

CHAPTER LX.

STRUCTURE OF THE PRINCIPAL ORGANS AND PARTS.

In addition to the general explanation already given, there are some of the female organs whose peculiar structure requires to be more fully noticed, on account of its important influence on some of the processes hereafter to be described.

THE WOMB.

The external appearance of the womb, viewed in front, and in connection with its appendages, is shown in previous Figures. It is placed in the pelvis, between the bladder and the rectum, and at the top of the vagina.

The length of the womb, after puberty, is about three inches; its breadth at the upper part, or fundus, about two inches; and at the cervix, or neck, about one inch. The cavity in the interior is small, owing to the thickness of the walls, and its form is triangular. The shape of the womb resembles a pear, somewhat flattened, from before backward. Previous to puberty its size is much smaller, and with those who have had children it often exceeds the dimensions we have given.

The *neck*, or narrow part is much changed by pregnancy. In virgins it is long and pointed, and somewhat enlarged in the middle. In those who have borne children it is considerably shorter, more obtuse, and less regular in its form. The cavity in the neck is larger in the middle than at either end, as will be seen in the adjoining Figure.

The *os tincae*, or mouth of the womb, also undergoes considerable change from the same cause. In the young person it is merely like a small slit, scarcely to be felt, but after pregnancy it much enlarges, and remains more or less permanently open. The anterior lip, or the one in front, is somewhat larger than the posterior one.

The body of the uterus is formed of a very dense, gray-colored, muscular sub-

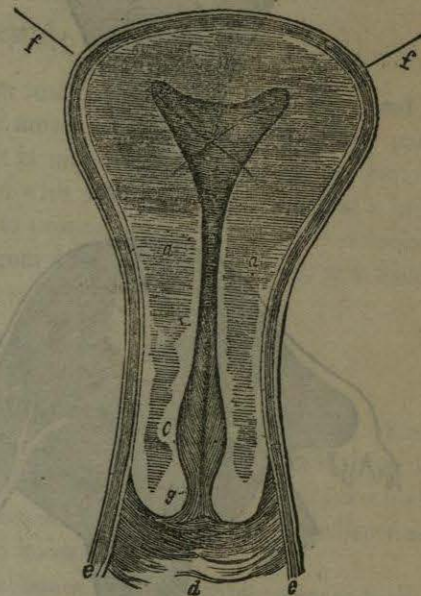


FIGURE 131. — Vertical section of the Womb and Vagina, natural size.

a. a. a. The solid walls of the womb cut through. *b.* That part of the cavity, or hollow of the womb, which is in the fundus, or top. *c.* That part of the cavity which is in the lower part, or neck of the womb. *d.* The vagina. *e. e.* The cut edges of the vagina. *f. f.* The positions of the Fallopian tubes, which are cut off, and down the passages of which two needles are passed. *g.* The *os tincae* or mouth of the womb.

stance, possessing astonishing contractile power. The interior is lined, like the vagina, with a mucous membrane, and the whole organ is plentifully supplied with arteries, veins, and nerves.

One of the most remarkable properties of the womb is that of being able to distend to an extraordinary degree, and then retract again to nearly its original size. The force which it sometimes exhibits during its contraction is very great, being sufficient to separate, and even break the bones of the mother's pelvis, and paralyze the hand of the operator when introduced. The muscular fibers on which this contractile force depends are most obvious during gestation; they then appear very numerous, and very curiously disposed, some of them ramifying in almost every direction, as will be seen by the Figures below. It is owing to this that the womb contracts in every conceivable direction, and thus presses, during labor, on every part of the child's body.



FIGURE 132.



FIGURE 133.

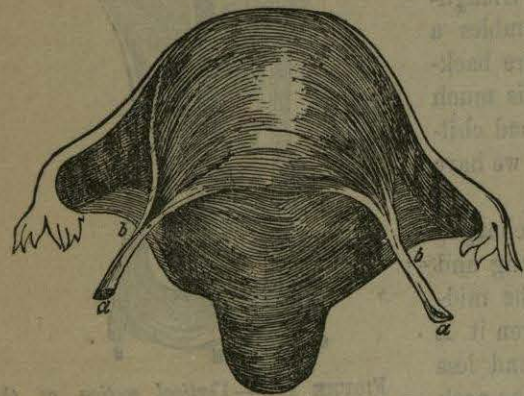


FIGURE 134.

The Muscular Fibers of the Womb.

Figure 132.—This represents the muscular fibers, a little exaggerated, so that they can be more distinctly seen; *a a* are the orifices of the Fallopian tubes.

Figure 133.—Represents the natural appearance, the fibers not being quite so distinct, though sufficiently obvious; *a a* the orifices of the Fallopian tubes.

In both figures the womb is supposed to be turned inside out, its peculiar structure being more readily seen interiorly than exteriorly.

Figure 134.—This represents the appearance of the fibers externally, and shows how they terminate in the round ligaments *a a*.

Figure 135.—The lines *a b* represent the direction of the force of the fundus fibers; *c d* that of the circular muscles of the body of the uterus; *d e* the combined force of the muscles.

The dotted lines represent the force reflected by the liquor amnii; the dotted curved lines the direction of the circular fibers of the body of the uterus.

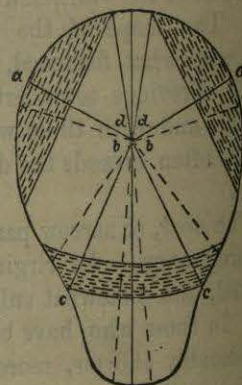


FIGURE 135.

THE VAGINA.

The vagina is a membranous canal, lined with a mucous membrane, like the uterus. By its upper part it is attached to the neck of the womb, at about two-thirds of its height, so that two-thirds of the neck hang within the vagina. Below, it terminates in the vulva, or external mouth. The upper part of the vagina is much larger than the lower part, particularly in those who have borne children. It is capable of considerable distension, and after retraction, to allow of the child passing down it from the womb. The external mouth is called the *vulva*, and is usually partly closed, in the virgin state, by the membrane called the hymen. The length of the vagina is from three to five inches, and its diameter from one inch to one and a half, or even two inches in those who have borne many children.

THE VULVA.

This is the external opening, or mouth of the vagina, through which the child has to pass at the termination of delivery. The external and internal lips, with the muscular and membranous tissue surrounding it, are all capable of great distension, without injury, to allow of the passage of the child.

THE PERINEUM.

This is the part situate between the vulva and the rectum. It is composed of a somewhat dense and firm substance, chiefly muscular, and, like all the other parts mentioned, is capable of great distension. It is important, in many of the manipulations during labor, to be well acquainted with it; and when the child's head is passing the perineum requires supporting, to prevent its being lacerated or broken through, an accident which often happens from want of due attention, and which leads to the most serious consequences.

THE PELVIS.

The pelvis is that part of the bony structure, or skeleton, of the female, in which the generative organs are placed, and through which the process of parturition is effected. An acquaintance with its natural structure, and with the changes which may be produced in its form and size, by disease and other accidents, is indispensable to those who wish to practice or understand midwifery.

In early life the pelvis is composed of several bones, many of which, after puberty, grow together. In the adult female it is customary to speak of but *four* bones, the sacrum, the coccygis, and the two innominate, or hip bones (see Figures 136, 137). In the young female these are divided into several distinct parts.

These bones are all firmly bound together by a cartilaginous substance, which is placed between where they touch, and is firmly attached to each one. This union is called a *symphysis*. The one at front which joins the pubic bones is called the symphysis pubis; the two which join the ossa ilii to the sacrum are called the sacro-iliac symphysis; and that which joins the coccygis to the sacrum is called the sacro-coccygeal symphysis. The two pubic bones are separated a little in Figure 136, simply to show them better. The reader will bear in mind that they are naturally connected by the cartilaginous substance which forms the symphysis.

These articulations, or joinings, become much softened during labor, and give way a little, but not to any extent sufficient to assist delivery. It is a mistake to suppose that the bones separate at that time. The only part that gives way is the sacro-coccygeal symphysis, which does relax, and allows the os coccygis to be pushed back by the child's head a full inch or more, thus enlarging the inferior strait. (See *c* and *o*, Figure 137.) Sometimes this little bone will be even broken off, when there is great disproportion between the head and the strait. I have heard it snap like a stick breaking. There is nothing serious or alarming in this, however, unless it be a *first delivery late in life*, though it may cause some pain at the time, and a little difficulty in *sitting* for some time after. In young persons the symphysis is

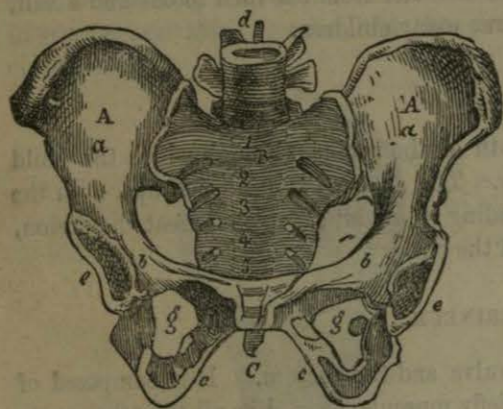


FIGURE 136.—Bones of the pelvis.

FIGURE 136.—The four principal bones as found in mature life.—A. A. The ossa ilii, or ossa innominata, commonly called the haunch, or hip bones. B. The os sacrum, or lower part of the back bone. C. The extreme termination of the back bone, called the os coccygis.

The divisions into parts, as in early life.—The ilium, A, on each side is in three parts; the ilium, properly so called, marked *a a*; the pubis, marked *b b*; and the ischium, marked *c c*. The sacrum is in five parts, marked 1, 2, 3, 4, 5. *d* is the last bone of the spine, which joins the sacrum; *e e* are the sockets in which the upper parts of the thigh bones fit, forming the hip joints; *g g* the two rings formed by the bones of the pubes and ischium, each called the foramen magnum.

FIGURE 137.—Section of the pelvis, to show the shape and connection of those parts not distinctly visible in the full view. The section is made down the middle of the back bone, and through the symphysis pubis in front. The letters correspond with those in Figure 136.

A. The right ilium. B. The sacrum. C. The coccygis. *b*. The os pubis. *c*. The os ischium. *g*. The foramen magnum. *o*. shows the manner in which the coccygis is bent back through labor.

soft and gives way easily, so that they have little difficulty during delivery from this cause; but if a female marry late in life, after it becomes hardened, she may suffer considerably. In this case the coccygis is usually curved inward considerably, and being firmly fixed, the head cannot push it back, and on that account cannot pass without great difficulty, and with the risk of rupturing some of the soft parts, or breaking the coccygis completely off. There is, in fact, great difficulty and some danger, if the first pregnancy takes place late in life.

The pelvis is usually divided into two parts—the *great pelvis*, or upper part inclosed between the wide flanges of the ossa ilii and the upper part of the sacrum; and the *small pelvis*, or basin, which is inclosed between the lower part of the sacrum and coccygis behind, and the ossa ischii and ossa pubis in front. The basin is nearly cylindrical, larger in the middle, and curved towards the front.

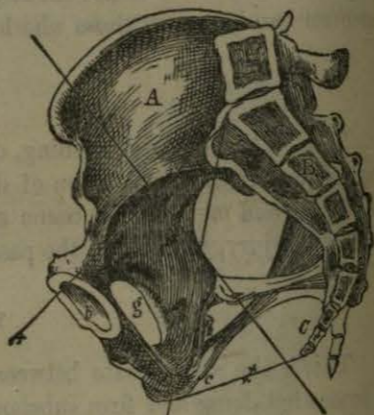


FIGURE 137.

The Straits of the Pelvis.—The bones of the pelvis, it will be seen, form a kind of broad ring, or cylinder, particularly in the basin; and the straits are two passages, one by which the child passes into the basin from the upper pelvis, and the other by which it passes out from the basin into the world.

In Figure 137, the line marked † is the antero-posterior diameter of the *upper strait*, through which the child first passes, called also the brim, or entrance to the pelvis. The line marked ‡ is the diameter of the *lower strait*, through which the child passes into the world, called also the outlet of the pelvis. In Figure 136 the line marked † crosses the upper strait, or brim of the pelvis.

The diameters of the pelvis are the distances between the prominent points of each strait, and are four in number for each, those for the upper strait being represented below.

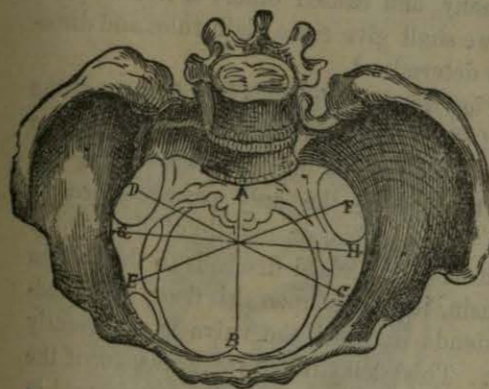


FIGURE 138.—Diameters of the Upper Strait.

A B, which extends from the most prominent point of the sacrum, to the top of the symphysis pubis, is called the *antero-posterior diameter*, or that from before to behind. C D, and E F, are called the two *oblique diameters*; they extend from each sacro-iliac symphysis, to the most prominent point of the os ilium, on the opposite side. G H, is called the *transverse, or bis-iliac diameter*; it crosses the pelvis, nearly from one hip joint to the other.

The sacro-antero-posterior diameter measures *four inches*. The two oblique diameters *four inches and a half* each. The bis-iliac diameter measures *five inches*.

The inferior strait has also four diameters, represented in Fig. 139.

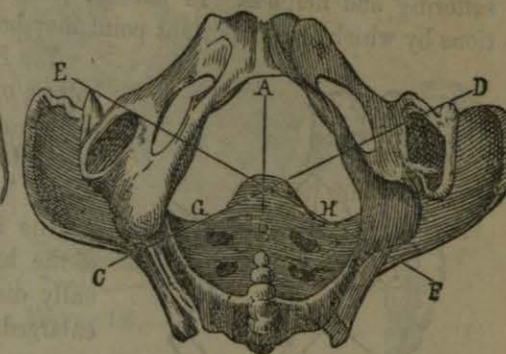


FIGURE 139.—The Bones of the Pelvis viewed from below, looking through the inferior strait, to show its diameters.

A B, which extends from the end of the coccygis to the lower part of the symphysis pubis, is called the *antero-posterior diameter*; it measures *four inches*, like that of the upper strait, but is increased a little by the bending back of the coccygis. C D, and E F, are the two *oblique diameters*, also corresponding to those in the upper strait; they measure *four inches*, but are increased a little by the giving way of the soft parts. G H, is the *transverse, or bis-ischiatric diameter*; it measures *four inches*.

It will thus be seen that the diameters only average from four to five inches, but it must be remembered that the soft parts, and even one of the bones, very readily give way, and thus they are slightly increased.

When we come to describe the form and size of the foetal child's head, it will be found that its diameters correspond very nearly with those of the pelvic straits through which it has to pass, so that ordinarily labor presents no serious difficulty. If the head be larger than natural, from any cause, or if the pelvis be too small, or deformed, this mutual adaptation does not exist, and delivery of course becomes difficult, or dangerous, and sometimes impossible. The only obstacle therefore, which can seriously impede the expulsion of the foetus, or prevent it altogether, is this want of conformity, in size and shape, between its head and the bones of the

pelvis. The *soft parts* may retard labor considerably, by being contracted or rigid, but can generally be made to give way, either by the efforts of nature or by manual assistance; and the foetal head can be reduced in size if necessary; but insufficient size, or faulty form, in the *bones* of the pelvis, is irremediable.

The various causes which produce deformity, or imperfect development, in the pelvis, and unnatural growth of the child's head, will be stated in a subsequent chapter. For the present, we have only to do with both in the normal state.

The importance of an accurate knowledge of the structure of the pelvis, and of the changes which may be induced in it, will now be obvious; neither the theory nor the practice of midwifery can in fact be understood without such knowledge. It is also frequently of the first importance to know, *previous to marriage*, whether the pelvis of a young person is so formed that delivery can be safely effected! Inattention to this has sacrificed the lives of many, and caused others to live for years suffering and helpless. In another place we shall give some plain rules and directions by which this important point may be determined.

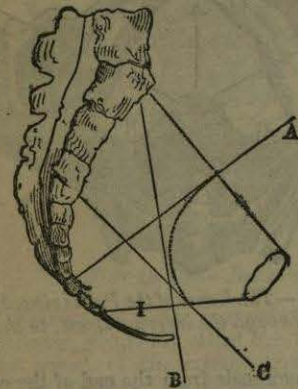


FIGURE 140.

The axis, or direction, of the upper strait is denoted by the line *A*, that of the lower strait by the line *B*, and that of the vulva by the line *C*. The force of expulsion tending to push the child in each direction, it has to traverse a path intermediate with them all, or compounded of them all, not being able to move in either alone. This aggregate direction is denoted by the dotted curved line, which shows the direction in which the child passes, and in which the hand must be passed when introduced.

I is the perineum. The dotted line which crosses *A* denotes the upper strait, and the line *I* the lower strait.

pelvis, in the human female is a curve, so that the child has to move during its passage in a circle.

It is a great mistake to suppose, as some do, that parturition necessarily imposes upon a woman suffering and danger; or that these constitute a *curse* from which she cannot escape!

All undue pain, and all danger, from childbirth, result simply from some infringement of natural law, and need not be incurred. If the female be healthy, and well

The Floor of the Pelvis.—The soft parts at the bottom of the basin of the pelvis, consisting of the perineum and various muscles, are called the floor of the pelvis—the only passage through which is by the vulva, or mouth of the vagina. As the head of the child descends to the bottom of the basin, it presses upon this floor, and gradually distends it, until the vulva is sufficiently enlarged. This delay is advantageous, for if the passage was always large enough, or increased in size without any difficulty, the child would pass too suddenly, and much mischief might often result from its sudden expulsion—such as pulling down of the womb, flooding, and the falling of the child upon the ground.

Direction of the Passage of the Pelvis.—In most of the lower animals the passage of the pelvis is straight, and on a line with the body, the two straits being opposite each other, which makes delivery much more easy with them. Even in the negroes, and other inferior races, the passage is much straighter than in the whites. The more perfect the organization therefore, the more difficult is parturition; and the more imperfect or simple the organization, the more easy is parturition. The direction of the passage of the

formed, and no accident or imprudence occur during gestation, she need neither suffer nor be in peril.

From ignorance, and consequent wrong living, her body becomes ill-formed and feeble, and her nervous system deranged, so that when her travail comes she is unfit to undergo it, and hence her suffering and danger.

Perhaps even before she was born this unfavorable condition was established, more or less, by the faults of her ancestors, recent or remote, who thus left to her the penalty of their wrong-doing, to transmit perhaps to her child in its turn.

In the savage state women are spared most of those dangers and sufferings which usually fall to the lot of their civilized sisters. And even refined and delicate ladies, under the stimulus of unusual peril, have passed through their ordeal with surpris-

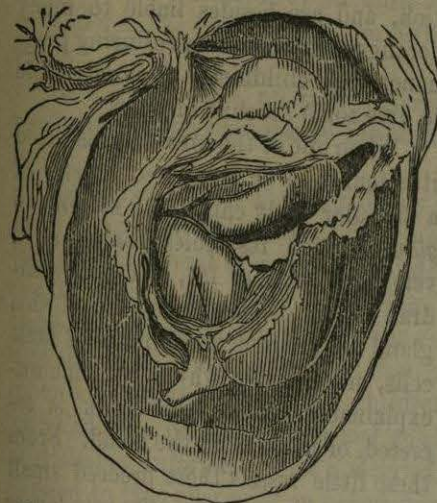


FIGURE 141.—Fetus at 3 months inclosed in the membranes.



FIGURE 142.—Fetus at 6 weeks.



FIGURE 143.—Embryo at 12 days.



FIGURE 144.—21 days.



FIGURE 145.—Form of fetus at 45 days.

ing ease, and perfect safety. *Lady Sale*, for instance, in the disastrous retreat of the British troops, from Afghanistan, was delivered in the midst of all the confusion and terror incident to such an event, and without help or rest pressed on with the flying soldiers, on horseback, and got through in safety. Under ordinary circumstances, at home, even moving from one room to another might have caused her death; but in the fearful Khyber Pass the greater fear overcame the lesser, and parturition did not even hinder her flight.

When the laws of physical health and development are fully understood, and acted upon, women will not dread becoming mothers, because they will have no reason to fear either pain or peril. Perfect in form there will be no difficulty when their children are born, nor any suffering, more than they can easily and gladly endure. Their children also will be perfect like themselves, instead of being, as they too often are now, diseased and misformed even while still in the womb.

The only curse is *ignorance*, and when that is removed pain and sorrow, as connected with the birth of man, will cease forever.

of the child, and probably also adds to its *pleasure*, as any one may readily conceive who will observe the delight with which an infant, even when not nursing, will often caress it. Sir Astley Cooper says: "The natural obliquity of the mammella, or nipple, forward and outward, with a slight turn of the nipple upward, is one of the most beautiful provisions in nature, both for the mother and the child. To the mother, because the child rests upon her arm and lap in the most convenient position for sucking; for if the nipple and breast had projected directly forward, the child must have been supported before her, in the mother's hands, in a most inconvenient and fatiguing position, instead of its reclining upon her side and arm. But it is wisely provided by nature, that when the child reposes upon its mother's arm it has its mouth directly applied to the nipple, which is turned outward to receive it, whilst the lower part of the breast forms a *cushion* upon which the cheek of the infant tranquilly reposes."

With the exception of the dark *areola*, or circle, and the little tubercles around the nipple, the breast is of the most delicate structure and color, so that it blushes, or reddens, like the cheek, from any sudden emotion, and goes pale during fainting.

As a general rule, no milk is secreted in those who have not become pregnant, nor in those who have passed the turn of life, but occasionally exceptions are observed to this rule.

Bandelocque tells us of a girl only *eight* years of age, who suckled her little brother more than a month! And Sir Hans Sloane tells us of a lady aged *sixty-eight*, who nursed several of her grandchildren, though she had had no child herself for twenty years! Dr. Francis, of New York, describes the case of a lady who continued to secrete milk regularly for *fourteen years* after having lost her child, so that she could always nurse an infant; and Dr. Kennedy relates an instance of another who continued to suckle children, uninterruptedly, for *forty-seven years*, and who had milk perfectly sweet and good even when *eighty-one years old*! Dr. Clark, of Alabama, informs us that a married lady, who had never been pregnant, was requested to take charge of an infant during the night, and that to quiet it she had put her nipple in its mouth. This was done frequently, and, to the great surprise of all, it induced a flow of milk. A singular circumstance connected with this was, that the lady soon after became *pregnant*, though previously barren! This will not appear so surprising, however, to those who know the connection between the breasts and the womb, and who have observed the mysterious bond of sympathy by which their functions are united. (See the articles on *Menstruation*, and on *Sterility*, in the chapters on *Diseases of Woman*, for other instances of this kind.)

The structure of the male breast is precisely the same as that of the female, but it is seldom developed. Instances have been known, however, of the milk being secreted in men, and of children having been nourished by it! Humboldt gives us an instance of this kind, and Professor Hull, of Maryland, exhibited a colored man to his class, in the year 1827, who had a large full bosom, like a female, and who had often officiated as *wet nurse* in the family of his mistress. The secretion appears to have been established by his putting the children that he had to nurse to the nipple, to quiet them. When the milk was not needed, it was found as difficult to dry it up as it is in some females, but it was soon made to flow again, by applying a child to the breast for a few times. This man differed *in no other respect* from any other man!

CHAPTER LXL

THE BREAST.

THE breasts, or *mammæ*, are not needed in the process of generation, nor are they absolutely necessary even after birth; but as they are naturally associated, in the majority of cases, with infantile nutrition, and are besides liable to many derangements and diseases during pregnancy and childbirth, it is advisable to give some account of them.



FIGURE 146.

a. a. The cut edges of the skin. *b. b.* The flaps of the skin thrown back. *c. c. c.* The fat which covers the breast. *d. d.* The cells of the mammary gland. *e. e. e.* The tubes or canals which convey the milk from the gland to the nipple. *f.* The nipple cut down the middle, to show the ends of the milk tubes terminating in it; these are usually about fifteen or eighteen in number. *z.* shows a bunch of the little cells, with the tubes proceeding from them, as they appear when injected.

Sometimes there have been seen two and even three nipples on one breast, and in a few cases one of the breasts has had no nipple at all. The two glands are not immediately connected, but have a very intimate sympathy with each other. The size of the breast depends more upon the thickness of the layer of fatty substance, than upon the development of the gland, so that one female, with a very full bosom, may have but little milk, while another, whose breast is but little prominent, may have a superabundance. The graceful swell of the fully developed breast is, however, a matter of positive utility, as well as of beauty, because it better adapts it to the use

In the females of some races of the human kind, the mammae attain a surprising length, and become very flaccid, so that they hang down to the hips, or lower, and may be thrown over the shoulder for the child to nurse from while carried on the back. Some suppose this to constitute a real variety of the human race, but others suppose it to result merely from habit, which is probably correct.

When the breasts are small sized in young females, their growth may often be promoted, but the means need not be pointed out here.

CHAPTER LXII.

SIGNS OF PREGNANCY, AND THE MEANS OF DETECTING IT.

It is always desirable, and frequently of the first importance, both to the accoucheur and to the individual, to be able to know whether a female is pregnant or not, or even to be able to judge whether she is probably or possibly so, or not. Sometimes this can be decided positively, but more frequently it is a matter of great uncertainty. The presumptive and positive signs on which a judgment can be formed are of various kinds, most of which can be readily observed, and easily made use of by any person in possession of the information already given in the preceding articles. They will be set forth in the following chapter, together with such other matter as appertains to this part of the subject, in such a manner as will make them available either for professional or for private use.

The signs of pregnancy are of three kinds—presumptive, probable, and certain.

PRESUMPTIVE SIGNS.

The presumptive signs of pregnancy are only of value in the first *three months*. They consist mainly of certain nervous and organic derangements, and of certain changes in personal appearance. It is scarcely possible to enumerate all these, nor is it necessary; we shall therefore only specify those most important, and most generally met with.

Colic pains, and creeping of the skin, with shuddering and fainting fits, very frequently follow *immediately on conception*, and in many females inform them when that event occurs. Some persons speak of other sensations, of a peculiar nature, by which they *always* know, in their own cases, when they conceive; but these sensations are felt by so few, and are so little capable of being explained or observed, that they are of no general use. In most cases, within the first three months, and sometimes in the first three days, the face changes remarkably. The eyes are sunk and dull, and surrounded by a black circle, the nose seems pinched up, the skin turns pale, and red spots, or freckles, frequently appear. Many females also complain of a husky dry throat, numbness in the hands and feet, and a sudden sinking at the heart. These signs, however, are very uncertain guides; very often none of them are felt at all during pregnancy, and sometimes they are all experienced from other causes. One of the most constant signs, according to some, and the most to be relied upon, is an *increase in the size of the neck*. This I know is often very apparent, and at a very early period. I am acquainted with females who, by simply keeping the measure of their necks, can always tell when they are pregnant. The increase is often considerable in a few days. In young persons of a certain temperament however, the neck is apt to swell merely from *marriage*, though they do not

conceive; and some old nurses, we are told, being acquainted with this fact, judge of the honesty of their unmarried charges by such admeasurements!

This singular development is owing, probably, to a sympathetic connection between the uterine organs and certain parts of the brain and large nerves in the neck.

Suppression of the menses is one of the strongest presumptive signs of pregnancy that can be observed, but does not always accompany it, and frequently arises from other causes. In the great majority of cases, it is true, the menses cease to flow, immediately conception occurs; sometimes they will continue for one or more periods after, and occasionally during the whole time of gestation, even up to a few days before delivery. This, however, is a very unusual occurrence, and the stoppage of the menses is by no means so strong a sign that pregnancy has occurred, as their continuance is that it has not. Some females are always irregular, so that pregnancy makes little difference, and in them of course these signs are even less to be depended upon than usual. There have cases even been known of women who have conceived without having menstruated, and of others who never menstruated except when they were pregnant; and it is not at all unusual to see others who will conceive while nursing, and never menstruate between the two pregnancies. Therefore we can only say that the menses usually stop when conception occurs, and that their continuance is strong evidence that it has not occurred, but still both signs may fail.

It is also proper to remark that several medical men have advanced the opinion that the discharge which appears during pregnancy is not the menstrual fluid, but real blood. It has however been accurately examined, and found in no respect to differ from the usual discharge. In my own opinion there is no doubt but that some females really do menstruate while pregnant.

As an instance that the presence of the menses is no proof that pregnancy has not occurred, I give the following case:—Not long since I was requested to see a lady who was supposed to labor under a polypus in the womb. She had been married six years, but had no offspring. On seeing her I suggested, from certain peculiarities in her appearance and manner, that possibly she might be pregnant. The suggestion was met with a smile, particularly by the medical attendant who was present, and I was told that there was no sign of such a thing, and moreover it could not be, for she had never stopped menstruating, nor was there the slightest change in the breasts, nor any disturbance in the stomach, mind, or feelings. On making the usual examination however, I felt fully convinced I was right, and told them so, but my opinion had no other effect than to induce them not to interfere for a time. They had been talking of an operation immediately. She still continued to menstruate for three months after, but in six weeks from her last period was safely delivered, without assistance, of a very fine living child. No part of the body had undergone any material change, except the abdomen, though many of the usual changes occurred after delivery. In this case the delay probably saved the lives of both mother and child, and deeply grateful they all were for the escape. Many fatal cases are on record of pregnant females who have been killed from mistakes of this kind, owing to a blind reliance on such uncertain signs.

Disturbance of the Digestive Functions.—It is very seldom, indeed, that pregnancy does not produce more or less disturbance in these functions, though it must be remarked that marriage also does the same sometimes, even without conception. These disturbances are generally manifested by loss of appetite; sickness, particu-

larly in the morning; vomiting, and depraved taste; the individual frequently taking a fancy to the most extraordinary articles, and making herself extremely unhappy if she cannot obtain them. Thus some have eaten flies, spiders, mice, and other living things, and others again have regaled themselves upon charcoal, chalk, slate pencils, and even earth or ashes. Such freaks are called *longings*, and it is thought highly improper not to indulge them, which is certainly right when they are for articles not positively injurious; but I have known this notion carried to a very hurtful and absurd extent. There is no doubt but these vagaries of the stomach arise, mainly, from its sympathy with the uterus, but it is highly probable that they are often exaggerated, and frequently even produced, by a morbid state of the sensibilities, and by vacuity of mind. The tendency to imitation also, so strong in most females, often leads to the same result. A young female who is declared to be, or who fancies herself, pregnant, listens eagerly to all that is said about that interesting state, by older acquaintances, and when told that they always longed, immediately begins to long also. I have known young persons considerably advanced in gestation, who had never longed at all before, do so immediately after a conversation of this kind. It must be remembered however, that the sympathies of the digestive organs with the womb are very strong, and that the appetite and taste are frequently rendered very capricious at this time, so that the female really likes or dislikes many things that she did not before; but still I feel convinced that the absurd ways in which this caprice exhibits itself, are often owing to the cause I have stated. The wondering ignorance, in which most females are kept, makes them disposed to be led away by a morbid imagination, and constantly liable to be imposed upon by silly and erroneous statements, which they of course implicitly believe. These longings are always the strangest, and most frequently met with, among the most uninformed and unthinking, though they are occasionally met with under all circumstances. As a sign of pregnancy, this longing is not much to be relied upon alone, because marriage alone often produces it, and so do many uterine derangements.

Usually all these disturbances disappear by the third or fourth month, the appetite becomes regular, and sometimes even voracious, and the digestion improves, so that the individual may become quite fat, though previously she was very thin.

Some suffer from constipation, and others from diarrhoea, but this is more rare.

Nervous Derangements.—The changes produced in the minds and feelings of pregnant females are sometimes of the most extraordinary character. Individuals who possess ordinarily the most agreeable tempers and the most amiable dispositions, will become peevish and fretful, and often even violently passionate and malicious. Some have even been known to have a disposition to commit various crimes, of which they had the greatest horror in their natural state. Others, on the contrary, who are usually ill-tempered and unhappy, attain a charming tenderness of manner, and a most pleasing serenity of mind. Their likings and dislikings also change very much, so that their most valued friends will become hateful to them, and those whom they habitually dislike will seem endowed with every lovable quality. Some will become perfect misanthropes, or weep and fret without intermission, while others will exhibit the most reckless and boisterous gayety. I have known some much disposed to study while pregnant, and others who would draw or paint most excellently, though at other times they were but indifferent artists. In short, it is impossible to denote half the singular changes of this kind that are thus produced. Suffice it to say, that