In another similar instance, impotency, with complete loss of desire also, followed a fracture of the skull over the *left temple*, and no means that were used had the slightest effect in restoring it. In a few months the testes began to waste, and eventually almost totally disappeared, but the general health was only slightly affected.

In the *American Journal of the Medical Sciences*, for February, 1839, Dr. Fisher relates a curious instance of a gentleman injured in a railway car. He was looking out at the moment when a collision occurred, and the shock threw the back of his head against the edge of the window with such force as to stun him; he, however, recovered his senses and was taken home, but suffered great pain in the back part of the head and top of the neck. His right arm was numbed a little, and some difficulty was experienced in passing the urine, but in two weeks he was able to walk out, with no other inconvenience than a slight dimness of sight. About the fifth week, he discovered that he was impotent, and had lost all sexual desire. The means used to restore his genital powers were only partially successful, nor was his memory so perfect as before, but all the other difficulties disappeared under proper treatment.

In the *Lancet*, for August, 1851, is an account of a medical student, who received a blow on the face, in a quarrel, which knocked him down, so that he fell on the back of his head. He was totally unconscious for eight or ten hours, but gradually recovered, and on the following day even resumed his studies, which he continued unremittingly for the next six weeks. He, however, became exceedingly irritable, with a feeling of general uneasiness, and after the first week he observed the genital organs begin to waste, and desire to weaken, till he finally became nearly impotent, but afterward recovered under proper treatment.

Many instances have been observed of soldiers being wounded in the head, and suffering afterward under the same disability. It is perhaps proper to remark, however, that this is not the only nor even the most frequent result of such injuries, as many patients so hurt suffer no deprivation of their genital powers, but have some other functions impaired. Thus, some lose their sight, some their hearing, and others become paralytic in their limbs.

The prospect of recovering the sexual powers, when lost from injuries of this kind, is very small, especially if the parts have really begun to waste. The treatment, at first, must be that best calculated to subdue the irritation which is probably existing in some parts of the nervous system, and afterward, if requisite, to rouse the spermatic nerves to more energetic action. Every case, however, will require something peculiar to itself, which can only be discovered by a patient and careful attention to all its symptoms.

A further corroboration of the facts above stated may also be found in certain physiological indications observed in those who have died from strangulation. It is well known that in very many men who have been hung, erection and even seminal emissions have occurred, and experiments upon animals have often led to the same result. This is attributed to the pressure of the rope on the back of the head, which in some way or other excites the spermatic nerves. I have even known pressure made on that region purposely, in a particular manner, in order to excite erections, and *frequently with perfect success*. Some of the females in the Turkish harems understand this, and they habitually chafe or *shampoo* the back of the neck of their companions of the other sex, for this very purpose. I have frequently made an application of this important fact in my practice, in cases where there was merely a

suspension of that sympathetic influence which the brain ordinarily exerts upon the sexual organs.

A full consideration of all the facts and arguments bearing upon this influence of the brain over the sexual functions, has left the subject, so far as I am concerned, in great obscurity. That a singular influence is *often* exerted by the brain in this way, sometimes beneficially, and at others the reverse, is undoubted, but whether such influence emanates from a *particular part* of the brain, or from the whole organ is uncertain. The phrenologists affirm that only a particular part of the encephalon is concerned in this phenomenon, namely, the lower part or cerebellum, which rests upon the spinal marrow.

But after a careful consideration of all the reasons brought forward in support of this affirmation, I am not yet convinced of its correctness. That many facts favor such a theory I am willing to admit, but it is also certain that many others militate against it, and, as a searcher after truth, I must consider everything that bears upon the question, even though opposed to my previous opinion. I set out with firmly believing that the cerebellum *was* the organ of the sexual propensity, and my investigations have made me doubt it. It is not true, I am convinced, that the strength of a man's propensity can be estimated by the development of his cerebellum, nor is it true in regard to animals either. If it were so, we ought to find that organ largest in those who exhibit the propensity most, and in numerous cases it is not so, though in others it is. A celebrated German physiologist made some investigations bearing on this point, of an interesting character; he had numerous opportunities of dissecting horses, and curiosity induced him to weigh the cerebellums of these animals, some of whom had been castrated when young, and others left entire. Now if the cerebellum be truly the organ of amativeness, it ought, of course, to be largest in the entire horses, who have always exhibited that propensity, and we should expect to find it almost disappeared in the others, seeing that they could *never* have felt anything of the kind. The result of the experiment was, however, on taking the average of an equal number of each, that there was scarcely any difference, or if any at all, the castrated ones had the *largest* cerebellums. In observing idiots, also, some of whom were notoriously licentious, and others directly the reverse, I have not found that the development of the cerebellum corresponded to the phrenological system. Neither can it be contended that the size of the cerebellum in the castrated animals was only the result of disease, for no difference could be detected in it between them and the others. All that can be said, therefore is, that certain agencies acting on the cerebellum, *sometimes* cause sexual manifestations, and at other times check them. The same agencies also acting on *other parts* of the brain will sometimes produce the same results, and sometimes when the cerebellum is acted upon, it is not the generative organs that are affected, but the sight, hearing, or speech, which might, therefore, just as properly be considered under its exclusive influence.

It should also be stated, as bearing on this subject, that certain influences operating on various parts of the body will often affect the generative organs in a decided manner. I have known a blister *on the leg* cause the most uncontrollable sexual desires in one man, and the application of caustic *to the throat* do the same in another. In applying blisters to the top of the neck also, though it is followed by erections in some, yet in others no such effect takes place, and occasionally it will produce a nervous twitching, like St. Vitus' dance, in the arms. Flogging the back, it is well known, even when very severe, will frequently cause erections and emissions, as in

the case of soldiers when undergoing that brutal punishment. Rousseau tells us, in his *Confessions*, that flogging boys at school, in the disgraceful manner formerly practiced, is sometimes followed by similar results, and he remarks that the pain of the punishment may be forgotten under the powerful excitement it leads to—a fact of deep moral importance. In short, there seems every reason to believe that the strength of the sexual propensity is dependent upon some peculiarity of the sexual organs themselves, though it may be often modified by various mysterious sympathies emanating from other parts. If the semen be never formed, there will never be any sexual desire, and if the amount secreted be unusually large, the desire will be proportionally great, independent of all other influences. In those who feel desire without having any semen, as is sometimes the case in impotency, or even after castration, it is only *the remembrance of a lost pleasure.*

In treating disabilities of the generative organs, however, the possible influence of injuries to the head, even at former periods, and long ago, should always be borne in mind.

Similar facts I have also noticed in females, showing that the influence is similar in both. Some have never conceived after receiving a blow upon the head, and others have always miscarried after. In some it has entirely destroyed all sexual feeling, and in others it has, for a time, excited it to a most uncontrollable height.

CHAPTER XLII.

STERILITY, AND ARTIFICIAL IMPREGNATION.

Of late years, much attention has been bestowed upon the subject of *sterility*, and much success has attended the efforts of physicians to cure it. This success has resulted from a better knowledge of the various causes of sterility, in both sexes, and of the means by which such causes could be removed. Those who have read our previous chapters will be aware that a childless marriage may result, on the part of the male, either from actual *impotence*, from *malformation* of the organs, or from an imperfect condition of the *semen*. On the part of the female, it may result from various causes. She may either be imperfect in the ovaries, so as to form no eggs, or the eggs themselves may not be perfect; or she may have such an irritable womb that constant miscarriage will occur, even if she does conceive. Besides these causes, the passage into the womb may be too small, or it may contract spasmodically, and thus prevent the entrance of the semen. In like manner, the *Fallopian tubes* may be so contracted that the egg cannot pass down them till it is *too ripe*, or spoilt, and, therefore, incapable of impregnation.

Most of these causes are capable of removal, as shown in previous chapters. In the male, various malformations can be corrected; the organs can be strengthened, and the *testes* can be made to secrete semen more abundantly, and of a better quality.

In the female, also, the *ovaries* can be strengthened, so as to form more and better ovæ, or eggs; the irritability of the womb can be removed, so that when she conceives the embryo can be retained: the Fallopian tubes can also be opened, when contracted or closed, and the passage into the womb can be enlarged, so as to admit the semen into its cavity. Thus most of the causes of sterility are *removable*, and it is perhaps safe to say that *nine out of ten* childless couples may be made to become parents.

The operations for opening the Fallopian tubes and the passage into the womb are now regularly performed, and with the happiest results. Men with small organs have them enlarged, and those with ill-formed ones have them re-formed, so as to make them fit for their natural uses.

It sometimes happens, however, that the man may have the opening of the penis not at the end, but far down the organ, and in such a case, though he may have abundance of good semen, he may fail to impregnate. The semen, in such a case, is not thrown up to the womb, and unless the female have unusual powers of absorption, it may never reach there, and of course cannot impregnate the egg. Such an imperfection can sometimes be removed by making a new opening in the proper place, and closing the other; but this cannot always be done.

Sometimes, also, in the female, the womb may be out of place, so that its mouth is not properly presented; or the passage into it may contract, in spite of all we can do, with such force that no semen can possibly enter. This is very apt to be the case with females of very warm temperaments, and explains why such women often

do not conceive. No doubt some females can absorb semen from the *vagina*, as explained elsewhere, but these are exceptions. In most cases, the semen, or the *animalcules*, must directly enter the womb.

Now, it is in precisely these cases in which the semen cannot reach the womb during or soon after connection, from some of the causes above named, that artificial *impregnation* is so applicable and *so generally successful.*

As we have already explained, *connection is not essential to impregnation;* the female may conceive without any contact whatever with the male! All that is needed is for healthy, perfect seminal animalcules to enter the womb, and unite there with a perfect egg. It matters not how the semen is got there, whether through the medium of the male organ or through the medium of a *syringe!* And upon this fact is based the practice of *artificial impregnation.*

Experiments, made a long time ago, showed that a bitch when in *heat* could be impregnated by injecting semen with a syringe up the vagina. And further, that by mixing the semen from different dogs, a mixed progeny could be produced, some resembling one of the dogs, and some another.

Finally, some physicians, seeing the anxiety of many childless parents for offspring, and feeling sure that this longing could, in many cases, be easily gratified by artificial impregnation, urged it upon their patients. A proposition so strange and novel was, of course, received with great surprise and many objections, and it was long before the matter was put to the test. Finally, a French physician prevailed upon several childless couples to adopt the means he suggested, and the success which attended them at once established the practice, till it has now become quite common, and no couple now in France consent to be without children, if they wish them, till these means have been tried. There are physicians, even, who make this a *specialty*, and do scarcely anything else but cure sterility, by *artificial impregnation.*

It is true old John Hunter had suggested this practice to one of his patients many years ago, and it had succeeded, but the fact had been lost sight of. It is only in recent times that the practice has become recognized as a legitimate one in medical practice.

It is a curious circumstance that in an old *Arab* book, published nearly twelve hundred years ago, a case of artificial impregnation is fully described. It seems that in one tribe there was a famous stallion, so fleet that no other horse could compete with him, and his master could make raids and always escape, owing to his fleetness. A man of another tribe, however, who had been injured by the owner of the famous stallion, determined to have one of the same breed, so that he might compete with him. The book relates, therefore, that when his mare was in heat he took some cotton and soaked it in the mucus from her vagina; then, during the night, he stole to the side of the famous stallion and put this cotton to his nose. The odor of course excited the horse, as it always does, and finally had such an effect upon him that he discharged the semen, which the cunning Arab caught upon some clean cotton, and then, hastening home, he placed it in the vagina of his mare. The consequence was that she became pregnant, and ultimately brought forth a male colt, which became the equal of his father, and the Arab was thus able to make raids in his turn upon the hostile tribe. There was one wide, deep ditch in this part of the desert which only these two could leap.

Artificial impregnation is performed in this way. The physician is provided with a properly constructed syringe, having a long nozzle, very small, and properly curved.

The semen, *freshly obtained*, is sucked up into the syringe, the small end of which is pushed up into the womb, and then the semen is injected. Of course it is then put just where it is wanted, and if a healthy, well-formed egg be there, impregnation follows.

There are various precautions to be observed, however, to insure success, connected with both sexes. In the first place, we must ascertain when the female *passes the egg*, as explained in a previous chapter, because it is of no use placing the semen in the womb when the egg is not there to receive it. Nor is it any use *before* the egg reaches the womb. It is requisite, therefore, to make the matter more certain, to study the female before, during, and after menstruation.

Of course, the most likely time will be immediately after the cessation of the courses, and from then till six or eight days after; or, in some few cases, perhaps, just before.

After the operation the female should remain *perfectly quiet* for an hour or so, and avoid all violent exertion or excitement for some time after. If the period comes on again at the usual time, it will show that impregnation probably did not occur, and the operation should be repeated a little *earlier* or a little *later*, for it is not possible, in all cases, to be sure of the proper time, and, occasionally, the injection has to be made six or eight times before impregnation takes place. I remember one instance in which the operation was repeated *eleven* different times in as many months, with no success, but on the twelfth it did succeed.

In this case the first injection was made the first day after the period, the second the second day after, and so on till the eleventh day; the twelfth injection was then made *before the flow had quite ceased*, and that succeeded.

It must be remembered that some women have a flow at regular periods, as usual, even after conception. It is therefore necessary to be very cautious and not repeat the injection too soon, unless there seems to be no doubt as to its being a real menstruation. In fact, it is better to let two or even three months pass, so that there may be no risk of causing miscarriage. With care, however, this accident may not necessarily occur, even if injection be practiced after conception has taken place.

It is also advisable that the man should prepare himself some time beforehand, by avoiding all exhaustion or excitement, so that the semen may be abundant, and of good quality.

Although the operation is simple, and easily made, even by the parties themselves, still it is better done by some one who has the proper instrument, and who is familiar with the anatomy of the parts. No injury need be feared under any circumstances, nor any unpleasant consequences whatever. The only precautions to be observed are, to have the syringe properly warmed, to introduce it slowly and gently into the passage to the right depth, and to have it *filled* with the *semen*, so that no *air* may be introduced with it.

I need only remark that the semen must be freshly obtained, and used immediately.

Some physicians use a *speculum* when introducing the syringe, but that is not necessary. It is necessary, however, to ascertain first the length of the vagina and the height of the womb, so as to know exactly what depth the syringe should penetrate.

Details as to the position in which the female should be placed, and other matters, need not be given here, as they can be communicated if necessary.

During the last five years, I have performed this operation thirteen times, and known of its being performed thirty-seven other times, making *fifty* in all. Of these fifty, *forty-three* have been successful, and the other seven failed, I have no doubt, from imperfection either in the semen or the egg.

In such a matter as this, I consider no apology or excuse necessary. It concerns only the parties themselves. If childless people wish offspring, and safe and harmless means of gratifying them can be adopted, it rests entirely with them alone whether they will remain without children, or obtain them by these means. As to the practice being in any way improper or immoral, I cannot so consider it, but rather the contrary. The *parentage* is of course the same, and the child so produced is just as perfect as if it came in the natural way.

Independent of its value as a means of insuring offspring, this practice may often lead to valuable results in another way. It is well known that many childless women suffer from a variety of complaints which can never be removed while they remain childless, but which disappear immediately they become mothers. Now in such cases artificial impregnation enables us to insure them that relief which they perhaps would never obtain without.

It should also be remarked, that when impregnation has once been effected *artificially*, it usually occurs afterward *naturally*, without any difficulty.

At the termination of our great war, I was waited upon by an officer, who had been wounded at the battle of Shiloh. The whole of the penis was *shot away*, leaving the *testicles unhurt!* His secretion of semen was abundant, and it was often ejected in large quantities, with considerable excitement. He was married only a month before joining the army, and his wife had not conceived. Of course any connection was out of the question, although an artificial penis had been adapted to him, by which he could urinate with comfort. Both himself and wife, however, were intensely desirous of having children, but thought, of course, there was no hope for them.

Being aware of his condition, I spoke to him of the practice of *artificial impregnation*, which he heard of with the greatest joy, and at once consulted with his wife on the matter. The result was that they both agreed, and the operation was performed successfully *the first time*. That child is living now, and is as fine a boy as ever gladdened parents' hearts. They have resolved, when he is seven years old, to have another, or earlier if he should die.

In another case, the man had lost all power of erection, from paralysis, although the secretion of semen still continued, and there were frequent emissions. They had had five children before, but all were dead, and they never hoped to have another. By accident, however, he heard of the practice of artificial impregnation, and wrote to me about it. An appointment was made, and he paid me a visit, with his wife. Feeling satisfied, at the interview, that there was no reason why the operation should not be performed, I undertook it at the proper time, and repeated it four times before it was finally successful. The result was all that could be wished.

Now who shall say, in these cases, that there was anything objectionable in the practice? Rather, I should say, they show its great value, and what a blessing it is to humanity.

It is true, a cousin of the officer, whose case is described above, did complain, and thought himself injured, because the child superseded him as heir to the officer's property, which he had fully calculated upon inheriting. I have also heard some

persons contend that those who cannot have children by the usual means should remain without them, and that it is unnatural, if not even sinful, to obtain them by artificial means. I leave every one to decide this point for himself, and in the meantime am prepared to practice the operation for all who need and wish it.

In addition to the precautions already indicated, there are also two others to be taken. First, the semen must be examined, microscopically, to see if it contains *living animalcules;* because if it does not, of course the operation will be useless. Second, the mucus of the vagina must be examined, to see if it be too acid or too alkaline, as either of these qualities may cause the death of the animalcules; and, in fact, sterility is often owing to this very circumstance.

Of course, if there be any organic disease of the womb, the operation is inadmissible, but a mere displacement is of no moment, and is, in fact, often cured by pregnancy.

In conclusion, I would draw attention to the fact that artificial impregnation has long been practiced, in numerous cases, though not till recently in human beings. Horticulturists, from remote times, have artificially impregnated plants, and *crossed* them in every way, by placing the pollen (or semen) of one kind upon the pistil (female organ) of another kind. Of late years, also, the practice has become habitual of impregnating fish eggs (or *spawn*) by the semen taken from a male fish, and merely added to the water in which the eggs are placed. In this way the semen from one male can be made to impregnate thousands of eggs. This is artificial impregnation.

It is only necessary to bear in mind that the process of impregnation is the same in all beings, and merely consists in the union of the male principle with the female egg. In some beings this occurs *within* the body, by the process of copulation, as in human beings, and in others it occurs *without* the body, as in fishes, and in such cases the male and female may never come into contact at all.

It matters not *how* the semen reaches the egg, providing they come together in the right circumstances; and in the human being they must unite in the female womb. But their union may result in a new being just as certainly when they are united artificially as when they are brought together in the usual way.

CHAPTER XLIII.

AGE WHEN BOTH SEXES BEGIN TO BE CAPABLE OF BEING PARENTS, AND WHEN THEY CEASE TO BE SO.

The Male.—The man is different from the female in this respect, that there is no positive proof of his incapacity, except in particular cases. As long as he secretes semen, and can have connection, no matter how imperfectly, it is presumed he may become a parent. But the female, at a certain age, becomes naturally sterile, so that the cessation of her capability is fixed.

The age at which the male becomes first capable varies very much, not only in different races and countries, but also in different individuals. It, of course, depends on the occurrence of puberty, or the perfect secretion of semen, and this may be either unusually early or very late. It is often much earlier than is suspected.

In the time of Henry the Eighth, it was decided that procreation could not be effected before fourteen years, and that if the wife of a husband under that age had children, they must be bastards; but such a decision was absurd, for instances are numerous enough of perfect capability much earlier than that.

In fact, we read in *The Berkeley Manuscripts*, that Maurice, third Lord Berkeley, was married at *eight* years old, and was a father before he was fourteen. Numerous other instances are also given of similar precocity. There is one instance recorded by a celebrated physician of a young woman who slept with a boy of ten years of age, and encouraged him to take liberties with her, thinking there was no danger, but who, to her great shame and surprise, became pregnant. In fact, there is no certain age when capability, in the male, may be said to begin, nor is it easy to ascertain it with certainty, even by examination. Many who are undoubtedly capable show no signs of it, while others who give every indication of puberty are still powerless. I have seen the organs in a boy of seven years very largely developed, and in a man of thirty scarcely more so than those of an infant, although he secreted perfect semen.

Of course, the only proof of puberty, or capability, is the secretion and emission of *perfect semen*, while its non-secretion is equally a proof of incapability, no matter what may be the age or apparent perfection of the organs.

The first semen formed, it must be borne in mind, is not always perfect, and that is the reason why many boys, though fully capable of connection, and having abundant secretion, still cannot impregnate. Very frequently, however, it is perfect from the beginning.

The age when man *begins* to be capable is therefore not fixed, and the same may be said of the age when he *ceases* to be capable, which is equally undetermined.

There is no question but that many men retain the virile power till extreme old age, while others lose it very early. As a general rule, the power begins to perceptibly wane after fifty years, and by fifty-five, or sixty, the number of animalcules in

the semen becomes constantly less, and they become also less perfect. As long as a man secretes semen containing healthy, vigorous animalcules, he may be the father of a perfect child, no matter what his age may be, even though he may be incapable of perfect connection. An instance of this may be found in the case of David in his old age, as recorded in the Bible.

If the animalcules fail altogether, or become too imperfect, no impregnation can occur. If they are only partially imperfect, conception may occur, but the child will be imperfect. This, however, is not the case with old men only, but often with young men, from disease, or debility.

In the year 1813, a curious case was brought up for trial in the English House of Lords, which turned upon this very point of age. It was called "The Banbury Peerage Case." The main argument urged against the claimant was this, that his ancestor could not have been the son of Lord Banbury, because that nobleman was *eighty years old* when the child was born! The judge, however, decided that this objection was worthless. The law, as he truly said, fixes no age when a man becomes incapable, while experience shows that there is no universal natural limit.

Dr. Gregory, of Edinburgh, says a man may be capable till a hundred years, if not more. Haller says till ninety, at least, and it is recorded that old Parr was a father in his one hundred and fortieth year. Sir Stephen Fox married at seventy-seven and had four children,—the first child was born when he was seventy-eight,—he had twins the next year, and the fourth child was born when he was *eighty-one*. Old Parr's son was older than Lord Banbury when Parr himself was a father.

Neither old age nor extreme youth, therefore, are sufficient to make man incapable. The law knows no limits, nor does science, and from seven years upward the male may be fully capable of parentage.

The Female.—There is also great uncertainty as to the time when the female may first become capable. Usually not before fourteen or fifteen, but numerous instances have been known of pregnancy at thirteen, twelve, and even at eleven! In Abyssinia and Bengal, mothers of eleven are not at all uncommon. Probably with us twelve years may be considered about the limit. In the year 1828, a lady visited Ballston Springs who was a grandmother, though not quite twenty-eight. In the Transylvania *Journal* (vol. vii., page 447) there is a case recorded of menstruation at *one year*, and of pregnancy before *ten*. The girl was delivered of a female child weighing 7½ lbs., when she was but ten years and thirteen days old! This was on the 20th of April, 1834.

In some parts of Africa, the girls menstruate at eight or nine years, and the same in Persia, though it does not appear that they begin always to bear children so soon. Many people suppose the North American Indian females menstruate later than the whites, but it is known not to be the case, for they observe about the same time.

Many instances of very precocious puberty are on record. Sir Astley Cooper mentions one at four years, and another even at three and a half. Dr. Francis also mentions one at four and a half years, in which the sexual organs and the breasts were similar to those of a full-grown woman at the same period.

As an almost universal rule, pregnancy never occurs till after menstruation, but in some rare cases it has occurred before. It is probable, however, that in such cases it was slight, and had simply escaped observation, as it frequently does in some women.

A similar uncertainty attends also the *cessation* of the faculty of child-bearing. As a general rule this faculty ceases when menstruation stops. It is well known,

however, that many women have borne children after menstruation had ceased for a considerable time.

The usual age when a woman can no longer become a mother is about forty-five, or from that to fifty, as the limit. There are, however, numerous cases on record of pregnancy at fifty-two and fifty-four years of age, and some even in still older women. At a trial in France, it was shown that a woman of fifty-eight had become a mother, and many authors have given cases up to sixty years, and even more. Beck, in his *Medical Jurisprudence*, quotes a case from the Boston *Medical and Surgical Journal*, of a woman at Whitehall, in the State of New York, who became a mother at sixty-four. Dr. Vandeveer, of Long Island, attended a lady in confinement in her sixty-second year.

Mr. Robertson tells us that out of one thousand cases of pregnancy registered at the Manchester Lying-in Hospital, four hundred and thirty-six were upward of forty-six years old, one was fifty-four, one fifty-three, one fifty-two, nine fifty, six forty-nine, eight forty-eight, and thirteen forty-seven.

It is related that *Madame de Stael* menstruated at sixty, and Richerand gives a case at seventy. Magendie and Rush also relate cases at the same age.

In short, though the limit of menstruation and child-bearing may be said to be from fifty to fifty-two, still it may be, and often is, protracted much beyond that.

The reason for this occasional prolongation of capability will be understood from our previous articles. As long as a female forms perfect eggs, and retains them long enough in the womb, she may become a mother.

In conclusion, we may state that though no means are known by which the procreative power can be prolonged, in a woman, or brought back when extinct from age, yet in man it is often different. Many men after having lost nearly all sexual power, for many years, even in advanced life, have had it restored, by proper treatment, to a considerable extent. In the course of my practice I have seen numerous cases of this kind, and have now a man of eighty-two, fully capable, more so in fact than he was at sixty.

The proper course to be pursued to retain, or restore sexual power, must of course depend upon the peculiarities of the case, and requires a medical consultation. I will merely say that there are *but few men hopelessly impotent*, if they only can and will do as directed.

In many trials for divorce, it is often a question as to the *capability* of one or both of the parties. It can, of course, always be known whether a female is capable or not, by the fact of her bearing children or remaining barren. In regard to the man, it is always assumed that he is capable, so long as his organs are perfect and he is capable of connection. But, as already shown, this is a mistake. A man may be incapable merely from *imperfection of the semen*, and this can be proved only by examining it microscopically.

Common justice, therefore, demands, when divorce is claimed because the woman does not bear children, that the semen of the man should thus be examined, to see if the fault may not lie with him. I am aware that this is a point not yet allowed in medical jurisprudence, because the fact is so new, but it is nevertheless a valid one, and will before long be so regarded.

It must also be borne in mind that barrenness may result not from any imperfection on *either* side, but simply from want of *adaptation*, as explained in previous

articles. Both may be sterile, in reference to themselves mutually, but not in reference to others.

It is an important thing to bear in mind, however, that sterility in the male may exist along with the power of perfect connection, and that this peculiar state can be positively *proved*.

In connection with this subject it may be asked whether a woman can conceive without her own knowledge, as during sleep for instance?

This question has occurred as a legal one in many celebrated trials, and is now fully decided in the affirmative. It is beyond question that a female may be violated during sleep, and may be impregnated without knowing it. This is a fact that should be borne in mind, as it may often be important.

There are many peculiar states of the female system, as in some diseases, which cause a stupor so profound that violation may undoubtedly be effected while it lasts, without the victim being aroused. Even ordinary sleep may sometimes be heavy enough to allow of such a crime.

It is, however, highly improbable, though perhaps not impossible, for such to be the case with a virgin, owing to the intercourse being so much more difficult. Medical men have held different opinions on this point, but I believe its *possibility* is fully admitted, in some exceptional cases. Of course, all such alleged occurrences should be received with extreme caution and distrust, and subjected to the most rigid scrutiny; for it is much more likely that the female is either deceiving herself, or trying to deceive others, than that so unlikely an event should take place.

These remarks refer only to natural conditions of the female system. If stupefying drugs have been given, there may be such insensibility and perfect unconsciousness that nothing may be known on waking of what has taken place.

In regard to conception, there is no doubt, as before stated, that it can take place while the female is perfectly unconscious from any cause. She may be simply asleep, or in a stupor from disease or drugs, and yet if connection takes place she may conceive. No knowledge or feeling on her part is at all necessary. There are numerous well-authenticated cases of this kind on record, and I have known several myself. Women have often been violated while intoxicated, without knowing anything about it, and conception has followed. Capuron mentions a case of this kind, of a young female whose lover made her drunk and abused her, and she conceived, but knew nothing of it till she was four months pregnant. Many similar cases are recorded by other writers.

It should be remarked, however, that in such cases we can scarcely conceive that any *violence* was practiced, because, if there were, the female could scarcely fail to notice and even feel the injury, when awake, and suspect the cause. This must especially be the case with virgins or very young females, and when such persons assert that they have been violated or impregnated, and yet knew nothing of it till a late period of pregnancy, there is at least room for grave doubt and distrust.

On the other hand, it must be remembered that in some very young females, undoubted virgins, the organs are naturally in such a state as to allow of connection without the least violence or injury whatever, and women have even conceived, after repeated connections, who have preserved the hymen unbroken till the time of delivery.

It is a common error to suppose that a first and only connection never leads to conception. Many women, and men too, have found out the falsity of this notion,