy, as the missionary Monrad records, this brings great disgrace to her family, as people say she could not bear a child; her corpse is not buried, but thrown on the open fields. Monrad concluded from this treatment that the Guinea negroes bestow great respect on pregnant women.

However, it may at the same time be cited here that with the Battak in Tobah Tinging in Sumatra, as Hagen reports, the corpse of a woman who has died in pregnancy is dealt with differently from those of the rest of her fellow tribeswomen. For whatever kind of burial may be prescribed for her *marga*, her corpse is burnt under any circumstances, and the ashes strewn in the sea.

The Chingpaw (Kachin) of Upper Burma have the belief that the souls of women, or of a mother and child who have died within a month after the birth, become ghosts, *Nat*, and, to be precise, become the evil variety of them, the *Munla* or *Sawn*. They wander about in the mountains and have the power of getting into human beings who then have to die the same death. They try to get into a house where a confinement has just taken place and to seize the mother and child in order to get new companions for themselves. "Young girls shun a house where a pregnant woman or a woman in childbed has died for fear the evil *Nat*, who has brought about this misfortune, might bring a similar fate upon them. In order to destroy as far as possible all connections between the spirit, or evil *Nat*, of the dead woman and those left behind, the possessions of the dead woman, and often even the house of death itself, are burnt" (see Wehrli).

In various parts of India, according to Crooke,² it is believed that a woman who has died during pregnancy becomes a ghost called Churel, which we have already heard about in the previous section.

In Bali, if a woman dies during pregnancy, "her corpse may be neither buried nor burnt, but it must, as a mark of the greatest contempt, either be thrown into a sewer or laid in an open grave or pit 2 ft. deep, which is, according to Balinese ideas, the greatest disgrace that can fall to anybody's lot. This holds good for all classes and castes, even for princesses " (cf. Jacobs).

We have already seen that among the Achinese the belief prevails that the spirits of women who have died in pregnancy or, indeed, in childbed, try to get away from their graves, and, as so-called Sěsoewé, fly through the air. They then endeavour to get into lying-in rooms and enter into the lying-in woman, whom they then make delirious, and whose death they may cause. Now these spirits, however, say all kinds of things through the mouth of the sick woman, and thus some of them have happened to betray how they can be prevented from creeping out of the grave.

If it is possible for them to escape from the grave then they go out of it in the form of three little will-o'-the-wisps. Now, if one wants to make this impossible, then one must engage a man for 24 dollars to watch by the grave for 10 nights and, armed with a kind of broom, he drives back the will-o'-the-wisp as soon as it shows itself. If the ghost escapes in spite of this, then the man gets no payment.

However, besides this, there is a second method which is very effective. When the pregnant woman is dead, then, according to the Achinese custom, she must be washed and wrapped in a piece of white cotton. This is done with every dead person. But now a tangled ball of silk yarn and a sewing needle with a broken eye must be put beside the pregnant woman. Now, if the dead woman is urged by another Sésoewé to leave the grave and go marauding with her, then she notices that she is naked and she now tries hastily to make a dress out of the cotton. In this, of course, she does not succeed, and as the other Sésoewé has not the time to wait, she flies away to look for another companion, and the woman who was buried with the ball of yarn remains behind in the grave. In this way, however, her family is saved from disgrace, for a Sésoewé who has made a lying-in woman delirious always gives her *real name* through the latter's mouth, and to this the name Sésoewé is then always appended. This, however, is regarded as an exceedingly great disgrace for the whole of the ghost's family (cf. Jacobs ²).

A third method regarded as quite certain for keeping a Sĕsoewé in the grave has likewise been divulged by one of them.

When the coffin with the corpse is left behind in the grave, one throws earth a foot high on it, takes a little twig of *Moringa polygona* Dc., puts it across the grave and adds a ripe kalapa which has not fallen from the tree, but has been plucked from it, and a handful of wet earth from the place where the dead woman was in the habit of washing. After this one who understands it must say a formula of exorcism, and now the grave is closed again. Then one can be certain that she cannot get out as a Sěsoewé.

Also the two other demons so much feared by the women in Achin during confinement, and also in child-bed, the Si Rabiah Tandjoeng and the Potjoet Siti Hamina, whose acquaintance we have already made (Vol. II., pp. 305 and 426 ff.) are the ghosts of women who have died during pregnancy.

Now, since besides these two ghosts there are many Sěsoewé swarming about in the air who had got away from the grave before people knew how to prevent it, women in labour and in childbed are very much menaced. How they are protected from them during confinement, we have already learnt above. In order to protect the lying-in woman from them, however, the husband must not leave the house during the whole of his wife's lying-in period. To keep the demons away he has to be careful in the first seven nights to see that the fire lighted in the plot of land does not go out and that the evil-smelling smoke-producing substances already mentioned are sprinkled on the fire from time to time. The third, fifth and seventh nights after delivery are the most feared because the demons prefer the uneven nights. From then onwards the matter is no longer so alarming, and the husband may then go out of the house in very urgent cases, *e.g.*, if he is called out to fight or if an illness of his second wife makes his presence a pressing necessity.

Among the Menangkabau in the Padang Highlands, it is supposed that a woman who dies during pregnancy gets into heaven at once (see Jacobs ²).

In the Caroline Island Mámolūk, on the contrary, people believe that "the gods do not want to have with them the souls of women who have died in pregnancy or those who have had one child, because they have an unpleasant smell; they go to the land of Pikenekataula, the distant land which lies where heaven and earth meet" (see Girschner).

Among the White Russians (Smolensk), if a woman dies with the child, they put the swaddling clothes into the grave with them (see Paul Bartels³).

Krauss has recorded a noteworthy idea of the Southern Slavs who have the belief that a woman who has died during pregnancy is able to give away her child which she was unable to carry to full time. He says :

"Many barren women betake themselves to a grave in which a pregnant woman has been buried, bite away grass from the grave, call the dead woman by name and beg her to give them her child. Then they take a little earth from the grave and carry this earth always with them under their girdle."

Among the Christians in Bosnia, states Krauss, if a pregnant woman dies, a cross is put at each end of the grave, a big one at the head and a small one at the foot.

According to Petrowitsch, among the Serbians, a plough and a distaff are put into the grave of a woman who has died during pregnancy.

The idea of a harmful influence of a dead pregnant woman which, however, seems not to have its underlying facts made quite clear, is at the bottom of the following interesting case from Russia, which came before the courts and which we give from Löwenstimm's description :

"On August 17th, 1848, the priest of the Veliko-Shuhowitz church informed the district judge that, contrary to his wishes, the peasants had dug up the dead peasant girl, Justina Jushkov (according to *Nedelja*, 1872, No. 2), taken her out of the coffin and performed a 'beastly operation' on her; they had done this in order to get rid of the cholera prevalent among them. When an investigation into the matter was inaugurated, the peasants admitted everything and told the following story: Jushkov was the first to die of cholera, but in August, when the epidemic grew worse, the army-surgeon Rubzov, who lived among them, assured all the peasants that the girl who had set the disease on foot was a loose woman who had died in a pregnant condition, and in order to remove the cholera it was necessary to open the grave and find out the position of the unborn child and whether the mouth of Jushkov was open or not; if the mouth were open, then a stake had to be driven into it." So they did as suggested, and into the mouth, which was open, they drove an oaken stake. There was no child in the uterus, but a baby's corpse was found in the coffin. Then the grave was filled in again. Unfortunately, we are not told what was done with the child.

Among the Basutos, pregnant women have to be buried in the fields far from the house, for, as is believed, their dead bodies will keep the rain away from the land. But, as it is horrible for the relatives to think of their dead thus in the wilderness, many use cunning and dig them up again when it is dark and bury them again in their native mountains. However, another reason for the secret exhumation comes into consideration: that is, the rain magician and chief as leaders are eager for such corpses. They dig them up and cut open the abdomen and the uterus. The liquor amnii is drained off with great care into vessels held ready, but the child is simply thrown away. At home, the chief has his *ntlu ea dinaka tsa pula*, *i.e.*, "a house where oxen-horns look upwards"; the liquor amnii is poured into these horns and that brings rain. Then, when they make rain, the witch doctor sits down in that house and plays on his pipe. They also collect the liquor amnii of women in labour for the same purpose" (cf. Grützner).

Crooke ² records of the Bhandári in Bengal, that when a pregnant woman dies before delivery, they cut open her uterus and take out the child. The two corpses are then buried in the same grave.

Niebuhr reports similarly about the Hindus (Banians in Bombay): there they are said to open pregnant women who have died, take out and bury the child, but burn the corpse of the mother.

Baumstark reports the opening of women who have died in pregnancy by the Warangi in the East African Masai plateau. The embryo is then taken out and mother and child are buried separately.

M. Bartels received a remarkable report about the Jews in White Russia from

his sister-in-law Frau Olga Bartels, who was living in Smolensk. She wrote in January, 1902:

"Recently I went to a neighbouring Jewish town and there became aware of an unusual stir among the people. A pregnant woman, when fetching water, had fallen head first into the hole cut in the ice and had been suffocated as she could not get herself out. In accordance with Jewish law, she could not be buried until she had delivered the child. So then the corpse was put in hot baths and the abdomen pressed heavily. For two days they had been making efforts without success till a *sage-femme* at last succeeded in removing the embryo by force, as the Sabbath was approaching and the dead body could not remain in the house over the day of rest."

Weissenberg also mentions this custom in a treatise on disease and death among the South Russian Jews. He records that in case of retardation of the birth, the husband or a woman friend whispers several times into the dead woman's ear: "Please give up the child." The funeral garb of a dead pregnant woman differs from the usual one in this that she has a petticoat added.

This recalls a custom of the Jews in Beirut which Frankl records :

"When the corpse (of a woman who has died in pregnancy) has been washed and dressed in the shroud, the women who lay out corpses watch with eye and ear whether the young life in the dead woman stirs. If so, they rain blows on the abdomen of the corpse till all is still in it. For it would be a dishonour for the dead woman and her family if they ventured to open the corpse and it would be a sin to bury the living child alive " (see Stern ²).

In the south of Sweden, according to Eva Ugström, people are convinced that the dead pregnant woman is certainly confined while her coffin is being carried across the churchyard. "Hence the old custom of putting the coffin down for a moment," and therefore baby clothes and a pair of scissors are put into the coffins of these unfortunate women.

5. THE DEAD WOMAN IN LABOUR

If the death of a pregnant woman before the actual time of delivery is an affecting occurrence, one can easily understand how much deeper an impression it must make on the minds of primitive peoples when they see how an unfortunate woman in labour, wasting her strength in fruitless straining, is unable to bring her child into the world, and how, instead of experiencing the joys of motherhood, she suffers a miserable death.

The Israelites regarded the death of a woman in labour as a punishment for her sins. Buxtorf records :

"We read in the Talmud also that women die in labour because of three kinds of sin: when she does not take *Challadough* (in olden times, a piece of dough was mixed to an unleavened cake with oil); does not light the Sabbath *candles*; and does not pay attention to her *monthly periods*."

Stern ² quotes a dictum of Mohammed : "The mother who dies in labour is raised to the rank of martyr and goes immediately to Paradise."

In Madagascar, the death of a woman in labour is regarded as proof that, at the beginning of labour, she did not confess honestly to her husband how often she had been unfaithful to him.

Among the Soongar, if a woman dies in labour, an evil spirit is blamed for it; in this case, a witch must then give help, and the men have to repeat incantationformulæ (see Klemm).

With the Ancient Mexicans if a woman died in labour, then, according to Bancroft, "they gave her the title *Mociuaquezqui*, that is, '*brave woman*,' and they washed her whole body and

washed her head and hair. Her husband took her on his shoulders and with her long hair hanging down loose behind him, bore her to the burial place. All the old midwives accompanied the corpse, marching with shield and sword and shouting like soldiers going to the attack. They needed their weapons because the corpse they escorted was a sacred relic which many people longed to gain and a section of youth fought with these Amazons to rob them of their treasure; this fight was no fun, but a real, bone-breaking, earnest struggle. The funeral procession made a halt at sunset and the body was buried in the courtyard of the Cu of the goddesses or divine women called *Ciuapipiltin*. The husband with his friends guarded the grave for four nights, and for four nights the young men or untrained and inexperienced soldiers made raids like wolves against the little band."

If one of the fighting midwives or of the night-watchers retired from defending the body, they at once cut off the middle finger of the left hand and the hair of the head from the corpse. Each of these things, put on someone's shield, made the recipient impetuous, valiant, un-

conquerable in war and blinded the eyes of his enemy. Round about the sacred grave here, certain witches went marauding who were called *Temamacpalitotique*, who tried to dig up and steal the whole of the dead woman's left arm; this they regarded as a powerful talisman in their undertakings and as a thing which, when they came to a house to do their wicked work there, took away the courage of the inhabitants entirely and so disheartened them that they could move neither hand nor foot although they saw everything that happened.

Women who died in labour, especially at their first confinement, did not get into the lower regions but attained the middle point of the sun's path, and from there they accompanied the sun in its wandering towards the west; with gay tilting and happy shouting, they went on before it. (In the same way, warriors who had fallen in battle had accompanied the sun from its rise to the middle of its journey.) When the sun had been conducted to its setting, the Ciuapipiltin scattered quickly, "descended to earth and looked for hand-spindles, shuttles, small baskets and other implements for weaving and women's handiwork" (cf. Sahagun : Preuss). One of these Ciuapipiltin has been published from the Sahagun manuscript by Seler (cf. Fig. 995). People believed further, that, on certain



FIG. 995.—Ciuapipiltin, the spirit of a Mexican dying in childbed. Sahagun MS. (After Seler.)

days, when the Ciuapipiltin had come down to earth, they had to hide the children from them in the house, because otherwise the Ciuapipiltin made them epileptic (Seler²). A special feast was dedicated to them when people offered up bread in the shape of butterflies at the cross-roads. The days on which they descended from heaven were used for the expiation of sins committed. People believed that they then betook themselves to cross-roads and lonely places; and thither there went "at night the bad and adulterous women who wanted to be absolved of their sins and left there the dress they wore as a sign that they left their sins there" (cf. Preuss). The ancient Mexicans regarded it as a bad sign when at one of the feasts to the earth-goddess, the sacrifice who had to represent her sadness and tears were to be seen. Then the death of many women in childbed was imminent as well as of many warriors on the battlefield (see Preuss).

Among the Orang-hûtan in Malacca, if the death of the mother should happen during labour and the child died immediately after or were born dead, then it is the custom, according to Stevens, for both to be wrapped up together and buried in one grave. In this, the new-born babe is placed on the mother's breast face downwards.

Very many tribes are unable to believe that a woman who has died in labour can find peace in the world beyond. The Ewe negroes on the Slave Coast are of the opinion that such a woman is a person forsaken by the gods and that she will become "a bloodthirsty being." She does not receive honourable burial, but is buried in a special place prepared for the reception of such bloodthirsty beings (Zündel).

In parts of India, if a woman dies in childbirth, the corpse is dealt with exactly as in the case of one who died during menstruation. This has already been recorded above in the appropriate section from the statements of Crooke.²

In Cambodia, the cause of a sudden acute illness is supposed to be that the spirit of a woman who has died in childbed has come upon the person affected, as such spirits fly about seeking a dwelling-place. In Siam, it is thought that such a spirit is gathered to the army of demons called *Phi krom* (see Bastian : Bab).

In Java, if women die during labour, they go on fretting after death because of their lost maternal happiness; they cannot rest, and as they are evil by nature, they try to get at the expense of others the happiness they were not able to enjoy. When they fly lamenting through the air and notice a house where the wife awaits her hour, they race each other to the house and try to get into the woman in order to taste the joys of motherhood in her stead; the unfortunate woman, however, goes mad. Naturally, in such cases, the dwellings are very carefully guarded and protected; fire is lighted, and watchers with burning torches in their hands make the rounds to chase away the spirits which, moreover, are, in certain circumstances, dangerous also to men who are on the point of breaking faith; they punish these men very vigorously, usually by very painful mutilation (see Metzger).

According to Haberland, the Malays believe that women who have died in childbirth stand like statues in the woods and entice men to them.

Among the Battak in Tobah Tinging in Sumatra, the woman in labour overtaken by death, like the dead pregnant woman, has to be burnt, and her ashes strewn on the sea (see Hagen).

In the islands of Ceram Laut and Gorong, a kris is put between the breasts of the corpse of the woman who has died in childbirth before she is wrapped in a white linen garment, and forty needles are stuck in the abdomen. On the grave, two thorn bushes are placed crosswise and tied fast with gomotu or areng fibre, so that the woman may not become a "Budi-Budiana" or "Pontianaq." However, burial takes place in the way usual with this tribe (see Riedel ¹).

The spirits of women in Tenimber and the Timor Laut islands who have died during confinement go about as ghosts after burial and stay preferably on the shore. Five days after the funeral, two old women go to the shore to seek the spirit of the dead woman who is not yet a *nitu* and take with them a dish in which is put some rice, an egg and plantain. In a heartrending tone, they call back the spirit and take it home with them in the dish so that it may be able to set out on the rest of the journey to Nusnitu and will not be disturbed by evil spirits. A woman who dies during labour must, according to these people, have committed a very great sin, *e.g.*, undiscovered incest or adultery. For this, she has now been punished (*cf.* Riedel ¹).

In the Amboina Group, if a woman dies in childbirth, her body is treated in a special way in order to prevent it going about later as a *Buntiana* to torment men and pregnant women. After the corpse has been washed, thorns of lagu or pins are stuck between the joints of the fingers and toes and into the knees, shoulders and elbows, and then, after it has been dressed, ducks' and hens' eggs are put under the



FIG. 996.—The Death of Rachel. From the tombstone of Dona Rachel Teicheira de Mattos, who died in 1716. (After de Castro.)

chin and in the armpits. Instead of covering the corpse with net, part of the hair is drawn out and the coffin lid well nailed down at this place. The purpose of this proceeding is to keep the corpse in the grave. Because of the thorns and pins, she cannot, they believe, move her limbs well enough to be able to fly out of the coffin in the shape of a bird; this is prevented also by the tightly nailed hair. If she has assumed the nature of a bird, she is supposed also not to leave behind the eggs put in beside her (see Riedel ¹).

Likewise, among the Galelarese and Tobelorese on Djailolo, women who have died in childbirth are wrapped in nets and eggs put in their hands and armpits so that they may not appear later as *Oputiana* to emasculate men and do injury to pregnant women. They hang a piece of a net before the house in which the pregnant woman has died.

In the Kei or Ewaabu islands, if a woman dies in labour, then, if the child cannot be brought into the world alive, it is stabbled to death inside the uterus so that the woman may not become a *Bumbunanah* or *Pontianaq*, and then pursue her husband in order to emasculate him (see Riedel¹).

A few works of art have come down to us which depict the tragic moment of death of these unfortunate women in labour. One group of these works is to be found among the old gravestones of the Portuguese Jews in the Israelite cemetery of Ouderkerk an der Amstel in the Netherlands. On the gravestones of interest to us here, we see, besides allegorical figures and ornaments, a representation in relief of the unfortunate confinement of Rachel (Genesis xxxv. 16-19) in which she died. Rachel draws her last breath while giving birth to Benjamin. Fig. 996 reproduces one of these gravestones. It covers the mortal remains of Dona Rachel Teicheira de Mattos who died in the year 5476, *i.e.*, in the year 1716 of the Christian era. De Castro gives the following description of the relief :

On the left, under the shade of the tree, is the tent in which Rachel lies on her deathbed. By the bed is the midwife who, showing the mother the son just born, seems to be saying to her the words which occur in the Bible text. More towards the foot is Jacob, with the still young Joseph and behind them the other sons of Jacob holding their shepherd's crooks. In the foreground, one sees the rest of Jacob's household in the attitude of weeping. Behind the bed, one sees one more figure, the head and arm raised as though she is imploring help from heaven.

Another gravestone with a similar relief stands on the grave of the wife of Isaac Senior Teireira de Mattos who died in the year 1694.

These gravestones, of course, indicate that the women buried under them met with the same unhappy fate as Rachel.

In the Museo Nazionale in Florence there is a marble relief with many figures of which the subject is the death of the wife of Francesco Tornabuoni. We see it in Fig. 997. In this also, the children—they are twins—have been born, but the unhappy mother died. Fear and horror are depicted in the features and gestures of the women standing about the dying woman, and the husband, as well as his attendants, seem not yet to realise the misfortune. This work of art was originally also the embellishment of a tomb. It came from the Santa Maria sopra Minerva Church in Rome. It was executed in the year 1477 by the master hand of Andrea Verocchio.

6. THE DEAD WOMAN IN CHILDBED

The death of a woman in childbirth is, for friends and relations, no less affecting than the death of the mother before she has been able to recover from the effects of





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FIG. 997.—The wife of Francesco Tornabuoni dies in childbed. (From a relief by Andrea Verocchio, 1477, in the Museo Nazionale, Florence.)

parturition. Such an occurrence is variously interpreted according to the mental agitation and the mystic ideas connected with it.

The ancient Mexicans, as well as the extinct Chibcha, ascribed a happy life in the world beyond to women who died in childbed (Herrera). What Sahagun tells of the Mexican woman who has died in her first childbed is covered by the information which Bancroft gives about women who have died in childbirth. Whether there is any confusion here is uncertain, yet it seems most probable that people will have had the same views about the fate of women who have died in childbirth as about those who have died in childbed.

Seler records of the Mexican women that "Ciuapipiltin," called "princesses," and "Ciuateteo," called "goddesses," are the spirits of women who have died in childbed, and of the women sacrificed to the gods, the female counterpart of warriors killed in battle or sacrificed on the altar. They dwell in the West, and when they descend to earth, bring trouble and ruin.

Among the Chibcha in Colombia, when a man lost his wife in childbed he had, as accessory to the death, to transfer half his property to his parents-in-law; the surviving child, however, was brought up by them at the father's expense (Piedrahita).

The Warangi in the Masai Plateau in East Africa seem to have similar views, for Baumstark records that in a case of death in childbed, the husband has to pay the dead woman's brother two head of cattle and 20 goats.

In the island of Engano if a woman dies in childbed she is buried in the wood (Modigliani²).

When, in Achin, a woman in childbed dies, it is believed that she has become a *pala tjahit*, *i.e.*, a spirit, a quarter of whose sins have already been forgiven. In the Padang Highlands the Menangkabau suppose that such a dead woman gets into heaven instantly (Jacobs ²).

Among the Hindus in the Punjab it is believed (according to Rose³) that a woman who dies within the first 13 days of lying-in will return as an evil spirit. Therefore, at her burial they put a piece of red cloth and the image of her child, made of grass, on the bier. Some also drive nails through the dead woman's eyes and head whilst they drive in other nails on both sides of the house door.

The death of the lying-in woman is regarded generally as a great misfortune for the husband. In a song of the Mordvins such a misfortune is called down on somebody in the form of a curse. This curse runs :

> " May thy old mare bear a young one, May she bring it forth, may she herself die, May the little foal remain alive ! May the old cow calve, May she calve, may she herself die, May the little calf remain alive ! May thy dear wife bear a child, May she bring it forth, may she herself die, May the little child remain alive ! "

Among the Magyars, according to v. Wlislocki,⁷ pieces of the bones of women who have died in childbed are used as magic talismans in order to have an easy delivery. For this purpose they are baked in a heart-shaped cake of clay (Fig. 998) and bound with the wearer's hair. Afterwards they must be buried under the sleeping place. To ease and shorten the pains which await the dead lying-in woman in the world beyond, the Chinese have, according to Doolittle, a peculiar custom. Some maintain, however, that it concerns not only women in childbed, but dead married women in general :

"A ceremony called the 'Bloody Pond' ceremony, as some explain, relates to married women who die. It may be several years subsequent to their having children; others assert it relates to those women who, having borne a girl, die within four months, or who, having borne a boy, die within one month. They say that a woman's uncleanness in the case of having given birth to a boy extends only to one month, while it extends to four months in case of having given birth to a girl. The Chinese believe that in the infernal regions there is a pond of blood into which the deceased married women generally or, as some say, women who have died in childbirth or within one or four months after confinement are plunged on their entrance into that world. Virgins and married women who have never borne children, on their death never have the ceremony performed on their account. The object of the 'Bloody Pond' ceremony is to save the spirit of a deceased mother from the punishment of the 'Bloody Pond.' Sometimes it is performed several times on the death of a mother of a family of

children. This is one way by which they manifest their filial love for the deceased."

The belief that the spirits of women who have died in childbed tarry in the blood-pond (*Chi-no-ike*) is to be found also among the Japanese, as Junker v. Langegg records. (*Chi* means blood and *ike* pond or lake). To set them free the following procedure is customary and is carried out, especially by the Buddhist sect, the Nichiren. It is called "*Nagare-kan-jo*," the water sacrifice (from *nagare* to swim with the current of the river, and *kan-jo*, letter of recommendation). Junker v. Langegg says that in the vicinity of Tokio, one not infrequently has an opportunity of seeing "on the edge of streams, brooks or watercourses, a tightly stretched cotton cloth with its four corners over four low upright bamboo poles. The ends of the bamboo sticks are often adorned with flowers and green twigs,

FIG. 998.—Clay tablet with splinters from the bones of a woman who died in childbed inserted and baked with it. Magyar amulet used in easing cases of

difficult labour. (After Wlislocki.⁷)

especially with an evergreen, *shikimi*. At the head is the *Rei-dai*, that well-known, long, narrow board with the upper end indented at the sides, bearing a Sanskrit or Chinese inscription such as is to be found everywhere on graves. The cloth is inscribed with a posthumous name, *Kai-miyo*, and the solemn words of the prayer for the dead. A peculiarly shaped wooden ladle with a long handle, *Shaku*, lies either in the cloth, if this happens to be stretched out near running water, or in a water tub, *Oke*, placed beside it.

No follower of Nichiren will go past this place without stopping. He says a short prayer on his rosary, for every pious Buddhist carries one of these with him, draws water with the ladle and, repeating the words of prayer for the dead, pours it into the cloth. Not until the last drop has filtered through does he go on his way. But it is not only the chance passer-by who practises this pious custom of Nagare-kan-jo. A woman looking forward with hope to being a mother, and who feels her hour of trial approaching, is reminded painfully of her unfortunate sisters who for a new-born life have had to give up their own. With a fearful heart she betakes herself to the place of the nearest Nagare-kan-jo and makes the deliverance offering for the suffering spirit of the woman who has died in childbirth which can find peace only after the cloth which is marked with her Kai-miyo is quite riddled with holes from frequent offerings."

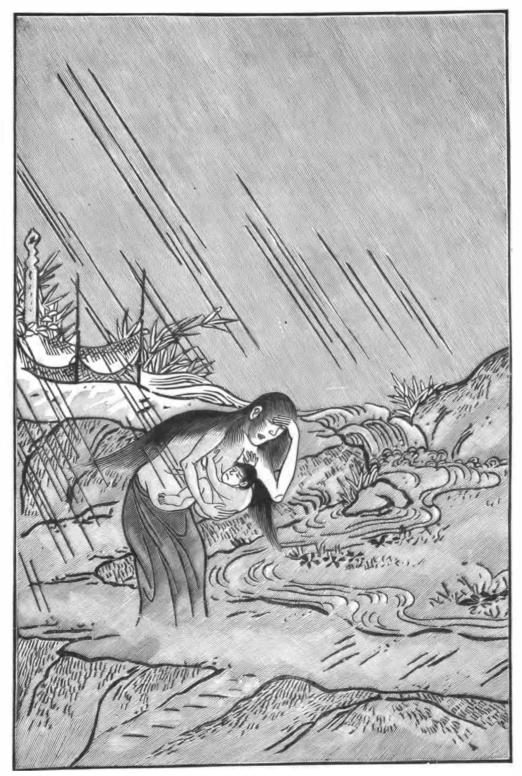


FIG. 999.—The wandering spirit of the woman who died in childbed. (From a Japanese woodcut of Toriyama Sekiyen.)

In a book of woodcuts by the Japanese painter Toriyama Sekiyen, which is entitled "A Hundred Ghost Stories," is to be found the picture reproduced in Fig. 999. It is called "Ubame," which means (according to information given by F. W. K. Müller) the lying-in woman. "It is the spirit of a woman who has died in childbed and who, with the child who has cost her her life, is wading in a shallow brook in pouring rain. On the bank of the stream we see hanging on the four bamboo sticks, the drooping cloth into which the water necessary for her deliverance has to be poured by pious beings so as to carry out the Nagare-kan-jo, the sacrifice for the dead. Behind it rises the Rei-dai, the board with the names on it."

7. THE BURIAL-PLACE OF THE WOMAN DYING IN CHILDBED

We find widespread the belief that women who had died in childbed had a great liking for haunting places after their death; hence special precautions were necessary to procure rest for them in the grave, or to compel them by force to remain quietly lying there. With this, no doubt, is to some extent connected the fact that in many places a lying-in woman is buried in a special manner. In many cases, it is true, it appears as if the peculiarity of the burial serves some other superstition, rather than giving merely a special ceremonial form to the last respect shown to the dead.

In Starkenberg (Prussia), if a lying-in woman dies, she is taken to the church because she must keep her churching (after her confinement). If the child has died it is laid beside her in the coffin; if it has lived, then it is baptised beside the coffin; after this, amid praying and the singing of hymns, the dead woman is buried with great ceremony.

Also in Lechrain a young mother who with her child dies in her first childbed, has her child laid in her arms and is buried as a pure virgin ; virgins bear her to the grave and the virgin's wreath is placed on the mound. When mother and child remain together in this way heaven stands open to them (v. Leoprechting).

In the Saterland (Oldenburg) the bier with the coffin of the lying-in woman used to be carried not on the shoulders, but with the hands, round the churchyard to the grave.

In Carinthia they bury the lying-in woman in her wedding dress or in a black garment (Waitzer).

In Hilchenbach (Westphalia) and the vicinity, when a lying-in woman dies, as also in Jever (Oldenburg), a white cloth is put over the black shroud and over the bier.

The sheet on which the poor woman in childbed has died is also of special significance. In Hesse it is put on her grave and fastened to the ground with four spears and left there till it crumbles to dust.

This calls to mind the following custom reported by Clajus :

"At Lüttgenrode, a village in the Halberstadt district, and a few neighbouring places, the following custom is observed at the burial of a lying-in woman. When the coffin has been lowered into the grave, four young women hold a white sheet by the corners over the mouth of the grave, in such a way that the earth can be filled in below it. After the mound has been made a white linen cloth about a yard square in size, and full of holes made by a knife, is placed on it and fastened down at the sides with wooden pegs. This cloth is left to decay on the grave."

The grave of a dead lying-in woman is made recognisable in still another way.

In Swabia a white net is spread over it so that no wounded person may walk

over it. This recalls similar customs in the islands of the Moluccan Sea which are practised at the burial of women who have had to lose their lives in childbirth.

In many parts of Germany people believe that a mother who dies in childbed has to go on sewing and washing for her child in the world beyond. In Tübingen needles, thread, scissors, thimble and a piece of linen; in Reutlingen a yard of cloth, a yard measure, needles, thread and thimble are put into the grave with a woman who has died in childbed (Meier). In Hesse a baby's napkin, weighted at the four corners with stones, is put on the grave (Wolf).

In Lückendorf bei Oybin in Saxony, according to Voss, even at the present day an earthenware jar, a little earthenware saucepan, a tin spoon, a twirling stick, ground rice, needle and thread, a baby's napkin, a baby's shirt, a tin can, a pair of scissors, a comb, an almond board and pestle and a thimble are put into the grave with a woman who died in childbed. Only models of some of these things are put in. In her right glove they put 12 pfennig as money-offering for the first churching which she cannot now have on earth.

In Upper Lusatia they put in one of the dead lying-in woman's hands a few coins which are called the offering, and amount to as much as the usual payment to pastor, choir leader and poor box, so that she may find peace in the grave; in the other hand she gets a book made of wood or white paper. In some villages a little key and a spoon are supposed to be put on her bed for six weeks (Pachinger).

Likewise, in Swabia it is customary to bury scissors with a woman who died in childbed; if they are dug out again, then a locksmith on Good Friday, according to others Maundy Thursday, makes them into cramp rings which people wear to prevent cramp; they pay two or three gulden for them; if they come wholly from hermits and are highly consecrated, then people do not bother about the price (Buck).

Of the nomad gipsies v. Wlislocki records :

"If a woman dies in childbed, two eggs are put under each of her arms and while this is being done her fellow tribeswomen recite the saying :

"' When this egg rots,

May the milk too be dried up !'

"They believe this prevents vampires from feeding on the deceased woman's milk."

In the seventeenth century Muralt, in Zurich, puts the question of whether women who died in childbed should be buried in towns or churches, and he makes the midwife give the answer :

"This shall by no means be allowed, and first because human flesh under and against each other has a wonderful affinity to nature on account of its similarity, since we all come from one blood; accordingly people are freed from fear, unrest and disturbance, night-spirits and house ghosts."

Now follows a very circuitous exposition how in dead human bodies a being antipathetic to the living, the *Mumia*, evolves, and "hence many other mishaps be caused in women by this being, such as hysteria, persistent hæmorrhage, which keeps on till death. This will be aroused at the time when nature begins to open for purification and when such a person comes to places where others have died of such a hæmorrhage. Now she gets such a stroke of mischief from the female Mumia that her whole life will be taken up with it. Or there can result a closing up, since female nature goes into a rage; then may result sterility, miscarriages, consumptions, swoonings and many other nameless and unknown mischances which our inborn ignorance is unable to help."

Muralt, however, stands up on the whole for burial places of the dead being situated outside towns, a hygienic proposal undoubtedly very meritorious for that period.

The Chingpaw (Kachin), in Upper Burma, have likewise a method of burial different from the usual for their women who have died in childbed or during pregnancy. That their property, and often, too, the house where they died, is burnt has already been stated.

Wehrli writes :

"According to Anderson's descriptions, it is asked of the shaman on the death of a pregnant or lying-in woman what animal must be killed to pacify the evil spirit of mother and child. An animal which the evil Nat is fond of eating is named, and a second into which the Nat is to be changed. The first animal is hung up alive by the head. In the direction the head shows at the moment of slaughter the woman has to be buried. A part of the flesh is offered up to the Nat, another part cooked and set before the dead woman. Her corpse is then rolled in mats and conveyed along with her ornaments and clothes to the burial place. After the body is lowered into the grave, grass is thrown on the head. As soon as the grave is filled up, all the deceased's possessions are burnt. Over the mound a little hut is made as a dwelling place for the Nat. The mourners have to perform the usual purification ceremonies on the return journey."

George alleges, according to Wehrli, that women who have died in childbed or during pregnancy are burnt. This report may well refer to another branch of the tribe.

Vortisch² records of the Gold Coast that women who have died in pregnancy, in childbirth or within the first week of childbed were formerly thrown first in the street and then into the bush. We have already learnt something similar in Section 4 under the general title "Guinea" about the burial of deceased pregnant women.

8. THE WOMAN DYING IN CHILDBED RETURNS AS A GHOST

The dead lying-in woman's heart clings to her child, and we frequently come across the belief that she leaves her grave at night to return to it.

In Swabia, if they neglect to put the scissors into the coffin with her, they are firmly convinced that the lying-in woman will return and *fetch* them herself. Hence then the lying-in woman in Flehingen in Baden who has been buried with her child in her arms appeared to her relatives and begged them for thread, scissors, thimble, wax and soap in the grave with her, because otherwise she could not do the necessary sewing and washing for her child in the world beyond.

In Luschtenitz in Bohemia, likewise, people give the deceased lying-in woman in the grave with her all that is necessary for the care of her child—napkins, cot, bonnet, etc. If they forget anything, then the dead woman returns at night to wash her child and continues this until they put a basin with soap and water before the door.

In Upper Austria and Salzburg, when a woman dies in childbirth, they have to give her scissors, needle case, thread and thimble in the grave with her, otherwise she returns and fetches them (Pachinger).

In many parts of Germany, however, people believe that the dead lying-in woman returns in any circumstances, at least during the lying-in period. She comes to her child every night to nurse it and tend it.

In Thüringen, if the mother dies, then her bed is made nine times more; in Swabia, eight times; in several places in the Bavarian Upper Palatinate, however, her bed is prepared with all care every evening for six weeks and her slippers put under the bed, because, as they believe, she comes every night to look out for her child. If a mother dies in childbirth in Bohemia, it is said there likewise that she comes to her child for six weeks and bathes it, and when a woman in childbed dies, they put baby's napkins in her coffin, for she comes every night to put her child to bed dry; in other parts of Bohemia, after the death of the lying-in woman, the people put sponge and water by the child because, for six weeks, she appears at midnight in a white robe to wash and bathe her child. In the same way in Hesse, the bed of the deceased lying-in woman is made afresh each morning and, if the child has remained alive, its cradle is left standing before the bed during that period.

In Kornmann, we read :

"Superstitiosae mulieres etiam post mortem puerperae lectum ejus sternere solent, ac si adhuc viveret, ad consummationem usque sex septimanarum, ferunt animam singulis noctibus cubare in eo, fossam imprimere, instar felis cubantis."

Thus the house cat, which will no doubt not have neglected to make use of this comfortable place, appears to have contributed considerably to maintaining this superstition.

Also J. G. Schmidt quotes this widespread superstition in the Rocken-Philosophia :

"When a woman dies in childbirth, a piece of almond wood or a book must be placed in the lying-in bed and the bed be taken to pieces and remade every day otherwise she cannot rest in the ground" (*i.e.*, deluding the lying-in woman into thinking herself "alive").

Among the negroes of the Loango Coast, according to Pechuel-Loesche, there is prevalent the belief that the dead mother continues to watch over her children to protect them from evil beings as well as from spirits.

Just as in the belief of many peoples the woman in childbed is regarded as unclean for a certain period and a purification ceremony is necessary so as to permit her to return to the society of her fellows again, so the deceased woman in childbed too is still unclean in death and remains so as, of course, she did not live to perform the ceremony of purification. As an unclean person, however, she has even, after her death, a contaminating and injurious effect on those who go near her. It is still quite possible to find traces of this view. In Eckarth's Unvorsichtiger Heb-Amme it runs :

"Also virgins and wives when they have their courses should avoid those churchyards and churches in which lying-in women and soldiers who have lost their lives before the enemy have been buried, for, if they walk over such a grave, the discharge will increase and cause great alarm. For this reason, the foresight of a government is to be praised for having persons who have died in childbed buried apart in a safe place."

Moreover, further not inconsiderable dangers may, according to the views of certain peoples, accrue to the survivors owing to women who have died in childbed. We have already learnt of isolated examples of this in the sections on the deceased pregnant woman and the deceased woman in labour, and this fear of danger is given expression in certain ways in which people try to get rid of the corpse and make it harmless.

In Styria people believe that it is true that a woman who has died in childbed goes straight to heaven without passing through purgatory, but they are convinced that two more from the same parish will die soon after her. Fossel justly points out that this superstition may well be due to the experience, unfortunately only too common, that with the infectious nature of puerperal fever, direct transmission of

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the fatal disease used to take place through the midwife to the next woman in labour.

The Loa proceed with the corpse of a woman in childbed exactly as with those who have died of epidemic diseases.

In Nias Island, mischievous spirits or demons arise from women who have died in childbed, as Modigliani records, and these, under the name of *Bechu Matiana*, torment pregnant women and may cause miscarriage. They are very much feared by women and, according to Rosenberg, the latter must always be armed with a knife so as to protect themselves from them (cf. II., p. 426). According to Rosenberg, they are also called *Sinotachera* and are supposed to guide thieves to steal cleverly and to penetrate into the houses through the smallest holes.

The Dyaks of Sarawak on the North and West coasts of Borneo likewise believe, according to Sir S. B. St. John, that dead lying-in women are changed into demons which they call *Mino-kok-anak*. These find a special pleasure in vexing and worrying the living.

According to the belief of the ancient Mexicans, as we have already heard, women who died in childbed came down to earth on certain days (Sahagun, according to W. Lehmann).

Such an apparition is reproduced in Fig. 1000, which Lehmann extracted from an old manuscript preserved in Paris which is written in Zapotec signs on a piece of tanned deer skin specially prepared by a cement covering for the better reception of the colours. The figures are arranged in the four directions; the ghost of the dead lying-in woman portrayed in Fig. 1000 belongs to the southern group. The description which Lehmann has given is appended in his own words (leaving out what does not apply here without specially indicating this):

The female person *ce quauhtli* bears an enagua painted lengthwise; on the girdle knot three pendent bands and two upright flags, on the shoulders the *Amaneapanalli* with pendent hearts,



FIG. 1000.—Ghost of a woman who died in childbed (*ce quauhtli*). From an ancient Mexican manuscript. Zapotec style. (After W. Lehmann.)

a necklace, in the ear a peg with pendent pad. In the right hand she bears a dish with sacrificial water, two *Malinalli*—bunches of grass, two agave-leaf thorns and the tip of a snake's tail, in the left a flag, rope and little *Amaneapanalli*.

The face with the protruding eyes and fleshless jaw with the bared teeth is very characteristic. From the region of the lower jaw a line goes across below the eye to the bridge of the nose. The head is covered by a cloth which seems to be decorated by four eyes and below which the hair falls in four strands. Above it rises the badge of Xipe, the pointed cap on a rosette (*Yopitzontli*) and on each side two carved bands like swallowtails (*Maxaliuhqui*) which are patterned with a dark circle and little dots. Two complicated tufts of feathers go one towards the right, the other towards the left. Finally, on the nape of the neck, a big fan-shaped ornament is fastened, from which four big feathers rise between small eyes apparently mounted on stalks. "That a ghost is meant to be portrayed here is clear from the fact that the form shows the death jaws in the face and the protruding eyes."

9. THE NURSING MOTHER IN DEATH

We have already seen that the belief is very widespread that a dead woman in childbed finds no peace in the grave, but she has to return every night to look after and nurse her child. Naturally, however, the main care must be giving the breast to the orphan left behind.

Thus there is a belief in Aargau that every lying-in woman who has died returns for six weeks more to suckle the baby left behind; also a "dummy" must be put ready for her with which she can quieten the surviving child at night; if this is not done, the child may get bad milk poisoned by witches. Nobody sees the mother but they hear the child sucking. For this journey she needs the pair of shoes which is put in the coffin with her or placed beside it. If this has been omitted, then she appears as a ghost until they succeed in throwing a pair into her lap (cf. Rochholz).

In Central Franconia, too, they put a pair of new slippers into the coffin with her because they believe she needs them, for she has to come at night for six weeks to see whether her offspring is being properly looked after (see Bavaria). Waitzer reports the same from Carinthia. According to an Alsatian tale, the deceased lyingin woman laments : "Why have you put no shoes by me? I have to go through thistles and thorns and over sharp stones!" After a pair of shoes has been put ready for her, she comes back regularly for six weeks to suckle her child at night (see Stoeber).

In the same way in Masuren, as Toeppen records, people believe that a mother who has died at the birth of a child or just after comes down from heaven every night to give her child the breast, and she does this for full six weeks in this case also. The day of death is not reckoned as the beginning of this ghostly suckling period, but that of the burial. That is to say, the lying-in woman must be in the grave before she can do her child this service of love.

According to Bezzenberger, the belief is prevalent among the Lithuanians also that the dead lying-in woman leaves her grave each night in order to give the breast to her child. She cannot be seen by anybody, but there is no doubt that when doing so she sits down by the cradle, for it all at once stays still and cannot be moved again as long as the mother is there.

In White Russia (Smolensk), only a witch is supposed to visit and feed her child for six weeks after her death. This is prevented by having exorcisms done by the priest (Paul Bartels ³).

In German sagas and tales, we often meet with the poetic feature of the mother returning from the realm of the dead or some other supernatural world who wants to nurse and attend at night the helpless children she has left behind. Let us call to mind in particular Melusine, whose husband's perfidy, distrust and curiosity had driven her to death. The romance of her vicissitudes was a favourite book in the Middle Ages. The Kunstgewerbemuseum in Berlin has in the collection which Freiherr von Lipperheide presented to it, an incunabula impression with woodcut illustrations of this romance which was printed by Heinrich Knoblochtzer in Strassburg in the year 1483.

One of the woodcuts, which is reproduced in Fig. 1001, shows a low room in a castle in which two young women are lying in bed together naked. These are the two wet nurses of the twins which Melusine has had to leave. Melusine is sitting on a low seat beside the cradle and is giving one child the breast while the other is still lying in the cradle. The explanation given for the picture is :

"How Melusine, after her departure, often came back at night and suckled her babes as the wet nurses saw it."

Also among the modern Greeks, the idea exists that a dead mother yearns for her children. One of their folk songs refers to this. It describes the attempted flight of a few shades from the realm of the dead :

Three valiant youths decided to fly from Hades. A lovely young mother implores them to take her with them to the upper world, for she wishes to suckle her child left behind there. The



Fig. 1001.—Melusine, after her death, suckles her children during the night. (From a woodcut of 1483.)

youths do not want to undertake this: the rustling of her garments, the shine of her hair, the clatter of her gold and silver ornaments will attract the attention of Charon, the horrible ferryman. But she is able to appease their doubts and they set out on their flight together. But suddenly Charon meets them and pounces on them. Then the young woman cries: "Let go my hair, Charon, and take me by the hand, and if thou wilt give my child to drink, I will not try to escape again."

In conclusion, a superstition in Achin in Sumatra, which Jacobs ² records, may also be mentioned. It is generally believed there that a barren woman has to suckle a snake at her breast after her death and in the fear of this fate is to be

found not the least part of the reason why women use every possible and impossible means of bringing at least one child into the world.

10. IMPREGNATION OF THE DEAD

It must strike us as very peculiar that our forefathers were of the opinion that sexual intercourse with a corpse can bring about pregnancy in it in some circumstances. Naturally, it is not a question in those cases which appear so often in the romances of past centuries where an apparently dead person is involved who, after impregnation had taken place, revived again and then did not know how she had come by the child. Here it is a question of women really dead.

We find one such story in Kornmann's *De miraculis mortuorum* :—

"A warrior in the island of Deysa loved a maiden but she would not listen to him. She died and the soldier got access to the dead body and accomplished with the dead what the living had not granted him. After the coitus, a voice from the corpse spoke to the desecrator of the dead body: 'See thou hast conceived a son with me ! I shall bring him to you.' And after nine months, 'cum tempus pariendi instaret pepirit filium abortivum,' she brought it to the father and said to him: 'See this is thy son, cut off his head and keep it if thou wilt conquer thine enemy,' etc. He did so, and this head acted like a kind of Gorgon's head. Later, the soldier married; one day his wife found the head and threw it into the Gulf of Satalia and now it was all over with his conquests."

According to information from Konrad Schottmüller, monographer on the Order of the Templars, a very similar tale played an important part in the recorded proceedings of this Order and was twice recorded by Michelet² in an almost corresponding way. Once it is an Armenian knight who made his dead lover pregnant on the day after her burial in the vault; the other time, it is a Templar who had first to exhume the maiden beloved by him for the said purpose. Both times, a voice proceeding from the corpse demanded that the corpse-ravisher should return after nine months had passed and fetch his child. Then, at the appointed time, he found it lying between its mother's legs; in one case, however, not a complete child but only a human head was born, and with this, as their persecutors charged them, the Templars are said to have practised all kinds of evil magic later.

11. NUPTIALS OF THE DEAD

The Serbians seem to be mindful of regulating conjugal conditions even for the kingdom of heaven. For, with them, if a man or woman dies who has been twice married, they kill a black hen and put it in the coffin with the corpse. By this sacrifice the dead person is supposed to forget the second marriage and to join the first life companion at once in eternity (see Krauss).

Serbian women however have still another procedure for compelling the husband left behind to keep faithful to the wife whom death has wrested from him. Krauss relates of this :—

"If a young wife dies and the mother does not want the widowed son-in-law to marry again, then she does not untie the bandages on the hands and feet of her deceased daughter, for thus the 'husband's happiness remains bound in a new love.' Incidentally, a mother promises herself the same effect when she has her dead daughter buried in her wedding and betrothal dress."

There is something very strange to our whole mode of viewing things in hearing that there are people who actually carry out contracts of marriage after death.

At the head of these again are the Chinese, of whom Doolittle relates the following :---

"Oftentimes when the girl dies before the wedding day arrives, especially if nearly or quite of marriageable age, a custom called 'asking for her shoes 'is observed. Her affianced husband goes in person to the residence of her parents and with weeping approaches the coffin which contains her corpse. He soon after demands a pair of shoes which she has recently worn. These he carries home, having three lighted sticks of incense in his hands, as he walks or is borne through the streets. At the corners of the streets en route to his residence, should there be any, he calls out her name and invites her to follow. On arriving at his own home, he informs her of the fact. The incense he brought with him he puts in a censer. He arranges a table in a convenient room and places behind it a chair. The shoes of the deceased girl are placed on the chair or under it. The censer containing the incense brought from her parents' residence is placed upon the table together with a pair of lighted candles. Here he causes incense to be burned for two years, when a tablet to her memory is placed in the niche containing the ancestral tablets of his family. By all this, he acknowledges her as his wife."

Katscher gives another record of the same custom of the Chinese :---

"Meanwhile, if the fiancée dies before the wedding, there is a rule observed in the better classes almost without exception that the bridegroom performs a ceremony by which he becomes pro forma the husband of the dead girl. Her parents inform those of the bridegroom of the death of their daughter. The bridegroom's father sends as answer the head of a sucking pig, candles, a shroud, four dough cakes and a broken comb. The last is put into the grave with the girl, while the remaining gifts are regarded as sacrificial offerings. Immediately after the funeral, the preparations for the wedding are made. On a propitious day prescribed beforehand, the bridegroom puts on a wedding garment and awaits in his house the arrival of his wooden tablet on which the name of his deceased bride is inscribed and which is brought to him in a wedding sedan chair which also contains a fan and a handkerchief. The palanguin is preceded by a musician who blows a wind instrument which he holds in his right hand, whilst with the left he beats a drum hanging from his girdle. The bridal sedan chair is received in the bridegroom's house with some ceremonies which resemble those observed on the arrival of the living bride. The tablet showing the name of the deceased bride is placed on the ancestral altar of the bridegroom's family, and his younger brothers and sisters along with his nephews and nieces prostrate themselves before it, touching the ground with their foreheads. On the tablet hangs a silver medallion on which the name and the date of the birth and of the death of the deceased are engraved. A few Taoist priests are summoned to pray for the peace of the dead bride's soul and ask her to promote the fortunes of her new family, above all the prosperity of her husband. Such marriages take place only at night, for daylight is considered to be unsuitable for spirits."

"The following custom is very strange in the realm of marriage, which is regarded by the Chinese as something so important and necessary that they marry not only the living but also the dead. The spirits of all male children who die quite young are married after some time to the spirits of female children who have died at the same age. For example, if a 12-year-old boy dies, then, six or seven years after his death, his parents endeavour to marry his spirit to that of a girl of the same age. They resort to a matchmaker who lays before them her index of dead virgins. After a choice has been made, an astrologer is consulted who casts the horoscope of the spirits of the two departed. If he declares the choice to be a favourable one, a propitious night is appointed for the wedding. This proceeds as follows : In the ceremonial hall of the house of the parents of the dead boy bridegroom, a paper image of him in full wedding dress is placed on a chair. At nine o'clock, or still later, the parents send a wedding sedan chair (made of palm bark covered with paper) in the name of the youth's spirit to the house of the bride's parents, with the request that they permit the spirit of the girl to sit in the sedan for her to be taken to her new home. The Chinese believe that everybody has three souls and that one remains by the ancestral tablet after death. This belief leads to the dead bride's tablet being taken from the ancestral altar and placed beside her paper image in the sedan. In many cases, also, the articles of clothing worn by the girl in her lifetime are transferred to the parental house of the dead youth. Immediately after the arrival of the wedding procession, headed by two musicians (one plays a lute, the other beats a big drum), the ancestral tablet and paper bride are taken out of the sedan ; the former henceforth finds its place on the ancestral altar of the parents-in-law; the paper figure is placed on a seat beside that on which the paper bridegroom is sitting. Then a table set with various kinds of food is pushed before the paper bridel couple, who are exhorted by half a dozen Taoist priests by the medium of several hymns and prayers to enter on the matrimonial alliance and to enjoy the wedding feast. The conclusion of the ceremony comes with the burning of the paper couple as well as a great number of paper men servants and maid servants, sedans, imitation coins, clothes, fans and tobacco pipes " (cf. v. Reitzenstein,²¹ p. 13).

However, the Chinese are not alone in this connection. We read in Kornmann :

"If a Tatar's son who is not married dies and an unmarried daughter of another Tatar dies, the parents of the two deceased agree to bring about a marriage between the two dead. The marriage contract is put down in writing, the youth and maid are sketched on paper and this, with money contributed, objects in common use and household utensils is dedicated to Vulcan in the belief that the two deceased are now allied in marriage in the other life. For this purpose, they also prepare a ceremonious wedding and drop here and there some of the food prepared so that the bride and bridegroom may also have something to eat. The parents and relatives believe of these dead people that they are now joined by the same tie as if the marriage had taken place in the lifetime of the bridal pair."

This record is almost identical in matter with the narrative of Marco Polo quoted by Schrader.⁴

We have to call to mind still another form of nuptials of the dead which likewise takes place among the Chinese, according to v. Brandt's ² report. He says :—

"However, it often happens that a widow of good family marries again and then, if not the necessity, at least the desire comes to the family to find another wife for the dead man, so that the space in the family burial place and in the ancestral hall may not remain vacant. Then perhaps the crippled daughter of a poor family will, for money, consent to a marriage of this kind which is regarded as perfectly legitimate."

Finally, one more record follows which Stenz quotes from P. Pieper's information (from Jan-ku in the north-west of southern Shantung) about a remarkable marriage of two corpses among the Chinese :—

"An elaborate ceremony of this kind took place recently in the district of Puoly in the south of Shantung. It was a matter of an aged man who had departed this life and whose wife, too, had died immediately afterwards. Nothing stood in the way of both being buried, but before this was done, the old man had first to take home a bride long since dead and forgotten. She had been betrothed to him about 50 years before, but, when the wedding was to have taken place, death claimed the bride. Another wife was soon found for him and he lived with her for more than 40 years till they both died. The bride who died first, however, is regarded as the legal wife, and, in the spirit world, she takes her place beside her man as the actual wife. Yet before he can take her home there he must first be married to her here below. This took place on the same day as the old man's wife was to be buried. The grave of the dead fiancée was opened, the few bones still existing were carefully taken up and placed in a new coffin, the tablet was put in a sedan and then taken in a ceremonious bridal procession with music and fireworks to the home of the dead man. Whilst friends and relatives devoured the wedding feast, the

tablets of the dead were placed side by side and people did not omit to offer the individual dishes to them and to waft the odour of the food towards them."

In the continuation of this narrative, the second act of this celebration, the burial, is described. "The mourners put on their soiled white dresses and reeled behind the coffins of the two mothers; some of them could scarcely keep upright with their mourning sticks, the grief at the early death of the good mother had quite crushed them. . . . 'Our good mother, our good mother,' wailed the three sons of the second wife, men of 30 to 40 years of age. 'Just come to us to-day, must thou leave us so soon again ?' But no tears were shed behind the coffin of the real mother. . . ." The interment of the three coffins now took place; the first wife got the place of honour on the husband's left.

Conrady, the editor, takes this opportunity of referring to the information given about marriage of the dead by J. J. M. de Groot (II., 802-6), who confirmed this custom from the Chou-li to the Ming, but did not know whether it was still in use.

In Africa, according to a statement, unfortunately very short, of the missionary Gutmann,² the custom of marriage of the dead is likewise to be found among the Wachaga, who "marry to each other in the realm of the dead young men and maidens who have died unmarried." They do this by special arrangements and rites.

But in Europe also, there exists, or used to exist, in many countries the custom of marriage of the dead, as can be concluded from certain usages.

Thus Krauss¹² records that in Croatia and Slavonia it was customary fifty years ago that in the funeral processsion of a youth of marriageable age who had died prematurely, if he had not enjoyed a woman in his lifetime, a girl dressed as a bride walked behind the coffin as if she were the widow, for people believed he would have no peace in the grave if the pleasures of love had been unknown to him in this world. In Further Pomerania (*e.g.*, the district of Dramburg) virgins, even if they die in old age, are buried in myrtle wreath and veil, that is, dressed just like brides (Brunk). Kaindl² also refers to the fact that the Little Russians make for unmarried people, and even for children, the preparations which if the deceased had lived would have been made for their marriage, and sees in this and similar customs (carrying to the grave) the survival of the custom of marriage of the dead up to our age.

Schrader⁴ has collected a quantity of other evidence in his treatise on the nuptials of the dead.

Thus, he gives evidence from two records written in Russian, and therefore little known, that in Russia quite a mock marriage used to be performed at the graves of people who had died unmarried. We give the evidence from Schrader's translation.

Kotljarevskij records: "In Little Russia they dress a dead girl as if for marriage and mingle marriage custom with burial ceremonial. They do the same on the death of a young man. In Podolia there is a conviction that there is no place in the world beyond for a dead man without a wife; wherefore the burial of a young fellow bears the designation of marriage (vesilie = Russ. veselie, really 'rejoicings') and is celebrated in the manner of a marriage : they use flowers, wreaths and kerchiefs. They fasten two wreaths on the dead girl and give the bearers of the funeral flag (wedding flag) kerchiefs; further, a bridegroom is ordained for her for the world beyond and some fellow or other acts thus as suitor. His hand has a wedding kerchief wound round it, and in this attire he conducts the deceased girl to the grave. From this time forwards, the dead girl's family regard him as their 'son-in-law' (Zjati), others as a widower. With the Serbians, when a youth dies, some girl is dressed as if for marriage; she takes two wreaths and carries them behind the coffin; two bride's men accompany her. When the corpse is being lowered into the grave, one wreath is thrown on the dead youth, the other is handed over to the girl who wears it for some time, although she had never had any thought of marrying the deceased."

Another report by Šejn relates to White Russia :---

"A bride they dress for marriage, they put a ring on her hand, put a candle and a kerchief in her hands, adorn her head with a wreath of flowers, in summer of fresh, otherwise of artificial flowers, the rest of the dress is as usual with a woman with the exception of the cap and headkerchief which is exchanged for the wreath and the plait. A bridegroom they dress also as for marriage. . . ." Schrader ⁴ has pointed out that also in an old record of an Arabian traveller Masudi (about 940) a wedding of a dead bachelor is spoken of : "The heathens who dwell in the land of the Chasar peoples belong to various races among which are Slavs and Russians. They burn their dead and put on the same pyre their weapons, their beasts of burden and their ornaments. When a man dies, his wife is burnt alive with him, but if the wife dies, the husband suffers no such fate. If, however, a man dies a bachelor, they marry him after his death."

Schrader ⁴ compares with this passage an old Arab record of Ibn Fadhlan who was sent by Caliph Muktadir as ambassador to the Volga-Bulgars in the years 921– 922. He was eyewitness of the ceremonial customs observed at the burning of the corpse of a Russian leader. The very detailed description cannot be quoted here, but stress may be laid on what is important for this question, namely, that a girl voluntarily had herself burnt with the corpse, various proceedings having previously been undertaken with her, which Schrader is inclined to regard as imitations of marriage customs : a ceremonial washing of the feet, sexual intercourse with seven men, raising up the maiden thrice when she had to step with bare feet on the heads of the men lifting her, throwing the girl forcibly down beside the corpse (as it were in the nuptial bed), etc.

Schrader thinks that the most primitive form of the marriage of the dead is to be seen in this custom.

The above-mentioned custom of mock marriage would represent a higher grade.

It appears, however, as if there has been a still higher grade in other branches of the Indo-Germanic family. At least, Schrader has made it probable that in ancient Greece, especially in Attica in the sixth and fifth centuries before Christ, the custom practised of putting a vessel containing the bridal bath on the grave of unmarried dead, or (two centuries earlier) placing a vessel full of water in the grave with them, was nothing else than a symbol of marriage.

Thus the peculiar custom of marriage of the dead can also be proved among the Indo-Germanic peoples.

12. THE DEAD WOMAN WHO RETURNS

Dead women who return or haunt places play a very prominent part in the mysticism of very many nations, and we have already had many an example of this in the foregoing sections. Sometimes it is their own heavy unexpiated guilt which causes their return to the earth, sometimes a child left behind is the cause of their return; now their reappearance is of quite a harmless nature, again it is an omen of evil, and in still other cases the dead walk with the intention of doing harm to the living. The washing women, the white women, the dancing nuns and whatever these spectral apparitions may be called, are too well known to need further investigations here. Also, what played such a prominent part in the popular imagination in the eighteenth century, women buried alive (apparently dead women) will not be considered in detail here. Place, however, may be given to one characteristic picture (Fig. 1002). Here it is more a question of those women who, according to the absolute conviction of their contemporaries, had in reality died, but, in order not to have the bleeding heart of the inconsolable husband break, were recalled to life by "divine mercy" and remained united with him in conjugal love and trust for many years longer. As typical of this mythical group, the following story, sketched by Kornmann, may find its place here :—

"In Bavaria a man of good family is said to have felt such profound grief at the death of his wife that he spent his life in solitude. At length, as he never ceased to mourn, his wife rose again from the dead, appeared by him and said : 'Although I have already finished my earthly life once, I have been called back to life again by thy lamentation and have been commanded by God to enjoy thy companionship longer, yet with the condition and stipulation that our marriage alliance, which was dissolved by death, be formed anew with the ceremonious blessing of the priest and that thou cease thy evil habit of swearing : for, on that account, I was taken



FIG. 1002.—A dead woman comes to life. Seventeenth century. Cologne. (Germ. Mus., Nuremberg.)

away from thee and I shall have to depart from life for the second time if thou sayest such words again.' After this had taken place, she managed his house as before, also gave birth to some more children but always seemed sad and pale. After many years, the husband was displeased with his evening drink and swore at the maidservant. Then she disappeared from the room, but her clothes remained standing like a ghost at the place where the meal had been laid."

Also among the ancestors of the Counts von der Asseburg there was one such dead woman who returned. She also had already been consigned to the family vault and the husband left behind would not be comforted. When one of his family said, to comfort him, the dead woman might perhaps return, he replied that he would believe that his favourite horse would look out from the opening in the roof before he could believe in the possibility of a return of his dead wife. Soon after was w.-wot. III.

heard a bustle of people who had assembled in front of the castle. When the reason for this commotion was investigated, it was found that these people were only wondering why the Count's favourite horse was looking out of the hole in the roof, and how it had really got up there. In the night, his wife, too, returned, dressed in a shroud but alive again. The overjoyed husband lived in happy marriage with her for many years longer, and she bore him several more children. But she was always noticed for her great pallor. Her portrait, as well as that of the children born after her first death, is said to have been hung in the Cathedral at Magdeburg.

In Cologne on the Rhine, too, a similar tale is known, and in memory of this one still sees two horses' heads looking on the street down from the first storey of the house concerned.

From the Chronicle of Neocorus in Dithmarschen of the end of the sixteenth century, Kinder relates :—

"Mans Krinkens' wife Grete had died. The children raised such pitiful cries and lamentations that her soul returned to her again. She lived for years afterwards, but had a very sharp, death-like countenance, was quiet and queer, but gave correct answers."

In many other old German and foreign families tales very similar to the above are told. They seem not only curiosities but have quite a considerable cultural importance. Ludwig Uhland made it seem highly probable that in all these cases a special ceremony for ennobling a wife who was not of equal birth was involved. Also the maidens abducted from dances of the dead at night and those put into a magic sleep by the spindle, the tool of the bondwoman, who are awakened to new life by an intrepid knight, seem to be connected with this. All these tales agree in stating that the dead woman who had risen again bore her husband several more children. Also in every case, the marriage of the husband to the wife brought back from the grave is consecrated anew by the priest with all the prescribed ceremonies. The corporeal rising of the mother from the dead is kept in mind by people calling the children "the dead," and Uhland calls to mind in this the family of the dead of Lustnau. He also refers to the following regulation :—

"Langobard legal sources of the seventh and eighth centuries, and legal codes and records, offer a figurative expression in agreement with this which is certainly borrowed from a much older application. If anyone wanted to marry his bondwoman, this was permitted, but he had to make her free, that is, reborn, and his true wife, either by formally granting her freedom or by gift on the day after marriage, then she is to be regarded as a freewoman and a true wife, and sons born of her are to be true heirs; in the same way, anyone who wanted to marry a foreigner or a half freewoman must also make her a reborn woman."

The other statement, in which all the tales agree that the raised woman is distinguished throughout the whole of her second life by a quite extraordinary pallor, we must doubtless regard as a later embellishment of the tale. People considered it necessary that a person who had once been dead should be distinguished from ordinary human beings in some way, and the continuance of the pallor of death was the most convenient distinguishing mark.

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