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# THE ETHNOLOGY
# OF THE SIXTH SENSE



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ARCANA ANTHROPOLOGICA

# THE ETHNOLOGY OF THE SIXTH SENSE

## Studies and Researches

Into its

## ABUSES, PERVERSIONS, FOLLIES, ANOMALIES, AND CRIMES

BY

Dr JACOBUS X.....

FRENCH ARMY-SURGEON

AUTHOR OF: UNTRODDEN FIELDS OF ANTHROPOLOGY



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PREJUDICE SQUINTS WHEN IT LOOKS, AND LIES WHEN IT TALKS. (*Duchesse d'Abrantes.*)

# To the Members of the Medical Profession of the City of St. Louis, Mo., U. S. A.

---

GENTLEMEN,

To whom with more pleasure or propriety can I inscribe this volume than to you, who were brave enough, under the battle-fire of bigotry and false virtue, to endorse the scientific importance of my previous work "The Untrodden Fields of Anthropology" in the teeth of the Governmental "Scribes and Pharisees" of your good City of St Louis, what time they cried "obscenity" before the dignity of the naked human body, and saw "indecency" in Medical studies that aim only at the alleviation of the sufferings of Humanity.

Wishing you God-Speed, I am,

GENTLEMEN,

Yours faithfully and obliged

D^r Jacobus X...

# AUTHOR'S FOREWORD

**Nach Gottes Wesenheit ist gar nicht dein Beruf zu forschen; forsche du nach Wesen, die er schuf** — (Thou art not required to search into the nature of God, but into the nature of the beings which he has created). *Rückert.*

**Homine imperito nunquam quidquam injustius —**
**Qui, nisi quod ipse fecit, nihil rectum putat.**

(Nothing so unjust as your ignorant man, who thinks nothing right but what he himself has done). *Terence.*

**Pure truth, like pure gold, has been found unfit for circulation, because men have discovered that it is far more convenient to adulterate the truth than to refine themselves. They will not advance their minds to the standard, therefore they lower the standard to their minds.** *Colton.*

# AUTHOR'S FOREWORD

*"The true Shekinah is Man"*
ST. CHRYSOSTOM.

*In every man, whatever be his rank, it must be recognised that the mind is differentiated more or less from matter; one must then logically, in a Study of the Sixth Sense, or Genital Sense, in Mankind, recognise two principal branches, each of which has to be studied separately.*

*The first portion comprises a review of this puissant factor in its physical aspect, through which Man approaches Animality, and the resultant of which is found in that phrase of Rabelais, trivial perhaps, but possessing a deep hidden meaning for the Reflective. According to him, Love is "making the beast with two backs."*

*The study of the Genital Sense in its active phase, which forms the subject of this volume, includes two perfectly distinct parts:*

A. *The Anatomy of the genital organs in the two sexes, and an examination of the Anomalies which they may present.*

*B. The Physiology of the Sixth Sense, or the Study of the Acts and physiological Laws of Procreation and Generation, and the examination of their Variation according to Race and Environment.*

*The Second branch should be consecrated to the Psychical aspect of love which sharply divides Man from Animal, and it will be studied in the volumes that are to follow the present one.*

*But, alas, in studying the Depravations, Aberrations, and Crimes of human Love, we shall prove decisively the truth of St. Augustine's saying, that, « he who is over-desirous of playing the angel, plays the beast. »*

*It is the Ethnology of the Sexual Passion which we are writing, and that alone justifies our title. This book is a work of Medical Science rendered plain for everybody's eyes, written for serious minds who seek the truth in earnest. We offer it to them without varnish, naked, and without veil.*

*Therefore, we have deemed it unneccessary to translate into bad mechanical Latin that which might wound the false modesty of certain hypocrites, but we have avoided trivial and obscure language by the employment of medical terms. It is for this reason that for certain words and expressions, which were in current use among our forefathers, we have adopted Greek characters.*

*On the other hand, we have not written this book*

*for the use of vicious and depraved young persons, and the high price of the volume reassures us with regard to the age and quality of our readers.*

*We have therefore considered it right to discard the dogmatic and pedantic tone which would have rendered the reading of a popular work too difficult, and to employ instead a more easy style; personally, we have been ready, when the opportunity presented itself, to admit the casual joke and the amusing anecdote.*

*In this we are but following the example of some excellent medical writers, such as Doctors Marrin and Meunier, not to mention many others.*

*Doctor* JACOBUS X...

*Meudon (Seine), January 1899.*

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# THE ETHNOLOGY OF THE SIXTH SENSE

Natur und Kunst; sie scheinen sich zu fliehen,
Und haben sich, eh'man es denkt gefunden.

Gœthe.

---

Natura beatis Omnibus esse dedit, si quis cognoverit uti.

Claudius.

---

Nature does not cocker us; we are children, not pets;
she is not fond; everything is dealt to us without fear
or favour, after severe, universal laws.

Emerson.

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# THE ETHNOLOGY OF THE SIXTH SENSE

## FIRST PART

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### FIRST CHAPTER.

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Anorchides. — Cryptorchides. — Monorchides. — Races of animals in which Cryptorchides is the normal condition. — Examples of testicular anomalies. — Variation in the weight of the testicles. — Supernumerary testicles. — The Veteran and the Recruit, or the Equal number.

**The Genital organs in the two sexes.** An acquaintance with the genital organs in the two sexes is necessary to apprehend thoroughly the physical maladies which attack them, and their intimate connection with the mental maladies of the generic sense. Everything which concerns the reproduction of human kind ought to be considered as sacred, for Nature has not given us organs with the intention of enveloping them in mystery. Many physical and mental maladies might be avoided, if everybody, the simple enquirer as well as the savant, through the investigating torch of Science could apply to himself the famous Greek proverb: know thyself, thy very self. — Therefore that which our fathers denominated the genitals, the Greeks, and Romans called the *noble parts*, because they are destined to assure the perpetuation of the species. It is true that they also called them the *shameful parts* because modesty bids us hide them. — We prefer the first denomination.

**Difference of the male and female organs.** It is evident that, in appearance, there is not the slightest resemblance between the genital organs of the man and of the woman. The first is what is contained, the second that which contains it. Nevertheless, the genital apparatus, where studied in its interior parts, presents strong analogies in the two sexes, as will be seen hereafter.

If it is desired to know the first cause of the dissimilarity between the male and female organs, the worthy fabulist La Fontaine supplies it to us in his Tale.

You've have heard tell
In days of yore, the human race possessed
A window in their body, so that all within
Could be most easily deciphered.
Convenient thing for doctors in those olden times,
But if to have a window in the body
Were useful, one within the heart was not,
And least of all convenient to the women:
For how could they in such a plight conceal
What they desired? But our common Mother
Dame Nature did for this provide most wisely
By laces two of equal length and size.
Thus Man and Woman were alike possessed
Of means to close this awkward aperture.
But Woman was somewhat too loosely laced,
Her fault it was, and she herself to blame,
Being never willing to be close confined.
With man 'twas different, and the lace's end
Perplexed Dame Nature to dispose of it.
In short, the lace of either sex could not
Agree, and this is why, they say, 'tis found
In women short, in men a little long.

In short, that which stares one in the face in the man, is the exterior apparatus, the penis and the testicles, the former to be introduced into the vagina of the woman, the cavity destined for its reception. Without penis and testicles there can be no copulation, it is unnecessary to say, for generative purposes. Now, the human species, from the point of view of the sexual organs, differs in no degree from the superior vertebrate animals. In all these animals the sexual union is the same. The male always possesses a penis which is introduced into the vagina of the female, where it discharges its sperm. The latter, placed in contact with the *eggs* which issue from the ovary, fertilize them.

In the case of the greatest genius of the human species, and in the case of the common bow-wow in the street, the act of procreation remains identical in each.

**Double character of the genital organs in the two sexes.** The genital organs in the two sexes have a double character to play, which allows us to distinguish them as follows :

1st The organs which serve for the preparation of the human germ and for its conveyance into the special organ destined to transform this germ into a living creature.

2nd The external organs which serve specially for the coupling.

The first comprise the testicles and the deferent canals in man, and the ovaries and the oviduct in woman.

The second are the penis in man, and the vulva and the vagina in woman. The latter possesses the uterus (or matrix) in which the fœtus is developed during the period of pregnancy, and from which it is not expelled normally until it has reached its full development.

It is to be observed that in the woman the urinary apparatus is completely distinct from the genital apparatus, although its canal comes end to end at the surface of the external parts. In the man, on the contrary, the canal of the urethra is a conduit common to the urine and the sperm, for which reason the denomination *genito-urinary* organs is frequently given to the two apparatus.

Although they are absolutely distinct one from the other, their neighbourhood causes them in certain circumstances to be conjointly affected, and the maladies which attack the one may influence in a greater or less degree the functions which devolve on the other. We are therefore obliged for this reason to concern ourselves with the urinary organs.

**The Apparatus of Generation in Man.** It is composed, as we have just remarked, of two quite distinct apparatus.

**A**. The secretory and excretory apparatus of the sperm.

**B**. The apparatus of copulation.

Let us give them in successive detail.

*The secretory and excretory apparatus* consists of the following organs.

1st The *testicles*, glandular organs whose function is to secrete the prolific fluid, or sperm.

2nd The two conduits, the *deferent canals* by which it makes its way to.

3rd *The seminal vescicles*, reservoirs which contain it during the interval between sexual conjunction.

And 4th, lastly the two other canals (ejaculatory canals) which are designed to pour it into the excretory conduit, the urethra.

**The apparatus of copulation**. This apparatus, eminently erectile, is formed by the re-union of the urethra surrounded by a spongious tissue, and by an interior body intended to support it (cavernous body), and lastly by a sub-cutaneous apparatus the contraction of which have the effect of vigorously ejecting the sperm from the urethra.

*All honour to every lord*, says the old proverb. Let us make a study in the first place of the apparatus of generation in man.

## Anatomy of the secretory apparatus of the sperm.

### THE TESTICLES.

The testicles (from *testis*, witness, because they bear witness to the virility of the individual who possesses them) are glands which secrete the sperm. Two in number, they are situated outside the abdominal cavity in the

purses on each side of the mesial line; they are ovoid, of the size of a pigeon's egg (normal dimension) and weigh from 18 to 20 *grammes*. They are enclosed in a kind of purse, situated between the two thighs. This pocket, which is called the *purse* or *scrotum*, is formed of thin skin and furnished with numerous long hairs, and with a large number of sebaceous glands : the latter are much developed and some of them attain a relatively considerable size : in some cases, they can give birth to genuine cystes.

The skin which forms the scrotum is double, of a thin muscular membrane which is called the *Dartos*. It is retractile and susceptible of very great variations in its degrees of expansion : under the influence of cold of the venereal orgasm it retracts considerably, while it becomes distended in opposite circumstances. It is the seat of an abundant sebaceous and sudoral secretion. Generally its colouration is deeper than that of the skin of the rest of the body.

In " Untrodden Fields of Anthropology ", we have remarked that in the crossing of the white race with the black race, the mark of the latter remains in the organs of generation until the third crossing, the *mesti*, who while possessing 7/8 of white blood, has organs of a darker colour and of a structure obviously different to those of a pure white.

**Consistence of the Testicles.** The testicles have a consistence of a greater or less degree of hardness, according to their state of action or repose. They attain their greatest degree of consistence in the venereal spasm; it is the fulness of the conduits which is the cause of their resistance; when they act no longer, so that their canals are empty, they become less hard. This is what happens to old men.

**Suspension of the Testicles.** They are suspended in the *purses* by a cylindric part which is pointed in the abdomen, and which is called the *cordon*. Their great axis is slightly oblique. In front the testicle is capped by a small tubercle, called the *Hydatidis of Morgagni*.

Generally the left testicle is more voluminous, more heavy, and consequently comes down lower than the right. This is a general rule among all races of men, and it has been so always; in fact, the painters and sculptors of antiquity noticed it considerably, for in all their works the predominance of the left testicle is noticeable. It is the same in the statues in bas relief representing lascivious scenes, which surround the famous temple of Elephanta in India.

The younger and more vigorous the man from a genital point of view, the nearer are the testicles drawn to the top of the purses, and so to say clustered together. In an old man, in spite of the diminution in weight of the organ, the cord relaxes, and the testicle loses its oblique position to assume a nearly horizontal position across the purses, which become elongated. A similar disposition is also to be remarked in young men who have indulged too freely in venereal pleasures. We have even remarked it in a young man of 17, exhausted by masturbation.

**Epididymis.** This is an organ in the shape of a pad occupying the upper side of each testicle and attached to them by its two extremities. The one in front forms the head, and the hinder one the tail, which together with the deferent canal is intended to conduct sperm into its recipient, *the seminal vesicle*.

At the beginning of life of the fœtus, the testicle and the epididymis, independent of one another, are situated in the abdomen, in the vicinity of the rene; it is not

until towards the end of the third month that the testicle begins to descend; towards the 7th month it approaches the inguinal canal, and at length in the 9th it penetrates into the purses, where it is generally found at the moment of birth.

**Structure of the Testicle.** The testicle being, difinitively, the most important part of the male genital organ, it is right to study it in detail.

It is a tubulous ramified gland, enclosed in an enveloping membrane, called the *Albugineous Tunic*, a kind ot fibrous membrane, of the thickness of a millimètre to a millimètre and a half, the office of which is to protect the same time. In the anterior part of the upper edge of the testicle a somewhat considerable thickening occurs, which is denominated the body of Hughmon.

To the eye, the testicle presents the appearance of a yellowish homogenous pulp, but under the microscope it is seen to be composed of from 900 to 1100 tubes called the *semeniferous canals*, or *spermatic canalicules*, from 75 to 50 centimètres in lenght, and the thickness of a hair. The canals form by their reunion little masses or lobules to the number of about 275, separated by divisions proceeding from the thick portion of the albuminous tunic.

They are the semeniferous canals which provide for the formation of the sperm. Their mean diameter is from 15 hundredths of a millimètre : if they were placed end to end (hypothetically), their length might extend to a kilomètre each testicle.

Their lobules contain on an average four canals which converge together and unite in a single stem which penetrates into the body of Hughmon, where it falls into a mass of tubes, constituting a kind of first reservoir for the sperm and called the Rete Testis.

The Rete Testis gives rise to intertwined tubes called the efferent canals or cones of the testicle, forming by their agglomeration and enfolding the head of the epididymis. The efferent cones are usually from 10 to 12 in number. Their length is about 25 centimètres : placed therefore end to end, they would form a canal of about 3 mètres in length. They are half a millimètre in size at their commencement, but they grow thinner and are not more two tenths of a millimètre at their opposite extremity. They proceed in continuity with the canal of the epididymis which we have already mentioned.

The latter is a canal with numerous flexuosities, with a total length of 6 mètres, and a diameter of thirty-five hundredths of a millimètre, folded successively on itself to form the epididymis. The interior part of the canal is provided with a vibratory epithelium, the mission of which is to cause the sperm to proceed as far as the deferent canal.

**Deferent canal.** The latter is the excretory conduit of the testicle and stretches from the tail of the epididymis with which it is continued, as far as the seminal vesicles. Its length is from 40 to 45 centimètres and its diameter about 2 millimètres. At its commencement it is narrow and folded over itself, then it becomes rectilinear and insensibly augments its size. It presents a considerable consistence on account of the hardness and thickness of its coats and of its small interior calibre of 30 hundredths of a millimètre.

**Spermatic cord.** The whole number of organs which lie between the inguinal canal and the testicles are called the deferent canal, the spermatic and deferential arteries, the spermatic veins, the lymphatics, and the tes-

ticle nerves. The deferent canal is situated behind, and is easy to recognize; when it is pressed it feels like a crow's feather.

The deferent canal with the rest of the spermatic cord runs through the inguinal canal, which it traverses, and penetrates into the hollow of the bladder to adhere to the posterior surface of the bladder and meet the seminal vesicles.

**Seminal vesicles.** They are two pockets, in the shape of an elongated almond, one to the right, the other to the left, with a length of 6 centimètres and a breadth of 15 to 18 millimètres, adhering to the bladder by their anterior surface and connected with the rectum by their posterior surface. They are almost in contact through their anterior extremity. This is provided with a conduit measuring some millimètres which returns to the deferent canal on the same side.

The seminal vesicles are not cavities : in dissecting them it is found that they consist of a tube rolled round itself. This tube has a diameter of 6 to 8 millimètres and measures in length from 9 to 12 centimètres.

The cats possess a thick muscular tunic designed, through its contraction, to expel the contents of the canal at the moment of ejaculation. The seminal vesicles are the reservoir of the sperm. They empty themselves during ejaculation by the contraction of the muscular fibre contained in their coats. Some animals are entirely improvided with them, the dogs, for instance, which require a considerable time to ejaculate. The sperm with man collects therefore in the seminal vesicles which secrete a mucus that mingles with the seminal fluid, with the object probably of facilitating the excretion.

*The ejaculatory conduits* are two small parallel canals

back to back, from 2 1/2 to 3 centimètres in length, situated beneath the bladder in the thickness of the prostate. They are formed by the union of the deferent canal with the conduit of the corresponding seminal vesicle. They open into the urethra from each side of the sacrum.

We will speak of the canal of the urethra and of the prostate at the same time as the apparatus of copulation.

**Course pursued by the sperm.** It will not be uninteresting to enquire at this point into the course pursued by the sperm from its formation or elaboration to its expulsion. We perceive that it follows a path definitively represented by a long canal, filiforme at the beginning, then becoming more and more voluminous and composed successively, 1st of the semeniferous tubes, 2nd of the *rete testis*, 3rd of the canals of the deferent cones, 4th of the canal of the epididymis, 5th of the deferent canal, 6th of the ejaculatory canal, 7th and lastly of the canal of the urethra.

If we add together the length of their different conduits, we observe that the sperm before being projected into the genital organs of the female, pursues a course within the man's interior of the total length of about 8 mètres, that is to say 5 times the average height of the man. Now it is not uninteresting to recall the following fact, namely that in the human species the digestive apparatus adapted to turn into blood the aliments introduced into the stomach, has an average length of 4 to 5 times the height of the body.

In all our previous observations we have said nothing of the sperm properly so called. The importance of the subject demands that we should devote a special chapter to it, in order that the description of the secretory apparatus may be complete. For the moment, let us direct our

attention to the anomalies which the secretory apparatus may offer.

## Anomalies and Malformations of the secretory apparatus of the sperm.

The anomalies and malformations relate almost exclusively to the testicles. In order to classify them satisfactorily, it is necessary to make a rapid examination of the migration of the testicles up to the time of their entry into the purses.

**Migration of the Testicles.** In the fœtus the testicles, enclosed at first in the interior of the abdomen, begin to descend about the 3rd month, going towards the inguinal canal which they traverse and then fall into the purses, where they are generally found at birth. Nevertheless there are numerous exceptions, for out of 100 infants, there are about 20 in whom only one has descended, and 5 in whom the 2 testicles are still in process of migration. On the other hand, the anatomist Suffey has proved the issue of the testicles in the case of a fœtus of 7 months.

In the case of infants whose testicles are not yet descended, the migration is accomplished in a period of from a few days to a few weeks. Nevertheless there are cases in which this migration has lasted for months and even for years. The testicles may remain definitively in the abdomen, and in this case they lie ordinarily in the inguinal canal. It is rare to see the two testicles retained, and generally there is one which descends to its position.

" In the case of 10,800 young soldiers, Dr Marchal found eleven in whom one of the testicles had not descended,

and one only in whom these organs had not descended either to the right or to the left (1). ,,

The testicle remains independent of the development of the rest of the organism and continues small until puberty, which arrives, according to race, climate and individual temperament, at from 10 to 15 years of age. But at puberty rapid changes occur in the course of a few months, especially if the child is already depraved and has contracted the unfortunate habit of masturbation. In a few weeks the testicle develops rapidly, the pubis begins to be covered with hairs, and the spermatic secretion begins to be established. The shrill and feminine voice becomes deep and masculine.

Nevertheless the apparatus of generation may have its development arrested, remaining thus trough the whole life. Saffey instances the case of a man aged 28, otherwise well made, in whom the genital organs had retained the proportions presented by these of a child a year old; the testicles, descended into the purses and perfectly healthy, were of the size of a small nut, and weighed only 3 grammes.

But it may be said, as a general thesis, that testicular anomalies affect man exclusively in his fecundity, without preventing his sexual intercourse.

**Testicular Ectopy**. The complete absence of the testicles is called Anorchidis. It is not sufficient for them to be absent from the purses to presume that the man is deprived of them. If they are not in their place, they are elsewhere; they may be held back, diminished, altered, they exist all the same and with them exists the function of copulation.

(1) Dr Hayès, *Anatomie des organes génitaux.*

The true *Anorchidis* are those in whom the testicles have never existed. This is a very rare case.

**Cryptorchides.** As a general thesis the individuals whose testicles are not present in the purses are Cryptorchides, that is to say men whose testicles have remained enclosed in the abdomen.

**Monorchides.** These on the other hand have but one testicle hidden, and have one (generally the left) descended into the scrotum.(*Sexual intercourse in Cryptorchides and Monorchides*).

" The ancients ", says Dr Garnier (1), " believing with Aristotle that animals without visible testicles are the most lascivious, considered that it was the same with man. If man, says an ancient philosopher, had his testicles concreated in his belly, among all animals there would be no animal more lascivious than he. "

The lamented Ernest Godard has done justice to this error by proving by his researches that cryptorchides, while indulging in sexual intercourse are completely sterile. " When the testicles ", he says, do not exist in the abdomen and are wanting on both sides, being only represented by the deferent canals, the individual proceeds to erection without ejaculation, as if they did not exist. This fact has been recently confirmed by various surgeons.

Dr Fischer of Boston has observed a case in a man aged 45, who died of pneumonia. No trace of a testicle existed in this individual nor of the epididymis either on the right or left. The deferent canals descended into the purses

(1) *Anomalies sexuelles apparentes et cachées* (Docteur Garnier); Garnier frères, éditeurs, Paris.

and terminated in a cul-de-sac. The double anorchid is impotent and infecund, a natural eunuch.

The whole matter is ridiculously exaggerated in this pretention of the ancients. The cryptorchides have but very moderate power. Polinan however has observed one who, when 12 years old, abandoned himself to the most immoderate abuse of venereal pleasures. Death alone put an end to his excesses. Has not the mistake been made of confusing pseudo-hermaphrodite men, in whom the 2 testicles are not usually apparent? These partake of the pleasures and passions of both sexes, and abandon themselves to every excess.

The gravity of testicular retention or displacement varies according to the age of the individual, and more particularly the constraint and compression of the organ, revealed by the pain and the accidents which result from it. After minute comparative investigation of testicular ectopies in men and animals, observations differ in results

The investigations of Lecomte, Gouboreau, Follin, resulted in demonstrating that the sperm deposited by the non-descended testicle contains no spermatozoides. These observations made upon men have been completed by observations made upon different animals. In three horses, two asses, a bull, a boar and a dog, all monorchides, the presence of spermatozoides has been proved on the side where the testicle was in the purses, and their absence on the opposite side.

In a cryptorchid horse, Bouley did not find any spermatozoides either on the right or left.

Nevertheless these observations have been invalidated by others. After Garnier, Drs. Ch. Monod and G. Arthaud, discovered that in a youth aged 20, who had an ectopied testicle removed when suffering from strangulated hernia, there were spermatozoides perfectly constituted and

living at the examination, although this testicle was much less voluminous than the other.

We may lay down the law from the above, that if cryptorchides are not impotent they are sterile, while the monorchides are never so.

**Varieties of Testicular Ectopy.** Testicular ectopy presents a certain number of varieties according to the position of the testicle which has not descended into the purses.

According to Dr Houget the testicle is sometimes in the abdomen beneath the rene; sometimes in the iliac region; sometimes it is situated on the posterior part of the inguinal canal. At other times, and this case is the most frequent, the testicle occupies the inguinal region. Another variety constitutes cruro-scrotal ectopy. Crural ectopy is rare.

Vedal de Cassis has pointed out a case of this kind, in which the testicle, after its exit, has risen again to the part in front of the abdominal coat.

Perineal ectopy has also been observed. Godard and other authors mention cases in which the testicle was placed beneath the skin of the perineum in front of the anus.

In addition to complete ectopies, partial ectopies have been seen, in which the epididymis and the deferent canals descend into the purses, while the testicle only is arrested in its passage.

Double ectopy is extremely rare. Godard has collected 20 perfectly authentic instances in man. It has also been observed in many species of animals, in the horse, the bull, etc. Particular ectopy is generally due to adhesion to the abdominal viscera.

**Races of animals in which Cryptorchidy is the normal condition.** But a considerable num-

ber of animals are naturally cryptorchides, and never have the purses. Elephants, amphibious carnivora, cetaceans, are instances.

In turtles and camels, they are situated beneath the skin of the groin. In pachyderms, the testicles are placed beneath the skin of the perineum. In the cheiropters and the greater number of the rodents they remain habitually in the abdomen, but at the period of rut they emerge thence, and take a momentary position beneath the skin of the groin or the perineum.

In the case of monorchidis, the one testicle which has descended is generally in a state of hypertrophy.

Sometimes the testicles, after descending into the purses, rise again towards the point whence they departed; these displacements, in most instances temporary, may become permanent.

Sometimes they result under the combined influence of the cremaster and the dartos being contracted too energetically. The testicles rise again into the inguinal canal. I have known several persons who thus made their testicles retreat at will. Salmuth mentions an individual in whom they used even to rise again into the abdomen. Arnaud knew a young Parliamentary Counsel whose 2 testicles reascended into the inguinal canal whenever he happened to be in the company of women.

Godard speaks of a student whose left testicle ascended again into the canal at about the age of 10, and remained fixed there definitively.

Some children amuse themselves by causing their testicles to re-enter the inguinal canal; the organ assumes again directly its normal place without difficulty : nevertheless this manœuvre may have serious consequences. Scurpis instances the example of a child aged 7 who had made his left testicle reascend into his belly; the organ did not emer-

ge again, and, three years later, a hernia was formed at the upper part of the thigh, pressing upon the arcucrurale, and produced a strangulation which could only be removed by an operation.

In the case of an adult, it has been observed that one of the testicles ascended again into the inguinal canal, as the result of a fall or of a violent blow, and then remained there definitively.

**Supernumerary Testicles.** Everybody is aware that we possess two testicles, as we do two eyes; when there is only one, it is because the other has disappeared or is hidden. But science has discovered cases where several testicles are found collected in the scrotum.

Blakus and other authors assert they have observed three testicles; Bligny and a few others have demonstrated four; Scharff has found as many as five. But these instances do not possess all the authenticity desirable.

However this may be, that three testicles have descended into the scrotum is a very real and well ascertained fact.

**Examples of Testicular Anomalies.** In 188., in Senegal, I found among the recruits for a battalion of Senegalese sharpshooters, submitted to my medical inspection before enrolment, an anorchid, with woman's breasts, fat, plump, with buttocks as fully developed as those of a negress. His penis was of the dimensions of a European's of 15 years old, and therefore very inferior to that of the generality of the negro race. This individual, whom I had rejected, asserted that he was able to accomplish the act of coition normally. But brought face to face with a negress with the promise of a considerable reward if he accomplished the act of coition, it was impossible for him to have a sufficient erection of his small penis to enter the spacious

vagina of the low-class prostitute, who assented complaisantly to the operation (it is needless to say for filthy lucre's sake) and who vainly exerted all her most lascivious arts to obtain a positive result.

In this same battalion, I found, *rara avis*, a sharpshooter possessed of three testicles. Two of them were of normal size, the third was sensibly smaller. This subject, otherwise of vigorous constitution, was not more salacious than any other negro.

Lastly, I treated in New Caledonia a colonist of Scotch extraction who had the left testicle almost completely atrophied, resulting from the kick of a horse received when aged 16. As a compensation the right testicle which for 25 years (he was then 41 years of age) had performed its office alone *ad majorem penis gloriam*, was much developed, very hard, and in size presented the appearance of a hen's egg. The penis was of moderate dimensions. Otherwise the colonist was very vigorous and led a very active and laborious life.

**Variation in the weight of the testicles.** The physiologist Mantegazza, in his *Hygiène de l'Amour* (1) has applied himself to investigations of the weight of the testicles. He carefully weighed the testicles of sixty individuals in whom the spermatic gland was well formed, and he found that the average weight was 19 grammes for the right and 18 grammes for the left (in exact figures 18,975 and 18,364). The figures are less than the average of 21 grammes given by Saffey.

The heaviest weight which we have met with was 33

(1) We cite with pleasure the name of our distinguished Italian colleague, who is not merely a maker of pioneer books, but a famous Traveller and Anthropologist, into the bargain.

grammes; it belonged to a peasant suffering from rickets, 63 years old, while the lightest testicle weighed 7 grammes, belonging to a peasant aged 40. The ratio between the heaviest and the lightest testicles is as 1 to 4, 9, a figure twice as high as that discovered by Saffey, who gives the ratio of 1 to 2. Few organs therefore, present greater individual differences, and, in certain cases it is difficult to determine if a testicle is hypertrophied or not. The young man, aged 17, who had only one testicle is celebrated; this single testicle was the right, it was perfectly healthy and weighed 70 grammes.

Many anatomists assert that the left testicle is generally more voluminous and heavy than the right, and they explain this fact by their different position in the scrotum, where the former occupies nearly always an inferior position: but from our observations it is shown, on the contrary, that the weight of the right slightly exceeds that of the left. The exact ratio is 18.364 to 18.775.

**The Veteran and the Recruit or the Equal Number**. May I be permitted to finish with this subject by a laughable anecdote, which a veteran of the Old Guard, who received a medal from St-Helena, often used to relate to me in the days of my youth.

One of his comrades in a regiment of Grenadiers had a testicle carried away by a bullet. As he was a brave corporal who had gone through all the campaign of the Empire, he was given the post of sergeant at the depôt. It was his duty to instruct the recruits of the Garde, and one day he had the following dialogue with one of the recruits of his section. — « I bet you a pint that you and I are an unequal pair; you know I am talking about our *things* in our c.....

— « I take your bet, replied the recruit.

— « Then you have lost, said the sergeant. I have only one left, the other was taken off by a bullet which a damned

Austrian fired at me at the battle of Austerlitz. *Mine and your two, make three.*

— « No, sergeant, it is you who have lost, replied the recruit, for I have three, and with yours, that makes four, an equal number. Pay for the pint. »

And the veteran paid for the pint, having lost the bet for the first time after he had won it so often.

# CHAPTER II

## THE HUMAN SPERM AND THE SPERMATOZOIDES

Opinion of the ancients on the composition of the sperm. — The sperm and its composition. — Why is the human sperm thick and viscous? — The spermatozoïdes (zoosperms, spermatic animalculæ). — Movements of the spermatozoïdes. — Favourable or unfavourable environments for zoosperms. — Birth of the spermatozoïdes. — Different degrees of development of the spermatozoïdes. — The absence of spermatozoides renders coition infecund. — Vital resistance of the spermatozoides. — Curious experiences of Mantegazza on the vital resistance of zoosperms to cold. — Vitality of the zoosperms of different animals. — Vitality of zoosperms in a corpse. — Fecondation at a distance. — Escaped from the phial, or adultery by post. — Is fecundation possible with the sperm of a corpse? — On spermatozoides animalculæ! — Different liquids constituting the sperm. — Chemical composition of the sperm. — Tardieu's process employed in legal medicine to recognize the spots of sperm.

**Opinion of the ancients on the composition of the sperm.** — We find this opinion admirably summed up in the Essays of the famous Michel de Montaigne, one of the most erudite men of his time. " Archelaus the Physician, whose favourite disciple was Socrates, according to Aristoxenus, said that both men and animals were made of a milky slime squeezed out by the heat of the earth. Pythagoras said that our semen is the froth of our best blood; Plato that it is the overflow of the marrow in the spine, and he argues this because it is that part which first feels wearied from the work; Alermeon, a part of the substance of the brain, and since this is so, says

he, their eyes are troublesome who labour beyond measure at this exercise: Democritus, a substance extracted from the whole corporeal mass: Epicurus, an extract of the soul and body: Aristotle, an excrement drawn from the ultimate aliment of the blood and held in supension in our members; others, the blood cooked and digested by the warmth of the genitals: they were of this opinion, because at the extreme efforts, drops of pure blood are ejected; which seemingly would have more probability, if we could discover any probability in such an infinite confusion.

**Semen, by what means brought into operation. Sperm denied to woman by Aristotle.** — Now, to bring this semen into operation, they are all of contrary opinions. Aristotle and Democritus hold that women have no sperm, and that it is merely a sweat which they exude through the heat of pleasure and of movement, and is of no use in generation. Galen on the other hand, and his followers, " that without the meeting of the semences generation could not take place ". (1)

After giving in this curious quotation the opinion of the ancient philosophers, let us see what is the composition of the sperm according to modern medical Science.

**The Sperm and its Composition.** The sperm is in itself a liquid heavier than water, at the moment of its ejaculation, slightly alkaline, of a yellowish white, viscous and stringy, with a special odour, compared by some to that of grated horn, but rather in our opinion, to that of the pollen of the first flower of the chestnut. Its taste is sharp and bitter, and very perceptibly salted.

(1) *Les Essais de Michel, seigneur de Montaigne.* Amsterdam, Aux dépens de la Compagnie. M.DCC.LXXXI.

It loses 90 o/o of water by dessiccation, its residue is a yellowish organic matter, which, when burnt on hot coals, leaves a slight saline residue. This organic matter is, in all probability, constituted by the spermatozoïdes, which of themselves form nine tenths at least of the *solid* sperm secreted by the testicles. The remainder of the sperm is liquid, and serves as a medium and vehicle for the former, and is supplied by the different glands and the spermatic canals.

When the sperm is dessiccated it forms a mass of crystals of phosphates of magnesia and lime; the spermatozoïdes enclosed among them undergo no alteration, the result of which is that they are still recognizable for a very long time in spermatic stains. This fact is of very great importance with regard to legal medicine.

The complex liquid vehicle of the sperm issues together from the spermatic canals, from the glandules of the deferent canal, from the seminal vesicles, from the prostate, from Cooper's and Littré's glands. We will describe these three glands when examining the apparatus of copulation.

The office of the testicles is solely to elaborate the spermatozoides, to which the sperm owes its prolific qualities; as to the liquids secreted by the various glands just enumerated, their part is solely to facilitate by their fluent qualities the emission of the sperm out of the genital parts of the man, and by their viscous qualities, to prevent its leaving the sexual organs of the woman.

**Why the sperm is thick and viscous.** On this subject Mantegazza, whom we have already quoted, remarks that among the various seminal liquids of mammiferae which he observed, he found that that of man is one of the thickest, which perhaps might be due to the vertical

position of the urethra in woman. A sperm less dense (and above all less thick) might leave the genital organs more easily, and so prevent fecundation. It would be very curious, according " to him, to examine the sperm in the inferior apes and in the anthropomorphous apes " and he thinks it possible to assert *a priori* that the sperm ought to be the more dense, the more the animal which supplies it approaches the biped position.

This hypothesis of the learned physiologist is correct. I have verified it *experimentally* in Senegal upon a large Cynopithique, in Guiana upon a red monkey, and in Cochin-China on a black monkey with a white face which swarmed on the banks of the Cambodge in 186... The sperm of these different animals perceptibly resembled that of a young native ordered to obtain it by the masturbation of the animals. Unfortunately I had not a microscope powerful enough to make a more complete examination of it, and I was obliged to content myself with a magnifying glass.

**Of the spermatozoides** (*Zoosperms*, *spermatic animalcules*). The spermatozoides are anatomical elements which are formed in the testicles, and which are endowed with very lively undulatory movements. They vary in length between 5 and 6 hundredths of a millimètre, and are composed of a pear-shaped enlargement called *the head* and of a filiform appendage which terminates in a very narrow and hardly visible point, called *the tail*. " The movements of the spermatozoides are sometimes extinct in pure sperm which is too much concentrated; most frequently they show themselves only in the ejaculated sperm, and in the sperm of the seminal vesicles, diluted with water or in pure sperm (NOLLEKER). »

The spermatozoides are endowed with a very great mo-

bility, particularly remarkable in sperm recently ejaculated. At that moment they move with so much rapidity that it is difficult to follow them, and impossible to ascertain immediatly their exact shape. It has been calculated that they progress from 3 to 4 millimètres a minute, which would be 220 millimètres an hour; that is to say about 4000 times the length of their body. Now a man of middle height, 1 m. 60 progressing 450 times his height in one hour, would therefore progress 7000 mètres. But a robust pedestrian, alternating the lengthened step with a few paces of the gymnastic, would easily succeed in doing 7 kilomètres an hour, especially if he only carried his body-garments. This comparison seems to us curious.

The spermatozoides progress with the head in front, by undulatory movements resembling those of eels in water, avoid each other and turn round or repel the obstacles which they encounter. Sometimes they inflect themselves, bending in a circle, then they straighten themselves more or less abruptly, without contracting or lengthening. They are seen also swimming with the tail held at a right angle, or at a more or less obtuse angle in relation to the axis of the head.

Gradually, the energy and rapidity of these different movements diminish. Soon they only oscillate without progressing, they are apparently held back by the extremity of their tail, while the head and the middle segment of the body incline and inflect still. At length they become motionless. If cold is the cause of it, by slightly heating the sperm they resume their movements for a few minutes or a few hours. If the immobility is due to the thickening of the liquid by evaporation, the addition of a little water very slightly alkaline and luke-warm produces the same effect.

**Media favourable or unfavourable to the zoosperms.** In the spermatic paths, although the individual has ceased to breathe, though he may have been suddenly killed, poisoned, or died of sickness, the zoosperms are still in motion at the end of three days. In the genital organs of the woman they preserve their movements and their fecundent properties for a much longer time still. They exist during 4 or 5 hours in blood, and for a few minutes only in normal saliva slightly alkaline, although it is much less so than blood.

The mucus of leuchorræa, provided it is not acid or alkaline, natural pus, that of chancres, of blennorrhæa, exercises no influence over them; it is not the same with urine which kills them rapidly. When the sperm is diluted with a too great quantity of water, and when the vaginal mucus is too acid or alkaline, under the influence of an electric shock, where they are placed in contact with alkalies, and even weak acids, with opium, strychnine and bile, the spermatozoïdes lose their movements.

For the most part, where they move, the tail bends round it in a circle, as though it were attempting to form a knot. In some, they bend so as to form an angle more or less obtuse with the axis of the head.

**Birth of the spermatozoides.** The spermatozoides take their origin in the small ampullae or cellules, called *spermatic vesicles*, which are detached from the internal coating of the spermatic canals. When these ampullae have reached maturity, they become detached, fall, and become free in the midst of the sperm.

The production of spermatozoides in the testicles does not occur till these organs have arrived at a certain degree of development, at puberty, from 15 to 18 years: then they make their appearance in the few drops ejaculated by the

child at the commencement of puberty. In the adult, if there are no infirmities or special maladies, they constantly exist, which allows him to fecundate at all seasons. They finally disappear in the old man, but only at a very advanced age. They may still be found in the sperm of an old man of 80.

**Different degrees of development of the spermatozoides**. In examining with a microscope the seminal fluid of different persons, spermatozoides of different degrees of development are found; in the testicles they are most generally joined together in clusters, and it is almost only on a level with the epididymis that we find them completely free. It is very important to notice that in the sperm of a large number of individuals, much smaller spermatozoides exist, perfectly formed, endowed with more active movements, than those which possess greater dimensions. We may also meet with pus therein among those subjects who have suffered from blenorrhagies either with or without epididymitis : but this is more rare. The liquid of spermatic colouration, light gray, which issues from the canal of certain adults in the efforts of defecation contains *very few* living spermatozoides, but *per contra* it contains a larger number of filaments striated in length proceeding from the urethral mucus.

**The absence of spermatozoides renders coition infecund**. The complete absence of spermatozoides in the sperm emitted entails infecundity. This is what occurs to crytorchid individuals, and to those who have had accidentally, as in the case of double orchitis, an obliteration of the deferent canals. The quantity of liquid which they ejaculate is the same, the matter appears to be the same, but they are nevertheless sterile.

It is therefore the duty of every husband normally constituted who has suffered from orchitis in his youth to examine his sperm microscopically if he has no children by his wife.

**Vital resistance of spermatozoïdes.** The vital resistance of spermatozoïdes is astonishing. Mantegazza, the physiologist, in his work which has been already quoted, has made numerous experiments as to the resistance which they offer to all the agents which can change or dissolve animal tissues and corpuscles. The human sperm maintained during 10 minutes at + 37°, and then during 10 minutes more at + 40°, keeps its spermatozoïdes alive. Brought during 10 minutes to + 45°, they move with less vivacity than at 37°; moving in the same place without advancing. The seminal liquid brought to 47° during 10 minutes, becomes more and more fluid and yellowish, the zoosperms move still, and some, though but slowly, progress in a straight line. Brought during 10 minutes to + 50°, the movement in all ceases definitively. If the experiment is continued in order to determine what degree of heat the spermatozoïdes can reach without losing their form, it is found that the sperm maintained at + 65° during 10 minutes is still very limpid with a strong odour of chestnut pollen, and with its zoosperms still intact : kept for 10 minutes at 70° no alteration is observable. At + 80° the spermatozoïdes are still intact, and the odour is somewhat empyreumatical. At + 100° during 5 minutes the sperm is very fluid, exhales an odour of baked bread, and the zoosperms are scarcely altered. Brought to 107°, the temperature of a saturated boiling solution of chloride of sodium, they appear very slightly altered, and the corpuscle alone seems a little contracted.

The alkalinity remains although it may be diminished.

This liquid, which had undergone so high a temperature, left to itself during 21 days at a medium temperature of + 15° although it was fetid, decomposed and very rich in bacteria, still presented the zoosperms very distinct and very little altered. The zoosperms may be seen very distinctly, nearly intact, in the drops of dried sperm, and medical legists are aware how it is possible to recognize the traces of an offence or a crime on the ground and on the garments, by examining what is left of the pollution days and months afterwards.

The zoosperms exposed during several months in their liquid to the air, at the temperature of the climate of the South of Europe preserve their mobility, the lower their temperature, the longer do they do so, and when they have lost it, they recover it almost immediately, if they are brought to the temperature of human blood (37°-40°).

**Curious experiments of Mantegazza on the vital resistance of zoosperms to cold.** The temperature of melting ice arrests the movement of the spermatozoïdes, but they retain the faculty of motion directly they are brought to animal temperature. Mantegazza was able to retain the zoosperms alive at 0° during four days, or more exactly during ninety-eight hours, by bringing them afterwards to + 37. After five minutes the movement appeared anew among several, and after ten minutes many were in lively agitation. The sperm was contained in a closed tube of glass.

It is necessary to observe however that this is not the extreme limit of resistance of the zoosperms, since in an experiment made on the 4th day, the operating physiologist accidentally broke the guage, and the experiment was thereby interrupted.

However this may be, it is to be concluded from the preceding experiments that the vital resistance of spermatozoïdes cannot much exceed this limit of four days, since Mantegazza, having on two occasions confined some sperm in an atmosphere of carbonic acid, and having kept it at 0° during six days, was able to revive only a few spermatozoïdes by exposing them to a temperature of + 40, and on the following day they were all dead.

In another experiment, the sperm maintained at 0° during 7 days in a small phial hermetically sealed, but which contained air instead of carbonic acid, presented no living zoosperms, although it was afterwards brought to + 37° during ten minutes, and maintained afterwards for half-an-hour at a temperature varying between + 37° and + 40°. The liquid was divided into two layers, the upper one nearly transparent, the other formed of a white and dense coagulum, which consisted of zoosperms, corpuscles and spermatic crystals. Putrefaction had commenced and no bacteria were visible.

In other experiments the Italian physiologist proved that the zoosperms are able to resist a temperature much below zero. He congealed some human sperm by bringing it for eight minutes to — 14°, and again for ten minutes to — 15°; he thus obtained a hard, solid mass, which maintained at zero for forty minutes, and then brought to + 10 melting it completely. Immediately after, the sperm presented very lively zoosperms. He congealed the sperm again by submitting it to a temperature of — 17°; the zoosperms perished definitively, although the operator raised the temperature with numerous precautions from — 17° to 0°, then to + 9°, then to + 35° and finally to + 40°.

This is Mantegazza's conclusion from the experiments stated above :

" Human zoosperms preserve their vitality from — 15° to + 47° — temperatures which closely approach the exact truth "

**Vitality of the zoosperm of different animals.** Their extreme limits are but slightly different from those which I have observed for the zoosperms of the frog; in reality the zoosperms of the frog from — 15° 75 to + 45° 75; Human spermatozoïdes from — 15 to + 47. Temperatures slightly different from these are given by Paul Bert as the extremes, i. e. — 18° to + 56°.

The sperm of the dog, from two of our experiments, appears less resistant than that of man. On one occasion, I kept it at zero during 46 hours, and I was unable to revive the zoosperms by bringing it then to + 35° and to + 40°. With this dead sperm I was unable to fecundate a bitch on heat. Another time the sperm of a dog placed in ice had all its zoosperms dead at the end of 24 hours, and it was impossible to revive them by bringing them to blood heat.

**Vitality of the zoosperms of a corpse.** The French physiologist Godard discovered that the zoosperms were still alive 54 hours after death, in the deferent canal of a guillotined subject. Mantegazza on his part examined the genital organs of a murderer hung at Milan.

" He was a man of about sixty years of age, but healthy and robust, and in his corpse was found a complete fracture of the second and third cervicle vertebrae with laceration of the lower marrow. I examined the genital organs 37 hours after death and I verified the fact that there had been ejaculation of the sperm and that the zoosperms were well constituted. I examined them in the testicle, in

the epididymis, in the vesicles, and in the spermatic conduits, but I was unable to revive them, even by bringing them during five minutes to a temperature between 35° and 40°. The sperm had its habitual odour, but, an extraordinary fact which I have never observed in man, its reaction was neutral ".

Against this experiment we can place that of Godard, who, in 1855, in the case of a man who died a violent death, found living zoosperms in his sperm one hour after death.

**Fecundation at a distance.** Let us conclude with the experiments of Mantegazza by stating that this original physiologist admits the possibility of obtaining artificial fecundation with frozen sperm sent by express-train from one country to another. It might even happen that a husband dead on the battle-field could fecundate his wife and have legitimate children after his decease. *Se non e vero e ben trovato*, we might say, and the children thus obtained might by called, " Escaped from the bottle ". What an original subject for a farce(1)! What embroglios might not occur! Example, an absent husband, unable to return for a long time sending a packet by post containing a bottle of his sperm hermetically sealed. Second husband who has had the same idea. Mistake on the part of the postman who hands to Mr A... the marital bottle of Mr B... and inversely Mr A's bottle to Mr B... The matter becomes complicated if Mr A... has bright red hair, and Mr C... has black. Tableau at the moment of birth. A law-suit by the husbands, and a complaint addressed to the Postmaster-general regarding the negligent postman.

But a truce to jests on such a serious subject. This is

(1) Escaped from the bottle, or Adultery by post.

a very simple experiment which might have been tried long ago!

**Fecundation is it possible with the sperm of a corpse?** Take the sperm, not from a guillotined subject (could he have become so merrily by persuasion), nor from a suicide, but from a healthy, vigorous man who died rapidly and unexpectedly by a violent death, without much time to look forward to it; rigorously avail oneself of the sperm of a subject who died from the rupture of an aneurism or from cerebral congestion. Try with this sperm the artificial fecundation of a woman desirous of lending herself to this experiment. And among the female medical students, who pursue their studies in Paris, could not a bold, philosophic spirit be found willing to agree to it in the interest of Science?

Female medical students have been known to inoculate themselves with syphilis in order to study the stages of that malady. And are they not known to risk their lives every day in the case of a young patient suffering from croup, when it is necessary to practise tracheotomy and to free the acrial passages from obstruction when they are stopped by the false membranes?

Why should a woman be less courageous than men and not accept the possibility of bearing a child proceeding from the spermatic organs of an unknown person, provided that unknown is healthy and otherwise well constituted? And in default of a female student courageous enough to lend herself to the experiment, would not one of our princes of medical science supply for a sum of money a well-formed prostitute, presenting the conditions necessary for the success of the experiment. If it were to succeed, this experiment would settle entirely the dispute which has existed for centuries between *Materialism* and

*Animism.* If from a dead creature, whose soul has passed away never to return, it is possible to obtain procreation, then the spermatozoïd is *in itself* a living creature, a veritable *homunculus*.

**Are spermatozoïdes animalculæ?** Are spermatozoïdes true animalculæ? This was the opinion of many physiologists both ancient and modern. Lecawaenhœck and Spullanzani considered it to be so. Ehremburg advancing on his predecessors, has gone so far as to rank the spermatozoïdes among the microscopic sucker animalcules, and Czermack has placed them among the infusoria. Valentin, when studying the zoosperms of a bear, believed he saw in them a proboscis, an anus, a stomach, and even intestinal convolutions! Gerber concedes to them organs of generation.

The *savants* who are of a contrary opinion assert that spermatozoïdes are simple vibratile threads, seeing that their structure is of extreme simplicity, and that they are not composed of an homogeneous substance. This is the theory of the anatomist C. H. Robin, who regards them as anatomical element analogous to vibratile cellules; the head representing the body of the cellule, and the tail one of the vibratile threads which are dependent on it.

Dr Bienaimé (1) says that mobility is not sufficient to characterize an animal. All known animals do not only move, but they also reproduce and digest; now, the spermatozoïdes have never been seen accomplishing similar functions.

Dr Hayès (2) for his part declares that "the spermatozoïdes, wrongly called spermatozoars are no more animals

(1) *Maladies privées des deux sexes.*
(2) *Fécondation naturelle.* Librairie Pigeon, Paris.

than the grain of pollen which fertilize the flowers, and to which it is permissible to compare them, are vegetables. They are a kind of free vibratile threads. "

To these denials other researches give an affirmative reply : but, if all the theories which have been broached on this subject, have no very solid scientific foundation two facts appear to us to plead in favour of their animality in a somewhat peremptory fashion. If some sperm, in fact, is laid in a sheet of glass which is exposed unequally to heat, in such a manner as to cause only a portion of it to evaporate, the natural result is that one portion of the sperm submitted to observation becomes dried up, while the other still remains fluid. Under the microscope we ascertain that the nearer we approach to the intermediate zone, the more do the movements of the spermatozoides lose their vivacity. Some of them are in the portion which still remains fluid, but much concentrated, which border on the entirely dry region, and have either on the head or the tail obstructed in such a manner that they are unable to release themselves. Now, while the former make completely disordered movements in every way resembling those of an eel or a serpent which is held by the head in the hands, the latter on the contrary fold back on themselves in order to throw themselves forward stretching themselves in the fashion of a spring, as the same animals do in order to release their tail. M. G. Souchet has made another remark of very great interest. While all the other anatomical elements restored to their normal form are solid revolutional bodies, the spermatozoïdes of man and of mammiferous animals display a most marked bilateral symmetry (1). The question evidently can only be settled definitively by the experiment proposed above.

(1) Moreau Wolf, *Impotence et Stérilité chez l'Homme*. Paris, Dentu, éditeur.

**Of the different liquids composing the sperm.** The spermatozoïdes, we may say, compose the living part, and the other liquids, the products of different solutions, serve only as a vehicle for it, as we have remarked. It is not uninteresting to know what these liquids are.

The zoosperms, immediately they are detached from the coating of cellule which has generated them, are received into a liquid equally formed by the spermatic canals, with which they unite in the proportion of nine-tenths to form the testicular sperm, a humour of creamy or muddy consistence, semi-liquid, of a dull opaque white more or less pronounced, sometimes slightly yellowish, and odourless. The semen thus elaborated, makes its way to the meatus, where it arrives after passing through the long and tortuous canals which we have described, and being mingled successively with the liquids of the deferent canal, the seminal vesicles, the prostate, Cooper's and Littré's glands, which give it the appearance it presents at the moment of ejaculation. In the first part of this journey the spermatozoïdes attain nearly double dimensions, and more and more pronounced movements.

The liquid secreted by the deferent canal contains granulations with a bright centre, and a dark circumference. This renders the testicular sperm less thick, and causes it to lose its colouration, which become of a more or less translucent gray.

The liquid secreted by the mucus of the seminal vesicles is the most abundant of all those which combine to form the sperm at ejaculation.

This is usually of a creamy consistence, semi-liquid, or like that of jelly, sometimes slightly granulous to the touch, of a yellowish gray, or rather of a yellowish or grayish white. The granulous condition is due to small

colourless concretions, transparent, designated by the term *sympexions*, which in old men frequently assume a brownish or rosy tint.

This rosy coloration has a certain importance, for it is an evidence that there has been no coition for a long time. The sympexious may increase so much in number or in size as to render the mass of seminal vesicles hard, and even to obliterate a portion of the corresponding ejaculatory canal. Thence results, at every coition, a retention of sperm in that reservoir, and at the same time pains which are called spermatic colics. These pains supervene not only during ejaculation, but also during erection, micturition and defecation, at all times when the vesicule is distended or contracted.

The prostatic liquid is slightly alkaline, odourless, of a pronounced milky or opaline colour, non-viscous, fluant, composed of a colourless fluid, holding in suspension very fine granulations, and greasy drops. To this is owing the whitish half transparent colour of the sperm, with which it mingles at the moment of ejaculation. It leaves deposited in the conduits and prostate of all adults, calculi or concretions, which may attain to a diameter of 2 to 3 millimètres. These concretions sometimes exist in such a large quantity as to form small masses of yellow, semi-transparent amber.

The opalescent coloration which the semen ordinarily has, disappears almost entirely after the 2nd coition, when several occur at slightly separated intervals. Commencing with the third, it is more grayish, clearer, and more like the liquid of the seminal vesicules. As the secretion of the prostate is intermittent, and very slow, it is probable that the cause of the preceding is precisely the more and more pronounced want of the humour supplied by that organ.

When the sperm has been ejaculated for a certain time,

it congeals into jelly, then it dries up and forms spots which stiffen the linen. After it has dried up, it may be moistened again, swell and resume its primitive aspect, five or six years or even more after its production. The spots which it forms then resume their density and even the opaline or grayish tint which they had at the moment of ejaculation, but the matter which composes them is not fluctuant, and the spermatic odour is absent.

**Chemical composition of the human sperm.** The cerebral matter whence human thought springs forth and the genetic apparatus which manufactures the sperm, both subsist on phosphorus, and Mückel is right in saying that " the sperm is a drop of brain ".

The yellowish coloured residue, supplied by the desiccation of the sperm, is called spermaline. The chemist Vauquelin, in his analysis of the sperm, found 90 p. 100 of water, 6 p. 100 of spermatine, 5 p. 100, of phosphate, hydrochlorate, magnesia and lime, and 1 p. 100 of soda.

**Tardieu's process employed in legal medicine to recognize the spots of sperm.** The lamented Ambroise Tardieu, whose recent loss is regretted by Science, has indicated in his classical work (1) a very simple process of easy execution, within the compass of every physician, to recognize the traces of sperm on linen or any other substance. This process has the immense advantage of restoring to the spots of sperm their original character without altering the substance which composes them, in such a manner that it is sufficient to submit a particle of it to microscopical examination, just as though a perfectly first spot were in question. " The textile fabric being cut so as to slightly go beyond the stai-

(1) *Etude médico-légale sur les Attentats aux Mœurs* par Am.T. (Paris, 1878).

ned portion, the unstained portion is soaked in distilled water or in a weak alkaline solution. The fabric absorbs it then, by capillary attraction, and the spot itself in proportion as the water penetrates it, and after a period which varies from three to six or twelve hours, swells, inflates, reconstitutes itself in a way, and it is necessary only to remove a small portion of the matter deposited on the linen with the point of a scalpel and to place it on a sheet of glass for microscopical examination. The spermatozoïdes are then observed with extreme facility, the greater number of them intact, and a few broken. These microscopic elements are sometimes agglomerated in an amorphous mass. Most frequently they occur mixed with fatty granulations, with globules of granulous mucus, and finally with prismatic crystal with a rhomboidal base of phosphate of magnesia.

It is possible by analogous processes to recognize the spots of sperm found on the floor of a room.

Tardieu cites the process of Longuet who employs distilled water coloured with a few drops of an ammoniated carmine solution, and the stuff having been once macerated in the solution from 36 to 48 hours it is undone and unravelled thread by thread, and each thread is undone in a drop of ordinary glycerine. Under a microscope with a magnifying power of 500 diameters, bunches of spermatozoïdes are visible round the uncoloured vegetable fibrils, the greater portion of them complete with the head strongly coloured a bright red, while the tail has no tint.

Following clever description is reproduced from the *Manuel complet de Médecine légale*, by J. Briand et Chaudé (1).

"The spermatozoïdes are nearly always some of them

(1) Paris, J.-B. Baillière et fils, éditeurs.

entire, and some broken. The relative proportion of one to the other is more or less considerable in different cases. The number of those which are broken is greater, where the spots are old, very dry, or require a greater account of scraping.

The entire spermatozoïdes consist of a larger portion, somewhat flattened, which is called the head, the body and the disc; and of a long appendage which is called the tail. The latter begins to diminish immediately from its commencement, near which it sometimes exhibits two or three slight ovoid swellings pale, moniliform or slightly irregular. The head is pear-shaped, flattened ; its narrowest extremity terminates in front, the widest behind; it is at this last point that the tail is fixed. The total length of the spermatozoïdes is 5 hundredth of a millimètre on an average, and varies very little. The head is 5 thousandths of a millimètre in length, 2 in thickness and 3 in breadth behind. The spermatozoïdes are pale, grayish and transparent. The preparations made in the conditions indicated exhibit many spermatozoïdes with their tail broken in the middle and others near the head. Fragments of the tail are seen here and there which are not terminated by a head. In spite of these fractures the nature of these bodies is easely recognized by reason of the shape and peculiar appearance of the head, whether it is seen in front or from the side. Sometimes the spermatozoïdes are not free and floating in the liquid as prepared, but plunged into the amorphous mass, swollen and softened with mucus, which is produced in the seminal vesicles, and is found more or less abundantly in the ejaculated sperm and in the spots. They are rounded or ovoid, with a regular outline, sometimes sinuous. Sometimes they touch one another and consolidate, so as to form pale masses nearly perforated and areolar. Nearly always they unite together

a few spermatozoïdes or leucocytes, and molecular granulations.

In the sperm which has cooled after ejaculation prismatic crystals oblique at the base and rhomboïdal in shape composed of phosphate of magnesia are constantly produced ; they are often slightly elongated or flattened out, which gives them a lozenge-shape. These crystals assume individually as they form in large or small volume a general shape slightly more or less elongated, and remain isolated or grouped in different ways. It is not uncommon in examinations to meet with their different crystals in the spots of sperm, but when they are voluminous and from 1 to 2 thousandths of a millimètre in length, they are frequently broken.

In the spermatic or supposential spots submitted to his examinations, the expert may find mixed with the elements of the product, (1st) microscopical grains, irregular, dark, such as are found in the greater part of dusts with an origin foreign to the human body; (2nd) a few grains of starch similar to those which are found on the surface of many fabrics and in many dusts; (3rd) rare polygonal cellules, slender, transparent, 3 to 4 hundredths of a millimètre in breadth without any nucleus, almost without granulations similar to those which are continually detached from the epidermic surface of the human body, and which remain for the most part adhering to the garments applied directly or indirectly to the skin.

Almost always there is found in preparations made with the spots, a certain number of greasy granulations with a yellowish centre, which normally exist in the ejaculated sperm.

It is possible, in case of need, to render the outlines of the spermatozoïdes more clear by adding to the prepara-

tion of water a small quantity of iodure ioduret, as M. Boussin has indicate (1).

Some of the epithelial tesselated cellules of the urethra may also be met with in it; these the sperm carries along with it at the time of ejaculation, and are nearly always present in small quantity.

The expert ought then to be acquainted with these cellules and to know how to distinguish them from the epithelial tesselated cellules which proceed from the vaginal tunic. He ought also to know that in some subjects, as an individual variety the urethra is found hung with cellules, very small and prismatic rather than tesselated.

Often too there is formed in the matrix of the spots of sperm, a certain number of leucocytes or globules with spherical details, finely granulous which exist normally in the ejaculated sperm. However they are often in the preparations made with spots slightly less irregular in form, and slightly less uniformly granulous, than in the fresh state. The action of the water causes one or two nuclei to appear which are absent in recently ejaculated sperm.

It is more uncommon, but not exceptional, to meet with regularly spherical drops, limpid, pale in colour, feebly refracting the light, of variable size, which exist nearly always in the ejaculated sperm, and continually in that of the seminal vesicles.

This remark applies equally to the sympexions, pale corpuscles or concretions, transparent and feebly refracting the light.

(1) *Examination of spots of sperm. Annals of Public Health and Legal Medecine. 1867.*

## CHAPTER III

### MALE APPARATUS OF COPULATION

Penis. — Gland. — Structure of the penis. — Coverings of the penis, or prepuce. — Cavernous bodies. -- Spongious bodies. — The canal of the urethra : its different divisions. — Mucous of the gland and its sensibility. — Interior surface of the urethra, its glands and its papillæ. — Muscles of the urethra : glands appendant to the canal of the urethra. — The prostate and its structure. Glands of Cooper or Merry. — Vessels and nerves of the penis. — Bladder.

**Male Apparatus of Copulation.** This consist almost entirely of the penis, which conveys the sperm into the organs of the woman, and to which is attached the urethra, the canal common to the sperm and the bladder, and the defferend glands which are appended to it, the glands of Cooper or Merry, the glands of Littré, and the urethral glands. In fact owing to the close relation which the copulative apparatus has to the urinary apparatus, owing to their common canal the urethra, and therefore to the reaction which disorders of the urinary apparatus have on the entire apparatus of generation, we have considered it useful to give in this part an anatomical description of the bladder.

**The Penis.** The virile member in man, medically denominated the penis (a latin word), is employed by the male for copulation for the purpose of pleasure and of the

reproduction of species. This organ, regarded as to consistence, both of its shape and direction, presents two appearances.

In its habitual condition, and when it is employed for the requirements of the urinary apparatus, it is soft, flabby, hanging the length of the purses; in this state, its shape is that of a slightly flattened cylinder.

Under the influence of an erection (sexual generally), the blood penetrates in considerable quantity into the penis, which enters a state of erection, rises from the side of the abdomen, and becomes harder and more voluminous than it is when in a state of repose; its shape too is altered and then represents a triangular prism with rounded side.

The proportions existing between the copulation-organ in a state of repose and the same when in a state of erection, do not depend in any degree upon the size of the penis when all sexual excitement is absent. A penis, in fact, which is of very small dimensions when it is hanging, may attain enormous dimensions at the time of erection. It is not uncommon, on the other hand, to see a very voluminous virile member attain by erection a size very little superior to that which it has in a normal state. Individual differences in the size of the penis are considerable; they vary at once according to races, and according to the individuals of each race. We may say nevertheless that in the french race the average *in erection* is from 140 to 150 millimètres and always from 36 to 38 in diameter.

Two different parts of the penis must be distinguished: an anterior part, free and vertical constituting the penis properly so called, and a deep part, situated in the thickness of the perinæum and in continuation with the bladder.

**The Gland**. The free part terminates in an enlarge-

ment called the gland pierced at the top by a vertical hole or *urinary meatus*. The base of the gland, which is enlarged to form the crown, is narrow, circularly, and in this groove is attached the cutaneous fold called the prepuce. Behind the crown a depression occurs where there are numerous glands which secrete a caseous matter, resembling white cheese, and having a pronounced odour of cheese. They are called Eyson glands.

The surface of the gland is covered with a thin mucous, which displays a slightly rosy colouration and forms thin folds when the penis is in a state of repose. But during erection, when the turgid gland assumes a provoking appearance, the rosy coloration changes to a bright red, the folds disappear, the entire cone becomes shining, and the tension is so great that it seems ready to break and allow the confined blood to escape.

The upper surface or back of the penis is furrowed with veins; the lower surface is noticeable for the projecture which forms the canal of the urethra.

The posterior extremity or *root* of the penis penetrates into the thickness of the perinæum, where it divides into three branches, two superior and lateral which are fastened to the bones of the pelvis, and one mesial and inferior, enclosing the urethra and running to the bladder and ejaculatory conduits.

**Structure of the Penis.** The copulative organ is composed (1st) of the canal of the urethra, (2nd) of the cavernous bodies, (3rd) of the spongious bodies, (4th) of the muscles, arteries, veins, and nerves; all these component parts are enveloped in three coverings.

Let us observe these component parts from without and from within.

**Coverings of the penis.** Outside, we find the skin which is noticeable for its fineness, its extreme mobility, and the total absence ot any hairs. The second covering, that situated beneath the skin, consists principally of muscular fibres. The third is cellular. This latter is much relaxed and can be infiltrated very rapidly : its infiltration is sometimes so rapid that a few hours are sufficient for the penis to attain its full size four times. The last covering consists of an elastic tissue. It follows the suspensory ligament of the penis, forms the immediate covering of the cavernous bodies, and the spongious portion of the urethra, which it separates and to which it is extremely adherent.

**Of the Prepuce.** At the end of the penis, the skin forms a cutaneous fold called the *prepuce*.

The way in which the prepuce is formed by the skin is as follows. When it has reached the level of the gland below the crown, sometimes at its very anterior extremity, sometimes towards a point nearer to its base (a condition which cause the prepuce in individuals to be more or less long) the skin of the penis folds back on itself and changes its character by transforming itself into a mucous membrane. Then, without forming any adherence with the surface of the gland, it inclines backward, leaning against the cutaneous covering, and when it reaches the base of the gland, it folds back on itself a second time to unite with the mucous membrane of the anterior extremity of the penis.

The length of the penis is very variable in different individuals. With some, it projects over the gland 2 or 3 centimètres in the shape of a cap, with others it terminates on a level with the urinary meatus. More rarely, it scarcely covers the crown and leaves the gland almost entirely exposed. On one occasion only, in a Chinaman, have we

seen it leaving the crown free and forming behind it a little circular cap which naturally disappeared at erection. This Chinese boy (15 years old) declared that it had always been like this: besides, the prepuce bore no trace of any operation.

The trænum or fillet of the prepuce is a small triangular fold of the mucous membrane, the base of which is opposite to the root of the penis, while the top of it reaches to seven or eight millimètres of the urinary meatus.

It often occurs that the frænum is too short to allow the prepuce completely to expose the gland at the time of coition; it is then requisite to cut it, a small and very simple operation, which is not at all serious.

The mucous surface of the prepuce includes several small glands which secrete a caseous odorous matter designed to lubricate the gland and the inner surface of the prepuce. The name of *preputial smegma* is given to the accumulation of this secreted product, and it is from this that the extremely fetid odour of those persons arises, who do not wash their genital parts every day.

**Cavernous Bodies.** The cavernous bodies are two erectile organs which compose the skeleton, so to say, of the virile member.

They are completely independent of the gland, and their root, which originates in the bones of the pelvis, to which they strongly adhere, gradually increases in size, and inclines forward, upward and inward as far as the front of the symphysis pubis. At this level they are in juxtaposition, separated by an incomplete mesial partition, in all their extent. The average length of the cavernous bodies is from 14 to 15 centimètres in their ordinary state, and from 20 to 21 centimètres in a state of erection.

To sum up, they are two species of cylinders placed

back to back like the two barrels of a double-barrelled gun. Their anterior extremity is capped by the gland. If a penis in a state of erection is pressed between the fingers, it will be seen that the comparison of the cavernous bodies to the two barrels of a double barrelled gun is absolutely exact. As a fact, at the upper portion of the cavernous bodies a longitudinal groove, not very deep, is felt, in which are lodged the dorsal nerves of the penis. It is the same at the lower surface of the penis where a wide groove is found, in which is lodged the canal of the urethra, like the ram-rod of a sporting-gun, which is loaded at the muzzle.

**Structure of the cavernous Bodies.** The cavernous bodies are separated and enveloped by a whitish fibrous membrane, very resistant, very tensile, and very elastic. This triple quality is necessary in order that erection and the relaxation which follows it, may occur.

Inside this membrane are found numerous reddish partitions, principally composed of muscular fibres, crossing one another in every way so as to form cavities or areolas. In these areolas occur small vessels which deposit the blood which has come from the arteries. In the cavity of these same areolas may be seen originating the veins which carry away the blood from the penis.

**Spongious Body.** The spongious body is of a different nature, but it also has the characterization of distending and hardening under the influence of the afflux of blood. It is situated round the canal of the urethra for which it forms a kind of sheath; it displays two enlargements: one situated behind, at the root of the penis, the bulb; the other at the extremity of the penis, the gland.

**The canal of the urethra**. The urethra is a conduit which extends from the bladder to the urinary meatus, serving for the excretion of the sperm and of the urine. It offers for our consideration first, a fixed portion extending from the neck of the bladder to the angle formed when the penis is in a state of flaccidity, by the change of direction of the virile member in front of the pubis; this portion forms a curve with an anterior and superior concavity. (2nd) A mobile part, falling when the penis is in a state of repose, and straightened when it is in erection. The canal of the urethra almost immediately after its origin in the lower part of the bladder, traverses the prostate gland; there it perforates the partition which closes the lower part of the pelvis. It afterward becomes involved in the spongious bodies.

The average length of the urethra may be estimated at 16 cent. 5, but it is not uncommon to find urethras of 18, 19, and even 20 centimètres, a fact which has no relation to the length of the penis, for the virile member of a subject may be very long, without the canal for the urine and sperm exceeding on that account the average dimensions.

It would be wrong to imagine that the canal of the urethra remains wide open in the normal state; as a matter of fact, it is not distended until it is on the point of being traversed by the sperm, or when the urine is flowing. In a normal urethra, except from micturition and erection, the walls of the canal are laid one against another and the free passage of this conduit is completely closed.

The urethra does not present uniform cavity; it is contracted naturally at 4 points and expanded at three. The urinary meatus is surrounded with a fibrous ring, and is merely a hole 5 to 7 millimètres in breadth : this prevents it from admitting any round objects but those having a diamètre of 3 to 4 millimètres. Commencing with the mea-

tus it displays a very pronounced dilatation which is called the navicular fosse; it is contracted on a level with the frœnum and keeps a nearly equal calibre for a length of 4 to 5 centimètres, that is to say on the remaining portion to the pubis from the penis in repose. Starting from the pubis it expands again as far as the bulb, where it attains its greatest diameter; but immediately afterwards it contracts again considerably, and then it expands for the last time in an ellipsoid shape in the interior of the prostate. It contracts definitively on a level with the neck of the bladder the same as at its exterior orifice.

In turning from behind to the front, *id est* from the neck of the bladder to the urinary meatus, the urethra may be divided into three regions which are designated by the names of the prostatic region, the membranous region, and the spongious region.

**Prostatic region.** The urethra immediately after its egress from the bladder hollows out, so to say, in the prostate a passage very near its upper surface : the prostate often forms merely a groove to receive it. In the lower wall of this region of the urethra a mesial projecture is observed, designated by the name of the verumontanum or crest of the urethra; it is on the sides of its posterior extremity that the ejaculatory canals open after traversing the prostate obliquely.

**Membranous region.** This portion of the urethra forms a concave curve in a forward and upward direction. Its lower surface is in connection with the bulb, Cooper's glands, and the rectum. It is surrounded with muscular fibres, the greater portion of which compose Wilson's muscle.

**Spongious region.** Much longer than the preceding, the spongious portion of the urethra is thus named from the erectile sheath which envelops it, and the structure of which is analogous, although thinner, to that of the cavernous bodies. It is lodged in the groove of the cavernous bodies, and presents two enlargements; the posterior one or *bulb of the urethra* which fills up the space left between the cavernous bodies; the anterior one, or gland, as we have said above. The spongious portion has at first an oblique direction from below to above, and from behind to the front, as far as the level of the suspensory ligament of the penis, then vertically downwards or upwards, according as the virile member is flaccid or stiffened by erection.

The anterior enlargement of the spongious body, or gland, has the shape of an ace of hearts with a rounded point, cut off very obliquely at the cost of its lower surface; it is doubly hollowed at its base to cover the point of the cavernous bodies, which penetrate even into its interior.

**Mucous membrane of the gland.** The surface of the gland, slightly folded when the penis,is flaccid becomes smooth and shining when it is in erection. The mucous membrane of this organ is in continuation with that of the urethra, and the epidermis which covers it is more or less thick, according as, either through circumcision, or owing to the shortness of the prepuce, the surface of the gland is exposed to the contact of the air and to the continual rubbing of garments, or as it is habitually covered by its sheath and withdrawn from the influence of external agents. Thick and dry in the first case, it displays less thickness and is also more moist in the second. Therefore the appearance of the gland is very different in those

individuals who have been circumcised, and in those who have it habitually covered. The sensibility of this organ, as may easily be understood, is more acute in one case than in the other. It is true that on the other hand this sensibility presents grave inconveniences, as will be seen further on.

The urinary meatus has its two lips of a rosy colour when in a healthy state; swollen and red, when an inflammatory condition of canal of the urethra exists.

**Interior surface of the urethra.** — The canal of the urethra is lined through its whole length with a mucous membrane. This membrane is thin and transparent, and, according as it is examined at the anterior portion of the canal or at the deep portion, it is either of a rather bright red or of a whitish colour. It is furrowed with longitudinal folds which disappear at the distension, and has frequent projectures and orifices. On the upper wall of the canal are also seen valvular folds, somewhat numerous, the most important of which is known by the name of Guerin's valvule.

The most important projecture is the veremontanum, which is 1 millimètre thick, 1 to 2 millimètres high, and 13 millimètres long, placed longitudinally in the lower wall of the perineal portion, above the prostate. At its culminating point is seen an orifice which leads into a *cul-de-sac*, 1 centimètre in depth, which is called the *prostatic utricule*, the use of which is not known.

From either side of this orifice through an opening 1 millimètre in diameter, there emerge the ejaculatory conduits for depositing the sperm in the urethra. There also exist at the base of the veremontanum on either side, five to eight small orifices, arranged in lineal Series.

through which the prostatic conduits pour the product of the secretion of the prostate.

In the perineal portion are found, especially at the lower wall, numerous small openings leading into the small cavities, designated by the term " Morgagni's lacunae " These are the openings of the canals of Littré's glands.

The extremity of the urethra, which opens into the bladder, is always closed by a muscle in the shape of a ring or sphincter. From its lower part there rises, in the case of old men, a projecture named uvula.

The canal of the urethra is lubricated by the secretion of the different glands, mentioned further on, which come and mingle their products with the sperm.

When the imagination or any voluptuous excitement arouses the activity of the genital apparatus, the secretion of these glands frequently rises before the organs enter upon their functions; this occurs as the result of a prolonged erection, not followed by ejaculation; the secretion of these glands may be compared to that of the saliva which rushes into the mouth at the sight of a coveted morsel.

**Papillae of the mucous membrane.** — In addition to the elastic fibre, the urethral mucous displays on its surface numerous papillae to which is due its exquisite sensibility at the moment of the ejaculation of the sperm.

*Per contra*, the mere passage of an indiarubber-tube, even if it is well lubricated, causes a sensation of pain. When the mucous membrane is inflamed, the passage of the urine by the urethra causes atrocious pains, to be compared, as those who have felt them say, to the blade of a razor traversing the canal. Thence arises the popular term *chaude-pisse*, applied to blennorhagia, a complaint so frequent among the younger generation of Americans. The

mucous of the urethra is doubled by a muscular tunic with smooth longitudinal fibres half a millimètre in thickness.

**Muscles of the urethra.** — The muscles proper are three in number. The *transverso-urethal*, the *bulbo-cavernous* and the *orbicular*. The orbicular muscle covers the urethra and the prostate as far as the bladder, and is attached to the spongious body. The contractions of this muscle have the effect, by compressing the urethra, of diminishing the calibre of the canal, and consequently of expelling the last drops of urine or of sperm.

The bulbo-cavernous surrounds the urethra like the preceding, and like it is attached to nearly the same points. Its office is to drive the blood from the gland towards the urethra during erection, and to expel the last drops of urine and sperm.

The transverso-urethral is situated on the ischio-pubic branch and on the orbicular; the fibres which emanate from this muscle are designated Wilson's muscle, which form a handle which embraces the urethra. The office of the transverso-urethral is to close up the canal, and particularly to fasten the membranous region of the urethra.

**Glands appendant to the canal of the urethra.** The prostate is a gland in the thickness of which is included, as we have said above, the origin of the canal of the urethra at its egress from the bladder. Its shape may be compared to that of a chestnut : its appearance is bilobate and round, and in fact the comparison is sufficiently correct.

Rudimentary during youth, the prostate attains about the age of 25 its complete normal development. It weighs on an average 10 grammes, and measures in three dimensions 15, 17 and 22 millimètres. With old men, indepen-

dently of any morbid condition, it increases in size. We compared it just now to a chestnut; its division therefore into two *lobes* or *lateral lobes* will be understood without difficulty; the projecture which it makes under the mucous membrane has received the name of *mesial lobe;* a projecture which is not really apparent except in men over 60.

**Structure of the Prostate**. The substance of the prostate is of a yellowish gray, sometimes reddish, which contains so large a number of muscular fibres, that the glandular substance, properly so called, may be estimated at only a third of the organ. The glandular element is composed of about forty small glands which all open into the urethra on the side of the verumontanum and secrete a transparent viscous liquid.In the glandular vesicles and in the excretory conduits of the prostate, concretions, known by the name of prostatic calculis are frequently found.

**Glands of Cooper and Méry**. These are small glands, varying in size from a pea to a nut, situated on each side of the mesial line, at the base of the bulb, in the thickness of the muscular fibres of that region.

Like the prostate they are surrounded with very numerous muscular fibres. Their excretory conduits, 3 centimètres in length, empty themselves, after traversing the bulb, on the mesial line of the lower wall of the urethra, one in front of the other. The mucus which they secrete serves to lubricate the walls of the internal mucous membrane of the urethra, and to facilitate the flow of the sperm.

**The Bladder**. It is known that the bladder is a pouch with extensible walls, situated in the small pelvis,

which forms a reservoir able to retain the urine for a certain number of hours. It is oval in the case of an adult man; in a child it has the shape of a pear, the top of which faces the navel. In the woman, who has fewer opportunities than man to satisfy her wants to urinate, the prolonged retention of the urine causes its size to be more or less increased.

Its dimensions are variable. It occupies so small a space when it is empty; but in proportion as it fills, it rises in the abdominal cavity, and may chance to go beyond the navel in the case of retention of urine. Dilated to an average extent it contains from 5 to 600 grammes of liquid.

On its exterior, the bladder is in connection in front with the pubis with which it has points of attachment in the shape of two small muscular ligaments, and besides, with the abdominal wall when it is full; behind, with the rectum in man, and with the two upper thirds of the body of the uterus in woman; on the sides, with the deferent canal; below, with the seminal vesicles, which separate it from the rectum in man, and with the lower portion of the body of the uterus, the neck of that organ and the anterior surface of the vagina in woman.

A ligament composed of three intertwined cords, stretches from its top to the navel.

In its interior the bladder presents towards its lower portion, behind, a *cul-de-sac* in which the urine sometimes remains continually, and where the vesicle calculi are in preference developed; in front, a smooth triangular surface, which is called the *Vesicle Trigon*. At each angle of this triangle an opening exists; at the anterior angle, the orifice of the urethra; at the two lateral angles the orifices of the ureters, conduits designed to afford a passage to the urine, which proceeds from the kidneys where it has been formed.

The walls of the bladder are composed of muscular fibres, covered inside by a thin mucous membrane and united with which they inwardly adhere. The anterior angle of the Vesicle Trigon, where is the opening of the urethra, forms the neck of the bladder. It is surrounded by a muscle called the sphincter, designed to close its mouth. This muscle composed of circular fibres prevents the trickling-out of the urine, and it prevents besides the sperm during ejaculation from returning back.

The bladder fills gradually, and when it contains from 200 to 250 grammes of urine, the need of emptying it communicates itself to the will, the walls contract, and the urine is pressed and forces the barrier of the sphincter vesicle.

**Vessels and Nerves of the Penis. Arteries.** The arteries of the penis are supplied by the internal pudic artery, a terminal branch of the hypogastric, except a few branches of slight importance which are distributed in the coverings of the penis and which come from the external pudic, a branch of the femoral. The internal pudic passes along the ischio-pubic branch, supplies the bulbous artery and terminates at the angle of the junction of the two cavernous bodies, by giving rise to the cavernous artery and the dorsal artery of the penis.

**The bulbous artery** is principally distributed at the base and at the lateral and lower parts of the spongious body. These divisions branch out into clusters of small arteries, like the arteries of the cavernous bodies, and terminate for the greater part in the aerolae. Others are distributed in the trabicules and in the muscular tunic of the urethra.

**The dorsal artery** runs along the back of the pe-

nis, after touching the root of the cavernous bodies and the suspensory ligament of the penis. In its course it furnishes a certain number of semi-circular branches which anastomose with those of the opposite size, forming a part of the cavernous body, and dividing into very thin subdivisions intended for the spongious body. The dorsal artery terminates in the gland.

**The Cavernous Artery** penetrates into each cavernous body by its root, runs along the division, by which it communicates with that on the other side, and furnishes branches from which a quantity of sub-divisions branch, which themselves give birth to branches of still smaller divisions. The latter, which are bent in a spiral shape, are called from this fact *helicene arteries*, and open into the areolae of the cavernous tissue. These arterial divisions are very rich in muscular fibres, and play the principal part in the phenomenon of erection.

**Veins**. First, as in the body of the penis, the arterial system is predominant, so the veins present more importance in the teguments of that organ. The small radical veins give place to two stems which sometimes anastomose or, more rarely, unite to form but one mesial stem; in this latter case the name of *superficial dorsal vein* is usually given to it, in order to distinguish it from the dorsal vein of the cavernous body which is never apparent beneath the skin.

From the areolae of the cavernous bodies or from the large capillaries which terminate there, spring the veins which traverse the partition and the walls of the cavernous bodies, and which go, some into the superficial veins, others into the venous plexus, or finally into the deep dorsal vein, which also receive the venous branches

which come from the spongious body and the urethra.

In the latter, as in the cavernous bodies, the veins spring from the capillaries which are steeped in the areolae. Those of the gland, just as the lateral veins, form the dorsal vein.

**Lymphatics**. The penis possesses a superficial lymphatic plexus, very rich principally in gland. This plexus, composed of very fine ramifications, anastomoses with another deeper plexus, with wider meshes; from which result two lymphatic stems which run along the back of the penis, and take their course into the internal inguinal ganglions. The lymphatics of the prepuce, equally very remarkable, unite on a level with the base of the gland with those of the latter organ, similarly with those of the mucous of the urethra.

**Nerves of the Penis**. The nerves of the penis, belonging to the spinal system, come from the internal pudic nerve which supplies two branches, the upper one is the continuation and the termination of the internal pudic. It is the dorsal or first branch which follows the direction of the dorsal artery from the pubis to the gland, distributes on its way sub-divisions to the upper surface and on the lateral portions of the penis, to the cavernous bodies, and even to the spongious body, and the mucous of the urethra, and terminates in the gland and the prepuce. The lower, or perineal branch supplies nervous frœna to the lower surface of the penis, to the muscles of the urethra, to the bulb and to the mucous membrane. Let us add lastly that some frœna of the genital branch of the small sciatic nerve are distributed in the skin of the penis.

# CHAPTER IV.

## DEFECTS OF CONFORMATION IN THE MALE COPULATIVE APPARATUS.

*A*. Defects of conformation in the penis.
I. Absence of the penis.
II. Arrested development of the penis.
Opinions of philosophers and physicians of Antiquity. — The Marquis' tooth pick. — The Brazilian's porcupine. — Different opinions of Tardieu and Brouardel on the shape and size of the penis in pederasts and masturbators.
III. Exaggerated size or length of the penis. Dimension above the average. The biscuit-rings of the duc de Roquelaure. — Petition of a German Peasant-Woman complaining of the monstrous dimensions of the marital penis. — I gain my livelihood by my P'''. — The son of the King of Kita in the Soudan. — Other instances of exaggerated size of the penis. — Opinion of religious persons on the quality of the virile member. — The Marseillais' mast.
Of the causes of exaggerated dimensions of the penis : influence of masturbation : opinion of different physicians on this question.
Elephantiasis of the penis and prepuce.
IV. Double penis.
V. Palmated Penis.
VI. Wrong direction of the penis in erection.
VII. Congenital torsion of the penis.
VIII. Defects of conformation in the cavernous bodies.

**Defects of Conformation in the male Genital Apparatus**. The male apparatus of copulation often displays, particularly among civilized races, certain defects in conformation which frequently are a cause of impotence : the subject therefore deserves our deep attention.

These defects of conformation may affect the whole penis, or they may be limited to the cavernous bodies, to the prepuce or to the canal of the urethra.

### *A.* Defects of Conformation of the Penis.

These are seven in number:

1. Absence of the penis.
2. Arrested development.
3. Exaggerated size or length.
4. Double penis.
5. Palmated penis.
6. Wrong direction of the penis in erection.
7. Congenital torsion of the penis.

*1.* **Absence of the Penis.** The absence of the penis is fortunately a very rare phenomenon, for Science finds herself disarmed and helpless before this defect of conformation. Nevertheless, perfectly authentic cases exist of this defect. Nélaton observed one in a new-born child, whose sex the mid-wife was unable to determine. She brought the child to the Clinical Hospital, where the surgeon ascertained that the two testicles were properly in their place in the purses; but there was a complete absence of the penis, nor did there exist in its place any tubercle, or orifice, or cicatrix. The umbilical cord being explored, it was observed that there was no passage afforded for the urine, so that that liquid could not escape but by the rectum. This was confirmed by the mid-wife.

Iodiret had the opportunity of observing a case in a soldier who had two normal testicles, but in the place of the penis there was a sort of button, at the top of which the urethra opened: this was capable of erection; when rubbed, a white liquid came out of it, analogous to sperm.

Dumarquay quotes from a German news paper the very

curious case of a robust man without any penis. We give these remarks word for word below, taken from his work (1).

**Absence of the Penis.** — P..., twenty-seven years of age, is a man of unusual strength, tall, strong, well formed, except as regards his genital organs; his beard is fair and very abundant; his parts are covered with bushy hair, the scrotum regularly formed, with a mesial line. The penis is completely wanting. P... was born with this defect. In a minute examination, there was no means of finding the least trace of a penis, at the place where it is ordinarily situated. The right testicle and the cord are normal; on the left there is an acute orchitis. On the anterior wall of the rectum, at a height of 4 lines, a rounded opening occurs on the mesial line, giving egress to the urine. In front of the anal orifice, is seen a cutaneous part, wrinkled, of triangular form occurring on the raphe. similar to a cock's comb; this projection, narrow at first, measures one inch and a half in length, and three quarters of an inch wide and terminating at the anterior part of the anus; it possesses, at its lower angle, a tubercled appendage, a line in thickness, and composed seemingly of the erectile tissue : it becomes swollen, in fact, every time when there is genital excitement, to which P... is very subject. The erection lasts several minutes: it is usually followed by an emission of sperm by the opening of the canal of the urethra: this opening occurs in the rectum. A probe of whalebone, introduced by this urethral opening of the rectum, and directed from behind to the front, and from below upwards, arrives in the bladder by this canal, which is one inch and a half in length and the calibre of which appears normal. The vesical sphincter acts regularly and P... evacuates his urine every three, four, or five hours ".

(1) *Surgical maladies of the Penis.* Adrien Delahaye, publisher.

Dumarquay adds that despite the evidence of this remarkable fact, it may be said that the absence of the penis is scarcely seen but with quite young children, who are otherwise affected with concomitant lesions sufficiently serious to compromise their existence at a period more or less remote from birth. Révolat also has seen a new-born child in which there was no mark of sex, nor any normal opening for stools or urine; but there was a *spina bifida* and a hernia or bilicule, beneath which a transversal opening was visible, through which the urine and meconium passed.

This absence of the penis is often more apparent than real; instances are given in which an operation has had the result of causing a penis to emerge across the narrow portion of the urinary passage, rudimentary no doubt, but sufficient to perform its office. Dr Boutellier of Rouen, published in 1875 the very curious case of a child absolutely devoid of penis, at least in appearance. After a careful examination, the surgeon believed that he detected under the teguments of the sur-crotal passage above mentioned, the presence of a mobile body which he thought was the penis. He made at this point an incision in the shape of a T, and disengaged a penis, rudimentary, but capable of enabling the small patient to urinate and empty his bladder, which he had not yet done.

If this child had lived, the result might perhaps have been satisfactory. He would have had a small organ, but one which might have developed by use at the time of puberty, and his case might have entered among the following.

**II. Arrested development of the penis.** In certain subjects, and they are more numerous than is supposed, the genital organs do not participate in the regu-

lar and progressive development of the whole organism. Under the influence of ill defined causes (among which however we may instance deprivation of all venereal pleasure and sexual exercise until a comparatively advanced age) it is not so unusual as may be at first thought, to see robust, bearded men, with an energetic voice, the bearers of a veritably lilliputian organ.

In the course of my medical career in the navy, both in France and in the Colonies, I have had occasion to examine more than 20,000 (twenty thousand) subjects, of every human race. I have verified the fact especially among the young soldiers of the marine infantry, of subjects, well made, but having a genital apparatus hardly more developed than that of an infant. I have remarked this especially in young men from country districts where the opportunities for coition are not so frequent as in large towns, especially those from villages and hamlets far away from populous centres. Most frequently the arrest of development occurs equally in the case of the testicle and the penis, but sometimes the latter alone remains of small dimension, while the testicle are normally developed. The opposite case occurs more rarely. Peridey has observed a young man, aged 28, suffering from Addison's disease, whose penis was 5 centimètres in length, the prepuce much hypertrophied, with small flaccid scrotum, containing no testicles. Venereal desires were present, and erections, but no ejaculations.

On the other hand, among the young Parisians, many of whom enlist in the navy, I have often seen a subject, slight in figure, narrow-chested, with smooth skin, and but slightly endowed with muscular power, with a voluminous penis, with the gland nearly exposed and normal testicles. These subjects, when questioned, denied masturbation, and acknowledged that they had commenced coition at 12 or 13 years of age.

I had collected nearly 2000 observations regarding these two very different conditions, the exiguity or the enlargement of the genital organs, with measurements and sketches. Unfortunately I have lost the note-books of these observations in a case of books which was stolen from me when I was changing my residence, and I have only been able to find certain observations written elsewhere.

**Opinions of the philosophers and physicians of Antiquity.** What I have remarked on the influence of continence or dissoluteness on the copulative organ is in no way a novelty. From the earliest antiquity philosophers and physicians have pointed it out. Plato in a few words gives valuable evidence regarding it. « The parts of the body become weakened and relaxed by repose, and increase in shape and vigour when they perform the functions proper to them. » In Aristophanes, we find the *small penis*, as an attribute of those who have preserved their innocence, and the *large penis* as a sign of dissolute young men. Galien confirms these observations of Plato and Aristophanes. He says that the genital organs of athletes, and of all those men who are compelled by their profession to be chaste, are generally shrunk and retracted, like those who indulge greatly in venereal pleasures.

In proof of this opinion the Greck sculptors have represented Hercules, the god of strength, with testicles of a moderate size, in a well-rounded and tightened scrotum, surmounted by an ordinary-sized penis.

It is the same in the Belvidere Apollo, whose organs are of ordinary size. In the Bacchus and in different statues of youths, the penis is more developed, and the purses somewhat more pendant than those of Hercules.

But for all that, I should not like to conclude that the small penis is a characteristic of absolute chastity, and the

large penis a characteristic of the contrary. This would be a serious error. There is also the question of atavism, which has a considerable influence on the matter.

**The Nose and the Penis.** There are persons who are born with a small penis, and others with a large one; just as there are persons who are born with a rudimentary nose, and others with an enormous nasal appendage. There are all varieties of noses, from the nose of a pug-dog to the proboscis of a tapir. Popular intelligence has remarked that there is an intimate connection between the size of the nose and the size of the penis. Country people say, *Big nose, big penis*. This is a translation of Ovid's line " *Noscitur a naso, quanta sit hasta viro.* It is known by a man's nose how big his penis is. " Martial has said too, " *Mentula tam magna est, tantus tibi, Papele, nasus, ut possis, quoties arregis olfacere.* — Thy nose is so long, Papelus, and thy penis is so large, that thou canst smell it when it stands up " Which may be freely rendered into verse " John has a very long nose and a very big πρικ, he can rub his nose when it stands up stiff ".

Can it be said, inversely, that a rudimentary penis corresponds to an exiguous nose? I do not believe it. In all cases, the following observations we give instances of penises so small that they constitute an absolute infirmity.

**The marquis' " toothpick ", and the Brazilian's porcupine.** I have read in some collection of anecdotes of the 18th century that among the Seigneurs of the Court of Louis XV, there was a certain marquis (whose name I regret that I cannot remember) whose penis was so rudimentary, that it was an object of scorn and derision to the " faire and virtuous ladies of the Court ", as

Brantôme would say. He owned, the saying was, a *tooth-pick*.

Roubaud (1) quotes another extraordinary case in a young Brazilian, who came to consult him about this infirmity. " Before showing me his organs, the patient informed me that he not only had venereal desires, but also frequent erections, and that, when he masturbated himself, the ejaculation took place with all the voluptuous spasms which usually accompany it; while during coition, in spite of every effort he made, it was never produced. The penis in erection had scarcely the ordinary size of a porcupine's quill, and was two inches in length. Evidently the pressure exercised in coition by the vaginal walls on the penis of this young man was *nil*, or at all events quite insufficient to draw the prepuce back and to cause the excitement necessary for ejaculation. " Upon this, Roubaud invented an apparatus to increase the size of the Brazilian's porcupine : — an instrument of which we shall speak further on with others of that kind.

To this most original case, we may add other observations offered by Dr Garnier, who has been already quoted. This author is of opinion that the congenital smallness of the penis, which frequently coincides with absence or atrophy of the testicle, produces feminism and constitutes thus the condition of a *natural eunuch*. Those subjects who endure this cruel infirmity, naturally become, like Roubaud's Brazilian, addicted to masturbation, as the only means of satisfying themselves, for they are ashamed of themselves, and dread not only to affront the woman, whose derision they fear, but also the looks of other men. I have been able to verify the justice of this philosophic observation in my monthly sanitary visits to

(1) Traité sur l'impotence et la stérilité. Paris, 1876.

the troops — as the troopers call them, " *Inspections of martingales.* "

**Different observations.** Let us resume Garnier's observations. " A Belgian Schoolmaster, aged 21, 1/2 years, thus draws his portrait on April 21st 1887. Slender stature, medium voice, body without any prominent muscles or predominence of fatty tissue, chestnut-coloured hair thinly scattered, beard insignificant, penis very small, absence of testicles in the purses : fond of music and dancing; absolute aversion to women — " never have I tried one, although I have often had the idea of it — ". Ardent desire to satisfy the sexual wants; experiments made on myself with premeditation since the age of 17, but they have not produced any result, as the sperm ejaculates in spite of my continence ".

This unfortunate man was therefore a true eunuch.

A youth aged 20, in good health, and never having had any illness, although he had abandoned himself to masturbation from 10 to 18 years inclusive. He attributes to that the atrophy of his organs, which he thus describes. " The penis is small and slender : the gland is wrinkled and small, the testicles small, soft, flaccid and pendant. I am able however to have connection, but in an imperfect and incomplete manner, and I have frequent seminal losses at night, always in a dream ".

Garnier assents to the opinion of the subject, who attributes the smallness of the organ to masturbation. We are absolutely of the contrary opinion, for reasons which will be seen hereafter.

Sterile union for 12 years of marriage, between an orphan aged 16, whose menses commenced at 13, and who was still growing until 18, and a youth aged 21, slender, delicate, with a shrill voice, but lively, active and

intelligent, and in a liberal profession. His genital parts have an infantile appearance, penis slender, gland small and soft, covered with a long prepuce which completely hides it. The gland never passes it spontaneously; in the most complete erection the hand is always indispensable to raise it. Testicles like small filberts, sperm not very abundant but normal ". According to Garnier the absence of beard is generally characteristic of feminism and a feeble virility. In support of this he gives the following observation.

" A tall and strong youth of 27 or 28 years of age, a pale blond, bordering or the albino, and having only a few scattered hairs of that colour under his nose, offered himself, in 1886, to act as nurse in an infirmary or as nurse for the sick in a private family. On my remarking on his absence of beard, he showed me his genital parts which were no more supplied with hair than his chest or limbs. The penis was but slightly developed, in spite of his habits of masturbation. He had never felt any inclination for the other sex. On the contrary he had allowed himself to be made love to by a man and had given himself up to passive sodomy for several years,during his military service. He had a deep voice, and nothing in his external habits revealed this sexual inversion ".

We will discuss this observation later on, from the point of view of sexual inversion. For the moment,we will be content with saying that we have often met with men absolutely smooth, but very vigorous and possessing normal genital organs. We even give above our observation of a youth, aged 23, with a penis above the average size.

Our belief is, contrary to Garnier's opinion, that the question of the abundance of hair on the head and body, is a question of races and sub-races, and has nothing to do with the genital organ.

The Asiatics, and especially the negroes, the Americans, the Arabs whose genital apparatus is the most developed in the human species, have the pelous system very slightly developed, nor is the hair of the head any more so. The Tahitians alone have abundant heads of hair, but on the other hand they have but little hair elsewhere, particularly on the body. But we are agreed with Garnier in admitting that the slenderness of the penis, or its want of length in the case of normal size, is the almost certain result of masturbation, and we quote in support of this the three following observations given by him (*Sexual Anomalies*).

" (12). A man of about 40, well made, but of short stature displayed this deformity to the highest degree. The protruding portion of the penis in erection did not measure more than two to three centimètres, with a thin, slender gland, imperfectly revealed. He indulged in manualization as the only means of relieving himself.

(13). " The contrary was the case with a stout, thick-set youth of 26. The penis was very voluminous, with the gland like a club; it presented a shapeless mass, scarcely showing its shape in a state of flaccidity, and being only five centimètres in length when in erection. He indulged in onanism with another, not being able to do anything else.

(14). Similar to this was an employé at the glove-counter in a large shop, a handsome young man of 24, tall and strong. When relaxed the penis formed a shapeless mass, hardly protruding, as wide at the root as it was slightly developed at the extremity by a very small gland. It scarcely developed at all in length when in erection. Ashamed to display this conformation to women, he had indulged in solitary masturbation; then, feeling himself tickled by a hand, when he was pushed and pressed in a crowd,

he had felt pleasure in this and had gradually habituated himself to masturbation with another man, without ever having attempted coition, believing himself incapable of it.

There is no relation, we have remarked, between the volume of the penis in repose, and its size in erection. In certain individuals, whose penis is of normal size during erection, this organ in the state of repose is so retracted, and retreats so much in flaccidity, that it is no longer visible outside, especially in certain special conditions of fear, cold, and pain. The anterior urethra is so much drawn in, or retracted in the pelvis that the wrinkled sheath alone is apparent.

In these conditions, says Garnier, the man is more impotent through timidity, fear of ridicule, — the fear of displaying his organs, — than through their exiguity.

And the author quotes two instances; one, a former non-commissioned officer had remained a bachelor for the following reason. Constitution with little pronounced virility : genital organs well shaped and of ordinary size, but the penis displayed a want of visible length, since in complete erection it only reached a total length of 11 to 12 centimètres.

The case does not seem to us very convincing, for the number of men whose penis in erection does not exceed 12 or 13 centimètres, is considerable, and nearly as large as those of the normal size, which is, as we have said, 15 centimètres in the whole of the French population.

May we be permitted to say that the ladies of pleasure, who have on this special chapter practical knowledge superior even to that of a specialist physician, have a special term to denote this size above the average. They say that the client has a *pine d'officier*. The origin of this term I do not know. Regarding the ordinary size, they say that is "*un bon nœud*".

The 2nd observation of Garnier is more characteristic. We give, it for these reasons in extenso, for the author makes a statement contradictory to his previous observation, in which he assigned to his client without hesitation the rank of an anaphrodite, which in our opinion he did not deserve.

" A recent instance (Dec. 20th 1880) contradicts this estimation. It is that of a gentleman, aged 34, slight, thin, very dark, and by his accent from the South. He came and asked point blank if the smallness of his penis permitted him to marry, without incurring serious inconveniences.

— Have you no experience then, Sir, in this respect ?

— Pardon me; as much as a young man of my age can have with kept mistresses and casual women and girls, and even now, I cannot remain for more than a week without seeing some.

— You are able then to answer the question better than anybody, after your previous habits. Have you met with any disagreeablenesses or insults ?

— Except a few unpleasant remarks on the small size which I present, the result has been favourable, and I have often been able to repeat it several times. But what the man requires in such a case and the woman also, is in no way to be compared to conjugal relations. See if I have any reason to disturb myself about it.

And he displayed a penis so short and retracted as to be hardly perceptible. It was hard and measured less than four centimètres, with an exposed gland, slender, and exceeding the body of the organ. The scrotum was contracted, containing two small hard testicles, raised against the ring.

— The appearance is not very favourable, but it is not its normal condition. I must see the parts in erection in order to judge of them.

— That is easy, he said, and in the twinkling of an eye, he displayed a complete transformation. The swollen penis was 13 centimètres in length and of proportional size without the erection being complete.

— How can you feel any alarm, with such a respectable average ?

— Regarding it in a state of laxity, I always believed that I was inferior to other persons. It was a settled idea, and not being able te satisfy myself *de visu*, I determined to know the truth.

— I can assure you, after what I have seen, that you exceed the majority and, in such a case, excessive size is often more detrimental and even dangerous than inferior size ".

Certainly a subject who, in the twinkling of an eye, before a man whom he had never seen before, and apart from any lascivious thought, increased the size of his penis from 4 centimètres to 13, is not an anaphrodite, and might rather include himself in the class of cynics, as a pupil of Diogenes their famous master.

We may also give the instance of a friend of ours, a very distinguished naval officer, whose penis, when in a state of repose, was similar in shape and size to the cigar called favorits, and whose prepuce was very long and covered the gland when in erection, only allowing the point of it to emerge together with the urinary meatus. In erection the penis lengthened to 13 centimètres, but the diameter was only 25 millimètres. The covered gland had a very pronounced conical shape, and its point was bent round, very probably owing to the shortness of the frænum. I had known this officer in a College at T... in the South. Until the age of 15, he had an admirable soprano voice ; his singing was as fine as that of the singers (castrati) of the Sixtine Chapel. Most assuredly, if my comrade had been

castrated at that age, he would have been able to sing women's parts all his life, especially as he was a very handsome youth.

At puberty, which did not arrive till he was 16 years old, when he entered the naval school, the testicles suddenly developed, and his voice deepened to such a degree that he was unable to sing properly "Au clair de la Lune". But the penis always remained slender, though it lengthened excessively without increasing proportionately in diameter.

He attributed this fact to his never being able to uncover his gland, by reason of the elongation of the prepuce, and from the shortness of the frænum; as he frequently experienced titillations proceeding from the accumulation of smegma round the gland, he had contracted the bad habit of forcibly drawing the prepuce forward, which at length had caused an elongation of the cavernous bodies.

As this exiguity of the penis, the shape of which resembled that of a dog, frequently exposed him to jokes from the ladies of pleasure of the Port of Toulon, he had unfortunately contracted in Cochinchina, where he had been sent when a young midshipman of 21, the vice of pederasty. If I enter into these, perhaps, somewhat private details, it is in order to show that a penis shaped like that of a dog, is no more the result of pederasty than a gland shaped like a club, as in Dr Garnier's observation, n° 13, is the result of masturbation.

**Opinion of Tardieu and Garnier on the shape of the penis in pederasts and masturbators.** The eminent Tardieu in his *Étude Médico-légale sur les attentats aux mœurs,* has frequently taken the cause for the effect in writing as follows :

" The dimensions of the penis in the individuals who

indulge actively in sodomy, are either very slender or very voluminous : slenderness is the very general rule, large size the very rare exception; but in all cases the dimensions are excessive in one sense or in the other. It is perfectly understood that I am speaking of the virile member considered apart from a state of erection, and that it is necessary to take account of the changes which the venereal erethismus may occasion in the volume of the organ ".

" As to the shape, it has something much more remarkable and truly characteristic, varying moreover according to the size of the penis. In the case where it is small and slender, it becomes considerably thinner from the base to the extremity, which is very slender like the finger of a glove, and quite recalls to mind the *more canum*. This is the most ordinary shape, which I have met with a great number of times.

It was this remarkable slenderness of the penis and this extreme smallness of the gland which struck the experienced eye of that " unfortunate ", who in her depositions concerning an individual who wanted to induce her to submit to acts of sodomy, pointed out of her own accord this peculiar conformation : " A member very thin, slender, and hollowed at the end ". This remark, proceeding from such a mouth, has in itself something too significant for me to pass it over in silence, and despise such testimony.

There is still another peculiar shape which the penis may offer, and which is more especially met with in individuals addicted to masturbation. This latter is well known (and our excellent colleague Jacquemin, if he did not discover it, has certainly made it common), in the prisons, where I have observed it a great number of times. We may designate it by the term, club-shaped penis; it consists in fact of a globulous enlargement of the extremity

of the penis, the gland of which is widened and, as it were, flattened ".

On the contrary when the penis is very voluminous, it is not the whole of the organ which undergoes a gradual diminution from the root to the extremity; it is the gland which, compressed at the base, lengthens sometimes so enormously as to give the idea of the snout of certain animals. Besides, the penis in its length is twisted on itself in such a manner that the urinary meatus instead of facing straight forwards and downwards, turns obliquely to the right or left. This torsion and change of direction are sometimes carried very far. I have seen the dorsal surface of the penis turned completely to the left, and the meatus become transversal.

The error committed by Tardieu arises from his only having seen the penis of subjects in a state of repose, and we have seen above that the difference of this state with that of erection may be considerable. The problem has only been studied from one of its two aspects. The signs formulated by Tardieu have for long been made an article of the law in cases of Sodomy and Pederasty and have been accepted by all the physicians and judges. This is what Garnier says in his work (*l'Onanisme seul et à deux*. Paris, Garnier frères, éditeurs).

" This shape in *canum more* of the penis of active sodomites appeared so well established that I did not hesitate to impute this habit to a young man, aged 24, who had a few pimples of herpes round the meatus of a very small, slender gland, grafted on a penis the root of wich was several centimètres in diameter. Insisting on the causes of these pimples and redness of the meatus, I finally obtained from him the confession that he indulged exclusively in buccal suction. " That is untrue, I said to him, you practice sodomy ". " No; never, never; he answered energetically and with confidence, I feel horror and disgust at it, without

ever having practised it ". I learnt, as a proof of his sincerity, that instead of a woman, he indulged in onanism with his comrades. This sign, like the others, has besides fallen into complete discredit at the present time by the appeal made from this erroneous judgment of the master by his pupil and successor Brouardel. " The shape and volume of the gland, he says, vary infinitely more than the features of the face. There is nothing comparable to the diversity of the masculine apparatus but that of the genital organs of the woman. If the penis is often small and slender, it is an effect of feminism, with which a great number of pederasts are constitutionally afflicted. Having but ill-determined genital aptitudes, they endure rather than instigate the intercourse in which they participate. These are passive sodomists. The greater number of those who take an active part have, on the contrary, a penis very much developed by the exercise which they have given it, often prematurely by masturbation. "

**Exaggerated size or length of the penis.** The exaggerated size or length of the penis conduces to a relative impotence, the subject afflicted with such a penis, resembling a pole rather than an organ intended for love, finding a difficulty in placing it suitably, in default of an habitation large enough to receive it. On this special point we are by no means of the same opinion as Dr Moreau Wolf, who declares, " that it is sufficient for the man who owns such a monstrous organ, to find a woman with a vagina capable of receiving it, in order to allow him to perform coition : now it must certainly be admitted that the thing is possible, for up to the present no man has ever been heard of who, whatever the dimensions of his penis were, has been condemned to celibacy for that reason ".

It is precisely because we have met with subjects who were unable to find vaginæ capable of receiving them, that we are of contrary opinion. To begin with; what dimensions do we judge as having an exaggerated length or size? It is evident that all this is relative. It is clear that the Annamite women, who have small and short vaginæ, since the Annamite men have small and slender penes, find that a normally constituted European is a trouble to them, and suffer martyrdom when they have to do with a negro or an Arab, whose enormously large penis is for them an instrument of torture. Nevertheless, this same conformation causes pleasure, on the contrary, to an Arab woman whose vagina is of a calibre in proportion to the copulative apparatus of a male of her race.

In France, the average size, according to numerous measurements taken from soldiers and sailors, coming from all parts of the country, and the opinion of the greater number of physiologists, appears to be from 14 to 15 centimètres in length, and from 35 to 38 millimètres in diameter, *in erection*.

The average is exceeded, beginning at 4 centimètres in diameter and 16 centimètres in length, and 20 centimètres with 45 centimètres constitutes what the ladies of pleasure call a fine πιβοτ.

Nevertheless such instruments quickly find recipients, and it is often surprising to see small, thin women, who appear to be delicate, real *noli me tangere*, absorbing them with delight, and without missing a single centimètre.

It is not less inexact to say that the penis when it attains a diameter of 5 centimètres and a length of 25 centimètres becomes a pale.

It is not so much its calibre as its length. In fact the entrance of the vulva is often sufficiently open, and the vagina sufficiently dilatable to receive the front portion or

two-thirds of the penis. But if in the cynic spasm, the man thrusts his apparatus brutally and without discretion, there is a shock inflicted on the relaxed muzzle of the matrix, which is a painful matter for the woman, and may occasion a great number of disorders.

When this occurs, it is sufficient to put round the base of the penis one or two indiarubber rings (hollow in preference) which, while diminishing the exaggerated length, also serve as buffers in the shock by taking effect on the woman's Mount of Venus.

On this subject, a short anecdote may be allowed.

**The Duc de Roquelaure's biscuit rings.** I have read, in some memoirs or other of the 18th century, that the famous Duc de Roquelaure (that Gascon who was the delight of the court of Louis XIV, and often under a playful tone imparted different truths to the Grand Roi), had a penis of huge length. As india-rubber was scarcely known at that period, in order to have connection with Madame la Duchesse, his wife, the Duc as a preliminary threaded on half-a-dozen *gimblettes*, a kind of small dry round-shaped cake. It is a case of saying " Where the devil was the pastry going to hide itself? " And when the Duchess had given her illustrious spouse any cause for displeasure, the latter used to say to her in a serious tone : " Madame, I shall take off one of the biscuit rings to night ". So that when the husband was much displeased he punished his wife with biscuit-rings ".

When the virile member excedes 5 centimètres in size and 25 centimètres in length, it then becomes a monstrosity. Instances, however, exist of such redoutable engines, and I quote two of them below.

**Petition of a German woman complain-**

**ing of the monstrous dimensions of the marital penis**. Let me first quote a petition presented to the Court by a German woman imploring for a divorce against her husband who was provided with a too disproportionate penis. It is found in the curious Latin work „ *Gynæcologia Historico-Medica. — Hoc est congressus Muliebris*, by the Doctor *Martino Schurigio* Physico *Dresdensi*, a work edited, *Dresdae et Lyspiae in officina Libraria Hekeliana*, M.DCC.XXX (Sectionis II. Caput IV. De coitu denegato regarding coition beeng refused. § 3).

We give the fac-simile of the page in Latin and the translation of the said petition.

" To your eminent Lordships, gracious Excellencies, and highly honourable Persons, may the request of your servant be presented in very profound humility and in pious prayer to God for you this day, for the purpose of suing for separation between her and H. N., for which a judicial decree is necessary. Seeing that, in my petition of the 10 ultimo, through timidity and shame I hesitated to submit in reading to your eminent eyes and ears the description of the largeness and thickness of the virile member of N.; because at the time of its inspection, hereafter mentioned, it was seen in a state of quiescence, and consequently it appeared smaller than it really is. Therefore, *nolens volens*, I have displayed in the circle annexed the veritable conditions of its size. Now, highly intelligent and sympathetic Christians will not be able to take it for human, but will be more inclined to compare it to that of a horse. How could I then, a weak vessel, a poor little creature, endure such an impossible size, and allow myself to be forced, rent, and reduced to the state of a mangled being? Who would then hold out a crust of bread to me to appease my famished soul? If there was in me the capacity

ſchen mir und H. K. bedarff nothwendig einer im Rechte zu laßl. Leutterung, indem in meiner Noth-Klage ich aus Blœdigkeit am 10. dieſes ſchamhafftig vor dero hohen Ohren und Augen im Leſen unbemühet enthalten, die groſſe und dicke K. Mannes-Glied zu beſchreiben, weiln es bey beſchetigung nur Auffmunterung betrachtet und kleiner Beſchaffenheit ben worden habe ich nobiter ohne die wahre Beſchreibung der Dicke allhier mit gegenwærtigen Circkel einverleiben laſſen. Was nun hochverſtændige Chriſten, gemitleydenwerden es nicht vor menſchlich, ſondern viel mehr einem Pferde zu vergleichen wiſſen, wo ſolte denn ich, als ein ſchwaches Werckzeug, als eine kleine Creatur, ſolche unmœgliche Geſtalt ertauren, mich ſchwingen, zerbrechen und zu einen lahmen Menſchen machen laſſen, wer wolte mir ein Stück Brod meine hungerige Seele zu ſættigen, darreichen; Wære einige Mœglichkeit bey mir auszuſtehen, er würde es binnen zwey und zwantzig Wochen wohl erzwungen, und mich geœffnet haben. Unmœglich bleibet unmœglich. Was GOtt und die Natur gezeichnet, darfür ſoll man ſich hüten. Muß man doch bey Stuttereyen bey groß- und kleinen Pferden einen Unterſchied machen und gebrauchen, ſoll das Pferd Mutter und Füllen nicht auff einen Hauffen in der Geburt verderben, alles beyſammen bleiben und ſterben. Denn dieſer unbeſcheidene und unverſchœmte Menſch im freyen Felde vor allen Küh-Hirten, manchen Tag gantz ohne Scheu, mich wohl dreymal zu Boden geworffen und ſeinen Wil-

to endure it, he might have succeeded in the space of twenty-two weeks, and have opened me. But the impossible is always impossible.

He who has been branded by God and nature, ought to be shunned. Is there not a difference of make, and do not they take account of it when they choose larger or smaller stallions for mares, for fear lest the brood-mare should die at the same time as the foal, at the time when she bears it.

But this indecent and shameless man has many a time thrown me indecently on the ground in the presence of all the drovers, and without being able to do his will of me, which was rendered impossible by the machine which he uncapped, as large and thick as a white turnip; he wanted to split me wider than God had made me.

To this end, he has also been encouraged by his brother-in-law, and by other of his friends, that if he could not have his pleasure of my body, that he might drag me into the woods, tie me to a tree, and kill me with his gun, then quickly depart where he pleased to go."

One remarks in this petition, as sincere as it is simple, that the artless creature observed to the judges that in the medical visit paid to her redoubtable husband, the engine had not been aroused, and had appeared smaller than it was in reality; it is then that she measured it, probably with her bracelet, and found a diameter of 63 millimètres. As she compares it to a horse's member, that would give a length of 4.5 to 5 times its diameter, say 30 to 32 centimètres. One can understand that the poor German was unable to receive it in spite of 22 weeks spent in fruitless labours to allow herself to be "opened". Nevertheless, there are women in existence who would be extremely happy to possess such a husband. And, as the old proverb

says, " husband and wife must be matched in the marriage tie ".

**I gain my-living with my P...** During my stay in New Caledonia when I had charge of the barracks of the 3rd Marine Inf. at Noumea, I had under my charge a corporal, a native of Bordeaux. This man was celebrated in the Regiment for the size and length of his penis. In repose it was the size of an ordinary member in erection, well shaped, with an uncovered gland having a projecting crown, and a body grooved with marked and swollen veins. The testicles were slightly above the average size. The pubis was covered with black and very bushy hair. The subject was of middle height, and well made. But as he had been in the habit of masturbating himself every day since he was 8 years old, his constitution was somewhat worn out. The skin of the penis was dark red and thickened; the mucous membrane of the gland was of normal coloration, but of a tanned appearance.I asked him to masturbate himself in order to observe the size of his organ in erection, and I remarked that he grasped the member with the middle of his hand, rubbing it quickly from the root of the penis to the crown of the gland, against which he rested his thumb. It was this friction, with the subsequent shock, which had at length produced the thickening of the skin of the penis and the voluted shape of the crown of the gland.

Erection in this subject occurred rapidly enough, but he acknowledged that it was not the same with ejaculation, in consequence of the want of sensibility in the nerves of the penis. And yet the unfortunate man was unable to satisfy himself except by masturbating himself,or by an act of bestiality with she-asses or mares, for his member, when in erection, was 66 millimètres in diameter by 294 in length, measured only from the meatus to the pubis!

In erection the penis described a normal bend towards the pubis, and kept at an angle of 30 degrees with the latter.

If P... had been able to find a woman with a calibre equal to his penis, he might have tasted the joys of matrimony.

A few years after my return from New Caledonia, as I was passing through Bordeaux to embark for Senegal, I came across S..... on the Place des Quinconces, stout, prosperous-looking, with a contented air, and well-dressed. I went and said " how-do-you-do ,, to him, and to my enquiry as to his present position, he cynically replied, " Doctor, I gain my living with my P..... " I had an explanation of this horrid joke. It appeared that he had become connected with a band of depraved young swells, who maintained him and used to take him the round of the brothels. They paid the woman very highly who would consent to have connection in public with S...., and the latter received for pocket-money a portion of the collection which was made among these amateurs.

I was even assured, later, that an old pederast accorded the favours of his anus to this rival of Priapus. I cannot vouch for this, but it is not improbable, for the dilatation of the anus attains extraordinary proportions in pederasts, as will be seen later on.

And yet I have found on a negro in Senegal a penis still larger than that of the native of Bordeaux.

**The Son of the King of Kita.** I have already quoted in my work on " *Untrodden Fields of Anthropology* ", the case of a sharpshooter who had a penis 30 centimètres in length by 6 in diameter. He was surpassed in dimensions by the youngest son of the King of Kita. This youth, aged 19, had been sent to St-Louis, to the Hostages' College, where he was learning French and being instructed in our

manners and customs. In reality this jovial blade six feet high, had learnt a few words of French (and what French!). and more especially to drink innumerable glasses of absinthe, alcohol not being forbidden him by his fetish-worship.

He came one day to see me in order that I might attend to a place on his leg, and complained bitterly, my Sarakolan boy being the intermediary, that the French Government did not give him any money to let him have the negresses. They wanted him to pay them for receiving it, and still, he said, half of it remains at the door, for they seize hold of the root of the penis with their hand, in order to prevent its full admittance. He had no hesitation in displaying his penis. His testicles were comparatively small, of the dimensions of a pigeon's egg, but his penis, which was partly stiff even in a state of repose, did not hang down his thighs, but remained half bent in the shape of a crescent with the concave part below. It measured 190 millimètres by 55 millimètres. It would have been even in that state enormous for a white man. I sent to find a professional prostitute, a drunken woman who drank bottles of pure Eau-de-Cologne like milk. For a present of a bottle she agreed to have connection with him, without any special preparations except using her hand to limit the length of the member, which measured from the meatus to the pubis 300 millimètres, and at the swelling produced by circumcision was 65 millimètres in diameter. The negress received the whole size, and allowed it to enter at least 20 centimètres into her vagina. The receiver was worthy of the received.

I observed that when in erection the penis was not very stiff, and that it was elevated at an angle of about 35 degrees, the degree 0 being the horizontal position, and the maximum an angle of 90 degrees, the penis pointing to-

wards the navel. Now there are Europeans, whose penis in erection adheres against the lower belly.

Compare the minute penis of a young Parisian aged 20, with that of the son of the King of Kita.

**Different examples of Exaggerated size of the penis.** Dr Garnier in his " Anomalies Sexuelles " (a French work already quoted), considers that youths endowed with members of excessive size, ought to select for wives tall and outwardly well-developed women, without any apparent defect of conformation.

He quotes the following instance. " A young orphan, aged twenty, came to ask my advice on this matter, on Feb. 5th 1883. He was a handsome youth, with a physical development above his age. Living alone in the country and enjoying very easy circumstances, he had formed the project of marriage, as he was troubled by certain requirements of a genital nature, which he had not yet attempted to satisfy. Having read the work on " *Marriage* " he enquired if the enormous development of his penis was not an obstacle to it. He exhibited it to me first in a state of semi-erection, which shewed me that its proportions were very exaggerated, above the average, without any trace of masturbation. On learning that his intended, eighteen years of age, was tall and strong like himself, I reassured him, and recommended to him the necessary precautions, which are indicated in the work on " *Impotence* " and particularly advised him not to venture on his honey-moon before he had succeeded, on account of the accidents to be feared in taking possession.

Disturbed at the thought that he might fail in his attempt, and fearing that I had not thoroughly appreciated his real conformation, he requested another inspection : " My erection is now complete, " he said, " and I am trou-

bled about it ", and suddenly rising he displayed it. Although regular, the proportions were in fact formidable, and I pointed out to him the prudence of making a prior trial. He was an absolute virgin, and hardly knew how to go to work, never having received any instruction for his new functions. " No ", he said, " I have a horror of prostitutes. I love my future wife, and wish to reserve all my favours for her. Give me in detail the instructions necessary to avoid accidents and I will follow them. In case I am unsuccessful, I will return ". I have never seen him again ".

And Dr Garnier adds: " In such a case everything is relative between the man and the woman. How many husbands, shaped normally and even above the average, have remained for weeks, months, and even years without being able to deflower their wives, owing to the fear that they were too narrow for them ".

**Opinion of three Nuns on the Virile member.** Béroalde de Verville, that grand old French satirist and wit, gives us a dispute of three nuns of Poissy on the nature of the sport of love (virile member).

*Glicas*. Of what is it made, this sport of love?

*Poggi*. The nuns of Poissy taught me all about it, as I was going to Longchamps and other parts. There! I do not name person or place for fear lest others should go. There were three of them who were disputing about it. One said it was made of sinew, for she had a fine sinewy one, when the Court was at Blois. The other said that it was made of stretched-out flesh, because when it is touched it is more delicate to the skin than the fine stuffs of the Levant, and softer than velvet; another said that it was

made of tendons because it stretched so much. The Prioress, who had heard them, said to them that she was rather of opinion that it was made of bone, because that morning she had drawn out the marrow from one. "

" *Penas*. You are mistaken; it was not they, but the three who were walking in a fine garden and found a gooseberry (groseille), and asked one another to give its Latin name. " How do you call it, my Sister? " The young one said *groselees;* the other said, *grosela;* and the old one said " You are fools, it must be thick and long (gros et long) for our little cunnies " (1).

Let us finish with a story told in " *l'Intermédiaire des Chercheurs et des Curieux* " (April 25th 1886).

" **The Marseillais' mast**. A very amusing story is going the round of the artists' studios, of a Marseillais who fell into the sea three leagues away from shore. He floated on his back, *thought of his sweet-heart*, and making a sail out of his handkerchief, went along gently impelled by a favourable wind. It seems to me to be interesting to show by a feature the link which unites the modern to the ancient world. This anecdote of the amorous Marseillais recalls to my memory a certain antique lamp of the Decadent period of Roman art, on which had been modelled an almost similar subject. We know that the sculptures on a terra cotta lamp, intended no doubt to be used in some place of ill-fame, did not boast of much refinement. A rower in his boat has attached his sail to a mast, and this mast is borrowed without shame from the arsenal of the vituperating Priapus.

(1) Béroalde de Verville. *Le Moyen de Parvenir*. This extraordinary work, a mine of old Gallic spice and humour, has been translated into English, under the title of " Fantastic Tales ", but I am told this version is expurgated.

**Causes of the exaggerated dimensions of the virile member.** Is a man born with a member capable of assuming a great development at the virile age? Or rather, does this development proceed from an excessive and premature use of the organ, principally by precocious masturbation ?

These two questions cannot be solved either by a complete negation or affirmation. They are connected, and are alternately effect or cause, and vice versâ! Let us first begin by finding the influence of race, a question which will be treated in Physiology. Then in the same race, there are individual differences which are enormous... We must then introduce the clothing, precocious dissolute habits, and especially masturbation. Finally let us instance elephantiasis as a particular reason. Let us examine them in succession. Hippocrates in a passage of his works on the impotence of the Scythians has already asserted that their impotence results from their continual " horse-riding, and because they wear trousers, a fashion which causes them to lift them up by the hand to the genital parts ". Let us note that among the ancient Greeks the use of trousers and breeches was absolutely unknown. Modern physicians, commentators of Hippocrates, have naturally been of different opinions. Hunter, the Englishman, decides against Hippocrates, because he says that these organs, being kept too warm and being held up too high, become relaxed. Our fellow-country man, Lallemant, asserts that with bakers the fact of not wearing breeches produces a result opposite to that indicated by the sage of Cos, " sæpe audivimus pistores et coctores quorum partes pendendæ subligaculis non oblieguntur, sed liberius pendent, crassos et bene nutritos habere testes ".

But Dr Mauriac explains very naturally this customary size of the virile member of bakers, and asserts that it is an

effect and not a cause. "Persons with a disposition to love have a more voluminous penis and clitoris. It is an effect and not a cause. There is thus an acquired development of the erectile tissus. This latter results from the immoderate excercise of the genital organs, and the physical excitements of which they are the object. Mauriac has remarked that the penis among bakers is very voluminous. He attributes it to the rubbing against the sides of the kneading-trough which it undergoes during their work. This incessant contact produces frequent erections, or exaggerates the afflux of the blood in the organ, and hypertrophy thence results.

Mantegazza (*Hygiène de l'Amour*) quotes the opinion of his fellow-countryman, Savarsi, who in his work on Egypt, discovers four causes of this development of the virile member : (1st)Circumcision, which gives free development to the penis; (2nd) The religious precept which imposes on the man the obligation of stretching the penis several times after urinating in order that he may not be defiled with his excrement; (3rd) The wide garments which they wear, which do not prevent the development of the genital organs; (4th) Their own weight, which conduces to lengthen them.

This opinion is corroborated by that of the "Dictionary of Medicine and Surgery" under the heading *Scrotum*. "In the child about 15 years old the scrotum has the shape of a sphincal purse. In the adult, one testicle is lower than the other, but they retain their harmonious shape. In the old man, the scrotum lengthens still more, growing larger at the same time below, as if the testicles contracted across on the base; the top is drawn, and changes its shape into that of a neck with flaccid walls. But in many obese old men, the purses still display the conoidical shape, and their coverings are firm".

The influences of race can only be indicated here. Among the African negroes, and among the Arabs, the majority of travellers have pointed out the considerable development of the penis, in proportion to the larger vagina of the negress; the purses among them are more voluminous and pendent. But here we must bring in the influence of costume. In the case of the man who walks along, scarcely covered with a slight loin-cloth, just as in the case of the Algerian, clad in the *gandourah*, the genital parts have no support and are influenced by their weight, teguments, and the layers which lie beneath are liable to stagnations and congestions."

The genial Rabelais had already made the same remark on the priests "who wear no breeches underneath, and their virile member stretches in unrestrained freedom, because through this rubbing the humours of the body descend to the said member". (Book II, chap. 26).

**Influence of masturbation**. A number of good writers point out precocious masturbation as a frequent cause of the excessive development of the penis. Garnier (Sexual Anomalies) finds that the largeness of the penis coinciding with the club-shape of the gland, and with the varicose enlargement of the dorsal vein of the penis, is a particular sign of the habit of masturbation. The hyper-dilatation of the vesicles of the cavernous tissue, returning only imperfectly on themselves, gives a special feeling of soft fleshiness to the touch, which serves to distinguish them.

It is certain that the friction, at times very hard, habitually practised on the organ, and especially the voluntary prolongation of the urethra by the masturbator, who stops a short time before the ejaculation to begin again a few moments after, by keeping the blood in the cavernous bo-

dies evidently assists the expansion and dilatation. " From thence arises also the habitual congestion of the organ in masturbators ".

" An idiot of Mans, a frantic masturbator, confined in the Lunatic Asylum of Marieville after numerous criminal assaults, had thus an enormous penis as evidence and consequence of his passion. It is sufficient to raise the prepuce to convict masturbators of this habit, if a bright bluish red, a kind of latent balanitis is noticed.

Many are thus in a state of permanent sub-erection which induces them to carry the hand there, as in the case of phimosis. It is enough to converse with them or to examine them on this matter for erection to be spontaneously produced as in the preceding case.

This singular fact explains itself evidently enough when we have to deal without any doubt, with latent pederasts and even with avowed sodomites. After suspecting this perversion by this sign of spontaneous erection, I obtained the proof of it in the case of a man aged 58, attacked with a singular running. Examination was indispensable, and he displayed a formidable penis, swollen and in semi-erection. The rigidity was perfected by pressing the urethra at the perineum, but without any pain. The volume of the penis was then excessive in all its dimensions, without the testicles participating. He confessed his preference for sodomy, and his discovery of onanism while practising gymnastics in his youth..... Is not the influence of masturbation evident here? " (Garnier, *Sexual Anomalies*).

The interpretation of Garnier is confirmed by the opinion of Civiale (1) in his work on the Diseases of the Urinary Paths, the great medical value of which, half a century of modern study and discovery has not altered. " In those individuals whose penis assumes an extraordinary develop-

(1) *Maladies des Voies urinaires*.

ment ", says Civiale (the discoverer of the pulverization of the stone in the bladder) " there are almost always profound lesions of the prostate, or of the bladder. The presence of the stone, by promoting the titillation of the meatus, causes the patients to pull about the penis, and to lengthen it excessively. The penis thus assumes a great development, and its distinctive character is to be clammy, hard, and rigid. Owing to this contiguity to the penis, these complaints, by leading to an afflux of the blood, produce a permanent turgescence, which being prolonged, imparts to it a growing volume ".

The American doctor, George Beard (1), gives a very interesting observation.

" A young man, aged 32, came to consult me on account of the following symptoms. At a certain period he had had frequent seminal emissions, which latterly had recurred 4 to 5 times a month. The latter were produced in consequence of his having abandoned his bad habits. There existed.... In sexual intercourse, ejaculation took place too soon, and without giving him sufficient satisfaction. He had a *weeping penis*, that is to say, moistened at the least excitement, as well before, as after, coition. On examination, the penis was voluminous, flaccid, with that cartilaginous sensation which excessive and long-continued masturbation gives, a sort of hypertrophy of the organ. No phimosis existed.

In this case it is interesting to note the following points:

(1st) The great physical force of the patient, who was able to accomplish long walks. The neurasthenia did not prevent him from applying for rather hard work. There was no anemia.

(2nd) He triumphed over all the symptoms which he displayed.

(1) Sexual Neurasthenia. Translated by Paul Rodet. Société d'éditions scientifiques. Paris, 1895.

(3rd) The augmentation of the volume of the penis consequent on masturbation is to be noted ".

Garnier repeatedly points out in his " Sexual Anomalies " cases of penes of large size through masturbation. Thus in Observation n° 141, he notices a hypochondriac masturbator, " his penis, swollen and in semi-erection, bore all the characteristics of the masturbator by its exagerated development, the gland especially. "

Observation 151 by the same author. A youth, aged 27, a tall and fine young fellow, a libidinous and salacious masturbator. " On examination, the penis, much retracted, had not more than 4 to 5 centimètres of projecture, with a voluminous and club-shaped gland : to my great astonishment he told me that it was, on the other hand, 15 centimètres when in erection ".

Observation 153. An English gentleman, aged 43, had been addicted to masturbation since the age of 14, displayed " a considerable relaxation of the genital organs ; penis developed, very soft, with a very pronounced varicose dorsal vein ; gland large and club-shaped. "

**Elephantiasis of the penis**. This curious formation is not congenital. It is the result of an affection very rare in Europe, except in the Southern countries, though this malady is rather frequent in those countries which adjoin the tropics. It is met with rather often in Barbadoes, Bengal, Brazil and Africa. Complete elephantiasis of the penis and scrotum is distinguished from elephantiasis of the penis only, a somewhat rare affection. It begins often with the prepuce, to extend then to the whole organ, and again remains stationary before extending to the purses.

In 113 cases of elephantiasis operated on at the Medical College at Calcutta in 18 years, the malady affected the

prepuce on three occasions only, and once only was the penis the principal seat of it.

The author who has made the best study of elephantiasis is Demarquay, in his *Maladies chirurgicales du pénis* (Delahaye, éditeur, Paris, 1877), from the 4th chapter of which work we extract a summary.

**Pathologic Anatomy.** The skin of the penis presents a considerable hypertrophy, which in some cases appears to be the consequence of long continued erysipelatic œdema. The cellular tissue participates in the irritation of the skin; the soft œdema is not long before it changes into a hard œdema; the hypertrophies and transformations of the tissue operate by degrees. The hypertrophic œdema gradually extends byond its limits, progresses more and more, and forms in the meshes of the cellular walls an excessively hard tissue, and it becomes impossible to distinguish the accidental fibrous tissue from hypertrophied derma which forms one body with it.

The penis is susceptible of attaining enormous dimensions, and so too is the scrotum. The first case quoted by Demarquay is that of Ketwsy, a German, who had a penis 13 fingers in circumference at its base, diminished as it went on, and terminated in a red tumour the size of a nut, underneath and behind which a hole was seen which led to the canal of the urethra. At the autopsy, the skin was found to be of three times its thickness in the normal state. This hypertrophy sometimes gives to the skin of the penis a monstrous thickness and development.

**Penis affected with the elephantiasis of the Arabs, observed in Provence.** An ecclesiastic had an enormous elephantiasis of the penis; the tumour was monstrous; it hung between the legs which it

kept far apart, as far as the knees and its weight was such that the patient was obliged to hold it up by means of a rather complicated suspensory bandage, which was supported by the neck.

This elephantiasis, one of the most voluminous which has been observed on the penis, still retained the shape of that organ; the body of the penis and gland was distinguishable, covered by the prepuce. Goyrand of Aix, separated from the morbid mass (formed by an enormous hypertrophy of the sheath and of the cellular tissue which lines it), the testicles, which were united with the penis (cavernous body and urethra). The gland was blended with the prepuce; in the operation it was necessary, so to say, to carve it in the hypertrophic mass. The cavernous body and the urethra had not increased in size, but the fibrous course was the only portion of their tissue remaining; the cavernous or erectile tissue had lost its vascularity, it had been lost by atrophy; the sheath and the sub-cutaneous cellular tissue alone formed the hypertrophic tumour. The skin of the posterior portion of the root of the tumour, which kept its flexibility, served to make a new scrotum. A quadrilateral strip was detached from the anterior portion of the root of the tumour to form a new sheath for the penis; but this strip formed part of the elephantiasical portion; it mortified and fell off, and slightly retarded the cicatrization. As to the new scrotum, it fulfilled very well the surgeon's intentions. The extirpated mass weighed 5.600 grammes.

The patient made a good recovery; but, two years after, the scrotum was in its turn attacked with elephantiasis, and attained such a size in eighteen months, that the patient was obliged to undergo an operation in 1855, four years after the first operation. The extirpated mass weighed about 2 kilogrammes; the recovery occurred in 35 days.

There was no relapse, and seven years after the second operation he succumbed to the results of a cerebral hemorrhage.

The penis may attain enormous dimensions. Wadd has seen an African negro whose penis measured 40 centimètres in length and 35 centimètres in circumference, which gives a diameter of nearly 11 centimètres. M. Tripier has seen a young man whose penis was 9 inches in length by 9 in circumference at the end and 6 in the middle. This organ had a monstrous appearance; its surface was unequal, indented and yet smooth, and brown. He says :

"R.....of Avenières (Isère),aged 24, of a strong constitution, nervous sanguine temperament, born of healthy parents, was quite well until the age of 9 or 10. At that period, when fishing during the cold season, he happened to fall into the water, and not taking care of himself after this accident, he developed a large number of boils. This first furunculous irruption was followed by several others which followed one another in a strangely obstinate way, and which were complicated all at once towards the age of 11 or 12, by an enormous swelling of the penis in a night. When this latter accident occurred, the boils quickly disappeared, but the swelling of the penis remained. The patient suffered much from it at first, at the time of the emission of urine, during cold weather, and when the tumour at certain periods became inflamed. It was and has been since then combated in vain by a great number of means."

When R.. came to consult M. Tripier ten or twelve years after the development of his affection, the penis was 9 inches long and 7 in circumference, and 6 at the middle. Slightly bent thus ( ⌣ ) in its anterior third, this organ had a monstrous appearance; its surface was unequal, indented and yet smooth, of a brown colour, especially on its lower surface, which was traversed all its length by a longi-

tudinal projecture, voluminous and rounded, which could be taken for the degenerate urethra. The mass is hard and of a greater consistence on approaching its free extremity. This, which turns to the right, shows in a small recess a sinuous opening, folded, apparently small and admitting only a probe with difficulty, which nevertheless allows the index finger to penetrate easily. The latter, buried to its full length, reaches a cavity where the gland is sought for in vain. The whole penis, at first, appeared to be invaded by this degenerescence; nevertheless, when closely examined, it is apparent that it terminates at one inch on the back, and at two inches on the scrotal surface from its root. However, the skin of this latter part, like that of the scrotum, is more or less penetrated by the morbid matter, which forms this singular alteration. Wholly monstrous as it is, the penis fulfils however the greater part of its functions; the emission of urine and the ejaculation of sperm are easy : at least these liquids freely run through the canal and the urethra; but, falling into the cavity previously mentioned they do not come out except when it overflows, and the patient is obliged to press on the extremity of the mass in order to facilitate their exit; otherwise a portion would always remain there. Erections frequently recur, and are the more painful the stronger they are. This is the only time when R...suffers from his infirmity. For several years he has only been inconvenienced by the weight and size of his tumour.

The operation performed by D^r^ Bourgoing succeeded marvellously, and the mass removed by the scalpel weighed, one lb. four ozs., and the patient regained possession of a penis of ordinary dimensions.

Gaillard and Gaetoni have seen an elephantiasis of such dimensions in an Arab aged 40, that it descended to the lower part of the calf. The penis, buried in the substance of

the tumour, allowed the urine to flow by a hole 5 inches in length, which seemed to be formed by the skin of the penis, retroverted and detached from the cavernous bodies and the urethra, and adhering to those parts merely by the pointer of the gland.

Gibert observed in 1834 at the Saint-Louis Hospital, a patient whose penis, swollen, was the size of that of a mule; the skin was wrinkled, bristling with granulations, as was that of the gland, besides being blended with the prepuce. The subject felt no pain; he urinated freely, had erections with rigidity of the penis, but with no increase of its dimensions.

Kegel saw, in 1845, a case of elephantiasis for which a young man had been discharged: the penis was 65 centimètres in length and weighed 2 kilogrammes and a half. He proposed to separate the penis proper from this enormous mass. The gland had undergone notable elongation. The penis, dissected, might nevertheless be recovered with a new cutaneous covering. The patient could since then micturate and procreate.

**Hypertrophy of the penis.** A negro, aged 27, displayed an enormous hypertrophy of the penis, with difficulty of urinating. Being measured the penis was 9 1/2 inches (24 centimètres) in length at its root. The structure of that part had become altogether cartilaginous. The hypertrophy of the cavernous bodies was such that the gland had been turned upwards, and was nearly in contact with the back of the penis. The gland presented normal dimensions and was otherwise healthy; its shape only was changed in consequence of the displacement of the part. Amputation was obliged to be performed. The cavernous bodies were changed into a fibro-cartilaginous tissue analogous to that of the cartilage at the sides.

It cannot be admitted, according to Wadd, that the unfortunate persons attacked with such an affection are able to experience sexual needs, as is commonly supposed. The numerous observations which his long residence at Madras permitted him to make, enable him to refute this error. Impotence is the certain result, when the malady has sufficiently progressed.

**Elephantiasis of the Prepuce.** In certain cases elephantiasis is confined to the prepuce. Demarquay quotes two instances of it, and operated on one. He points out that the prepuce bends back completely on itself in trumpet-shape at its extremity, so that the jet of urine is bent backwards also.

In the second case, operated on by Demarquay the malady made its first appearance by an angiolencity of the penis and the purses. After several amputations, Demarquay was obliged to carve out, so to say, the gland from the shapeless mass of the œdemated and hardened prepuce.

**Treatment of Elephantiasis.** The treatment of elephantiasis is the province of surgery, and the bistoury alone can cure this deformity, by the method inaugurated by the illustrious Delpech.

An American physician, D$^{r}$ Thibaud, operated on a tumour of elephantiasis, which occupied the whole of the genital organ. measured 28 inches in length, 14 in diameter and 48 inches in circumference below the pubis. It weighed 63 lbs and a half, a really formidable weight. The operation succeeded marvellously, and restored to the patient a penis and scrotum of normal dimensions.

**Double Penis.** Cases of double penis are very rare.

Nevertheless authentic cases of it exist. The two penes are then placed one beside the other. The following case is a remarkable instance of it.

Velpeau displayed to l'Academie des Sciences, on June 1st 1844, a child aged eight months and a half. This child had three lower members. In front of the normal pelvis were seen two penes, separated at their commencement by a distance of about 4 centimètres ; one testicle only was found on each side in the corresponding double scrotum. Each penis possessed its own urethra. The two canals appeared to communicate with a single bladder; at least, when emission took place, it occurred at the same time and in the same quantity from the two paths.

The most curious case of this bifidity is given by Dr Garnier (*Sexual Anomalies*).

" A most rare and curious instance of real bifidity is that of a Portuguese, aged 18, having a double penis.

They were laterally situated and normally developed, the left one a little more so than the right. The explanation of it exists in the insertion of a third rudimentary lower limb under the left buttock, the stump of the foot being bent round in front from the same side.

Being engaged in a troop of mountebanks to display his deformity, this youth, who was tall and well developed, enjoyed a real prolixity by making use of two organs in turn with the same woman. The left penis, however, entered on erection more rapidly than the right, and he used it in preference, although it, like the other, possessed only one testicle. But one of his feats of strength was to make use of them alternately, without simultaneous ejaculation. A double seminiferous apparatus, distinct and separate, was therefore probable ".

Instances of superposed penis are much less authentic. Nervertheless, Geoffroy Saint-Hilaire has quoted a case

in which the two penes were able to serve equally for the excretion of the urine, or for that of the sperm, separately or at the same time. The man who displayed this latter arrangement, is said to have engendered twins only.

**Palmated Penis.** The penis is said to be palmated when that organ is enveloped with the skin of the scrotum. This fault of conformation is very rare, very few instances have been published: the surgeon Bouisson, however says that he has met with it several times, but in his memoir he has given only one personal observation. Two cases reported by J.-L. Petit give a very clear idea of his deformity. The first case was that of a man whose penis was incurved in such a manner that the skin of the scrotum served as a covering on all its lower portion. The gland alone emerged at the time of the swelling of the cavernous bodies. In spite of J.-L. Petit's opinion to the contrary, the operation was performed by another surgeon. The penis was separated, but the cavernous bodies did not become straight.

J.-L. Petit discovered later on the explanation of this want of success. He had occasion to make an autopsy of a similar case, and he saw that the cellules of spongious tissue were nearly choked up in the neighbourhood of the concavity, while they were gradually enlarged to near the convex portion, where they were largest. The penis was therefore tied fast and incurved irremediably by the very fact of its contexture.

J.-L. Petit consequently concluded that this incurvation was incurable, and as a result that surgical intervention was useless.

There are, however, some curable cases, as Bouisson and Demarquay have shown. The penis besides, should it remain bent back during erection, would still benefit from

the operation. For after the disengagement of the penis, coition might remain more or less difficult, but it is possible, whereas before that it was absolutely impracticable.

**Congenital Torsion of the Penis.** This torsion of the penis appears to be connected with another fault of conformation in the genital organs. It complicates the latter, and exists rarely alone : besides, it is very rare to observe torsion of the penis. Godard has seen it once in a monorchid subject, whose scrotum and left testicle were wanting. Verneuil has studied an analogous instance in a patient affected with hypospadia ; the urethra, inclining from right to left, and from the front to the back, twisted in a spiral shape the lateral surface of the left cavernous body, and resumed its normal inferior and mesial position on a level with the root of the purses.

Finally, in a third instance noticed by Guerlain, the penis, otherwise but slightly developed, had undergone a nearly complete rotatory movement, in such a manner that the dorsal became the lower surface, and rested on the purses, while the urethral surface turned upwards and slightly to the left.

In spite of the defective position of the urethral orifice, the urine and the sperm could be projected to a suitable distance. If hypospadia exists, the jet of liquid will emerge under variable conditions; but if torsion of the penis exists alone, their egress may occur in the prolongation of the axis of the penis.

Sometimes the patient is obliged, even when he urinates, to turn the penis a little backwards.

As to fecundation, it is dependent on the degree of torsion of the penis. There is no absolute impotence, the erection often being very suitable ; but the direction of the spermatic jet may be defective, fail to reach its goal, and

thus produce a relative impotence, the more to be regretted because Science is unable, for the most part, to remedy this defect of conformation.

**Defects of conformation of the cavernous bodies.** The rarity of defects of conformation of the cavernous bodies considered separately, is such that there is no occasion for us to attend to it.

We have seen, respecting the total absence of the penis, an observation of Bouteiller, such a congenital atrophy of the cavernous body, that a very serious consideration was necessary for the surgeon to decide to proceed to a search for the penis, which appeared to be absent. In another degree, the arrest of development becomes a complete want of penis.

Dr Delbarier, in *Annales de la Médecine Belge*, quotes a case of urethral occlusion on a level with the sub-pubal ligament: the penis did not display the slightest trace of the cavernous body. On a level with the navicular foss, the urethra was noticeably distended; its surface at this level measured 15 millimètres; at the meatus and beyond the distention it measured only 5 millimètres.

On the other hand, the hypertrophy of the cavernous body constitutes, in several cases, a lesion almost as much to be regretted. We have pointed out in the preceding chapter what excessive development the penis attains when affected with elephantiasis; but apart from that pathologic condition, the penis may acquire a considerable development, and impede strangely the genital functions; instances of which we have given in this chapter.

**Bifid penis.** It may equally happen that the cavernous bodies being slightly parted instead of being welded one to the other, form a kind of groove. In this case the

penis is sensibly wider than it is thick. Garnier quotes an interesting case.

" 22. Without being complete, this bifidity is clearly shown in certain individuals. Instead of its usually rounded shape, the penis is flattened, hollowed in the middle, and swollen at the sides. I met with it thus in a young working locksmith, passionately devoted to active sodomy, preferentially on obese old men. The gland, attenuated by this habit, gave a singular appearance to the penis. This flattened, though attenuated shape, is observable also in certain masturbators, resulting from their peculiar proceeding of pressing the penis in the middle with the thumb, while the other fingers form a counterpoise beneath.

# CHAPTER V

## DEFECTS OF CONFORMATION OF THE MALE GENITAL APPARATUS (continued).

Defects of conformation of the Prepuce. — I. Absence of the Prepuce. — II. Incomplete development of the Prepuce. — III. Congenital division of the Prepuce. — IV. Imperforation of the Prepuce. — Congenital narrowness of the prepuce. — V. Phimosis. — Monography of phimosis. — Different forms of phimosis.

Serious maladies proceeding from congenital phimosis

A. Phenomena relative to the functions and organs of generation. — Genital excitement. — Depression of the genital sense. — Various lesions of the genito-urinary functions and organs proceeding from phimosis. — Congenital (calculi of the prepuce). — Balano-posthitis. — Eczema of the gland. — Elephantiasis of the prepuce, atrophy of the penis, cancer of the penis, difficulties of micturition, inconvenience occasioned in coition. — Influence on generation. — Phimosis assists venereal infection. — Hernias and hydroceles.

B. Reflex symptoms and general troubles. — Serious troubles of the genito-urinary organs. — Various troubles of the intellectual faculties. — Troubles of the general health (Convulsions, idiocy, paralysis, coxalgia, the vision, gastralgia, neurasthenia).

Opinion of American physicians on phimosis. — Paraphimosis, its reduction.

Defects of conformation of the prepuce are six in number :

1. Absence of the prepuce.
2. Incomplete development of the prepuce.
3. Congenital division of the prepuce.
4. Imperforation.
5. Phimosis.
6. Paraphimosis.

**I. Absence of the Prepuce.** The absence of the prepuce is very rare in children. This congenital deformity which leaves the gland uncovered, offers no other inconvenience than the diminution or disappearance of its sensibility.

And yet, strange to say, the ancients practised a curious operation in order to restore a prepuce to those who had lost it, as well as to those who had never possessed one. The former was practised on the few Jews who wished to obliterate all traces of their origin, and thus to exempt themselves from the exorbitant taxes which were imposed on that nation, and collected more stringently than from any others. If the European nations in our time should impose similar ones on the Jews, we shall perhaps see this operation coming into vogue again, a description of which we give according to Celsus. The skin of the root of the gland was detached with the scalpel in a circular shape, which Celsus asserts was not very painful, because the skin, thus detached, could be brought up with the hand to the root of the penis, without a large effusion of blood. Then this skin was drawn back beneath, until it covered the gland. After applying fomentations of cold water to the part, it was enclosed in a plaster calculated to moderate the inflammation. On the following days the patient was not allowed any food, until he felt, so to say, growing weak from inanition, for fear lest nourishment should excite the venereal appetites. When the inflammation was allayed, the penis was enclosed in a bandage from its root to the crown of the gland ; the latter was covered circularly with a plaster, the medicamental portion of which was turned away from the side of the prepuce. By this means this skin agglutinated with the body of the penis, and that which covered the gland cicatrized without forming adherence with it.

This process had the great disadvantage of causing a portion of the cavernous bodies, equal in length to the gland, to enter the pubis, and thus of diminishing the total length of the penis.

**II. Incomplete Development of the Prepuce.** The cutaneous covering of the gland does not always display a perfect regularity. It may happen that the prepuce develops irregularly, so as to leave visible some of the side of the gland, while it projects on the opposite side. From this there results a kind of cutaneous appendage, irregular, fimbriated or non-fimbriated, free or adherent, sometimes loose, and in this way affecting the functions of the penis; the latter case being the most frequently observed.

J.-L. Petit, who observed a case of this kind, relates that he was consulted by a young married man, the lateral and lower portions of whose prepuce were wanting; the small portion which he had fell on the gland, beyond which it projected a finger's breadth; this kind of pendant was 1 inch wide at its base, and terminated in a cylinder like a second penis, which, although it was small and without erection, inconvenienced him much during coition. The fragment was cut off, and the young man was soon in a state to perform the conjugal act without the least difficulty.

In another case, a nearly similar fragment, but disposed like a pad, might have been removed, if the subject had been willing to submit to this slight operation.

This deformity presents no gravity; it is a cause of trouble to sexual intercourse; but it is easy te obviate, and the operation is so simple that there is nothing in it to point out.

**III. Congenital Division of the Prepuce.** The prepuce sometimes displays a division similar to that which is apparent in hare-lip. It may be complete, and stretching the whole length of the prepuce from its commencement as far as the crown of the gland, or it may be partial : it may occur on the mesial line or on the sides.

When this division of the prepuce is still small, it does not impede the functions of the penis : it is an incomplete circumcision. But it is otherwise when it is complete, for then the introduction of the penis into the vagina is often difficult and painful, both for the man and the woman.

J.-L. Petit advised an operation in order to reunite the two lips of the slit and obtain a complete phimosis. It is doubtful whether it would have succeeded, for there is no instance of its having been tried : complete circumcision of the prepuce appears preferable to us.

The inconveniencies which result from this fault of the prepuce are such, and the success of the operation by which it is sought to remedy it, is so doubtful, that Boyer advises, in the case where this defective disposition of the prepuce renders coition difficult and painful, the removal from each side of a triangular strip of the prepuce.

**IV. Imperforation of the Prepuce.** Imperforation of the prepuce has been observed several times in new-born infants. When it is incomplete, it constitutes a variety of phimosis; when it is complete, at the extremity of the penis is observable a globulous tumour, on a level with which the skin may be stretched so much as to become transparent. The volume of the tumour increases at each effort of the child to urinate, but no urine is ejected; palpation gives a sensation of confined liquid.

Excision of the prepuce must be performed immediately. The wound, moreover, cicatrizes very rapidly, and a simple

dressing is sufficient. It is a partial circumcision, and it is well known that the circumcision of Jewish infants presents no danger, provided that the dressing is properly applied. By doing this the child avoids later on the inconveniences of phimosis. Chopart saw a child, 3 days old, which had a retention of urine in the imperforated prepuce. The retained urine was of the size of a hen's egg; it had so greatly distended the teguments that they had become thin and transparent; the undulation of the liquid was distinctly felt.

In Dec. 1779, a child of four months and a half was presented to Advenant, a doctor at Bellevue, in Auvergne, said never to have passed urine by the penis. The child had at the extremity of that part, a tumour, of the shape and transparency of a bladder full of serosity. He was extremely thin, and had a slow fever, and a smell of urine was emitted from every part of his body. Leval, a surgeon, opened the tumour, and excised a portion of the prepuce which was retaining the urine. The child recovered and urinated by the natural channel.

**V. Phimosis.** Normally, as in all animals, the gland of man is covered by the prepuce like a hood, which shelters it and preserves all its sensibility. But normally also, in children the gland remains nearly constantly covered with the hood of the prepuce all the time that the penis is in repose, and the urine flows through the preputial opening. When the child is vicious, or, more simply, when he has been told not to allow the sebaceous smegma to accumulate under the prepuce, he partly uncovers it at the moment when he urinates. This operation often repeated, results in such an enlargement of the preputial opening, that when the penis enters on erection, the gland swells, and overcomes the very feeble resistance offered by the sphincter of the prepuce; it releases itself, gradually unco-

vering itself from the hood, in such a way that the edge of the preputial orifice now encircles without pressing the base of the gland behind the crown, and generally forms a flattened pad, in shape of a half-moon.

When the child arrives at the age of puberty, especially if he is in the habit of sleeping with the gland uncovered, the nocturnal erections, which are nearly confined to this period of life, allow the gland and the penis to assume their full development. In some children the preputial opening is too narrow to be able to be brought back behind the gland. In repose, the prepuce projects obviously beyond the gland, and forms a kind of pad. The penis elongates during erection, but the gland always remains covered. This is the fault of conformation which is named *phimosis*.

When vicious children arrive at the age of puberty, they attempt to uncover their gland. They learn from one another to squeeze, at the time of urinating, the preputial orifice in such a way that the urine swells out the prepuce and cleans away, through the same cause, the smegma collected round the gland. Little by little, this manœuvre, repeated several times a day, results in stretching the prepuce and enlarging its opening, so that the child finishes by uncovering it in repose, and then later in erection.

The child in this way renders itself a great service without knowing it, because the gland remaining covered in the state of repose, is uncovered during erection, usually in a complete manner, which gives all the advantages of circumcision without having its inconveniences.

Phimosis is permanent (whether congenital or acquired by vicious practices) or temporary : in the second case, it is the consequence of an inflammatory alteration, and consequently curable at the same time as the morbid cause which produces it.

In this chapter, I shall concern myself with permanent

phimosis, and more particularly with congenital phimosis.

It may appear under a great number of forms. And, since the preputial opening is sufficient to allow the gland to pass through it in the state of flaccidity, almost to the imperforation of the prepuce, phimosis may present all the degrees in the dimensions of that opening. It may settle on a penis more or less long, and cover a penis more or less projecting.

**Monography on Phimosis.** Children are nearly always born, says J. L. Petit, with the opening of the prepuce too narrow for the gland to be entirely uncovered.

I have been able to verify experimentally on the children of every human race, that this remark is absolutely true. We must believe that the inconveniences and the maladies occasioned by phimosis have been always recognized, since the custom of circumcision exists everywhere. If it was Abraham who invented it, he can boast of having rendered a valuable service to his posterity, and of two founders of the two religions, daughters of the Jewish religion, Mahomet, by adopting circumcision from the Israelites, displayed his foresight after another manner to St Paul, who rejected it from the Catholic religion, for until his time the Apostles and the early believers were all circumcised. Our Lord was also, for the Church keeps the Festival of the Circumcision, and his Holy prepuce exists, it is said, in some monastery which I do not remember.

However this may be, the early Greek, Latin, and Arabian physicians, Hippocrates, Celsus, Galen, Paul of Egina, Albucasis, paid attention to phimosis and circumcision. Ambroise Paré, and the great physicians of the middle

ages, added their personal observations to the facts already known. J. L. Petit was the first to write a remarkable chapter on phimosis and its principal accidents. The surgeons and physicians of the middle of this century have not closely grasped the question, and have not appreciated the medical importance of congenital phimosis. Boyer, Velpeau, Blandin, Sabattier, Dupuytren, and Langier hardly mention it, but from the point of view of the uncleanliness occasioned by the accumulation of the sebaceous matter, of the trouble in micturition, and of the pain which may result from coition.

But the moderns have grasped the question more closely. Thus, Louis Henry, the propagator of hydropathy in France, has studied phimosis very closely, and recognized its evils, in his *Traité thérapeutique et clinique d'Hydrothérapie*. (Cesseler, éditeur, 1866.) There remain also a large member of monographies, among which we will point out the remarkable thesis of Dr Berger (*Sur des accidents peu connus de Phimosis congénitale*, 1890. Paris, G. Standheit, éditeur.

**Forms of Phimosis.** Phimosis presents different forms; it exists:

1st Through simply narrowness of the prepuce;

2nd Through elongation;

3rd Through adherence of the prepuce to the gland;

4th Through shortness of the frænum.

1st. The first form, narrowness of the preputial orifice, constitutes phimosis properly so called; the prepuce is thin, as is also its border which is narrow besides. The narrowness of this border presents some differences, from a simple small hole scarcely giving passage to the probe, to an opening allowing a larger or smaller portion of the gland to be exposed. Sometimes the gland is completely

imprisoned, sometimes it may be drawn partly backwards, but wanting however the base of the gland. This latter case is the more frequent. The former, on the contrary, is happily very rare. Professor Pribat has only observed it twice in 150 phimoses operated on by him.

2nd. **Preputial elongation** consists of a prolongation before the gland, in the form of a canal. It appears then like a piece joined on to the urethra. Two types of it are noted, elongation with narrowness of the orifice, and elongation without narrowness. This second type is the more frequent, not to say the normal type, for in the immense majority, the prepuce, when the penis is in repose, forms a pad in front of the gland, more or less long. It is sufficient to glance at the statues of the great Greek sculptors..

3rd. This third form is *phimosis* or *symphisis* of the ancients, or *false phimosis* of Nélaton. It consists in adherence whether partial or complete of the gland to the prepuce, " infants have been known to come into the world with the prepuce stuck to the gland ", says Dionis. But this is a simple agglutination of the two mucous membranes. To do away with it, it is sufficient, to follow the expression of J.-L. Petit, to " separate the prepuce by drawing it, as if we were skinning an eel ".

4th. Finally, as the fourth form, phimosis exists, because the frœnum being short and inserting itself to the urethral meatus, there is an impossibility of uncovering the gland. This is the lateral phimosis of certain authors.

**Temporary or permanent phimosis.** Congenital phimosis is physiological in youth. But towards the age of 12 to 15, at puberty, we have seen that

the child by his manœuvres finally releases himself from it. Unfortunately it also happens that, in spite of his efforts, the gland does not succeed in widening the preputial orifice, which remains close. Or yet again, at the same time as the penis is projected forward by the growth of the cavernous bodies, the prepuce continues to grow in too great a proportion, and the phimosis becomes permanent.

**Serious Maladies proceeding from Congenital Phimosis.** If, in the majority of cases, phimosis only gives rise to simple inconveniences, in others it is the direct cause of maladies and symptoms of the greatest gravity. Some are peculiar to infancy, others to old age; a great number may occur at any age.

They may be divided into three distinct categories. The first, entirely local, affect the genito-urinary functions and part of the organs which direct those functions : the penis, the testicles, the ejaculatory conduits, the prostate, and the bladder.

The second act upon the encephalon through the medium of the organs and functions of generation.

The third, finally, are sympathetic, felt on the general innervation, and consequently on the entire system.

**Phenomena relative to the functions and organs of generation.** Congenital phimosis, according to Fleury, may produce either an excitement or a depression of the genital senses. This is how he explains the first effect :

" **Excitement of the Genital Senses.** Covered by the prepuce and lubricated by the sebaceous matter, withdrawn from contact with the air and from the friction of the garments, the surface of the gland, in subjects affect-

ed by congenital phimosis, is much finer, more mucous, more irritable, to a degree that when an operation for phimosis is performed, the patients usually feel for a fortnight a troublesome sensation, and even somewhat sharp pains, produced by contact with the air and the shirt, and these phenomena do not disappear until the mucous membrane has become, so to say, tanned. But, when the phimosis is only moderate, when the prepuce can pass naturally beyond the gland, it results from this that the exaggerated sensibility of the gland is increased and excited by contact with the air, by the friction of the garments or of the sheets of the bed, or of that which it makes with the walls of the vagina during coition, and it is to this circumstance that we must attribute the immoderate venereal desires, the frequent diurnal erections, to which the individuals are subject, and which sometimes become a really morbid condition. Often too these phenomena result in a prurient sensation, tickling and titillating, which is felt in the gland or at the extremity of the prepuce to a more or less intense degree. I have seen several patients continually troubled by this sensation, which kept them almost constantly in a state of venereal desire and of semi-erection, and it is by acting in this manner that moderate congenital phimosis becomes a frequent cause of masturbation in children, and even in adults, as is proved by the following observation.

**Nocturnal pollutions. Generic excitement. Congenital Phimosis. Circumcision. Recovery.** M. X..., aged 33, after masturbating himself greatly during his youth, continued to indulge in this habit, in spite of a very active intercourse with women and frequent nocturnal pollutions. Unceasingly tormented night and day by erections, he had at first attributed them, for a

long time, to the vigour of his constitution and to a very pronounced sanguine temperament : but seeing that his desires were only increased instead of being allayed, he decided upon consulting me. I diagnosed that a congenital phimosis was perhaps the origin of the phenomena.

I proposed an operation, which was performed on April 17th, 1844. A month after, the erections and immoderate erotic desires had completely disappeared and M. X... had returned to the ordinary conditions of his age and constitution ".

In this case, the excitement of the genital senses was the only phenomenon produced by the phimosis. In many other patients, phimosis, without exciting in the same degree the generative organ, has given rise to graver and more complex phenomena, which have only been removed by circumcision. When the erections are too frequent they give rise to a continual irritation of the genito-urinary organs, and to voluntary or involuntary seminal losses, which result in giving rise to all the pathological phenomena which are the consequence of spermatorrhæa.

Henry also quotes a case of well confirmed spermatorrhæa, of which we give a summary below.

" Genital excitement; pollutions; venereal excesses, grave accidents; — congenital phimosis; — circumcision; — recovery. M. D..., aged 25, of a robust constitution and sanguine temperament, had indulged in masturbation from the age of 12 till that of 18; at that period he contracted an intimacy with a young girl, and during three years he had very frequent sexual intercourse with her, but this, instead of appeasing his desires, semed on the contrary to excite them, and nearly continual erections took place by night and day. M. D..., gave himself up to his habits of childhood. At the end of a year, that is to say

at the age of 22, the nocturnal erections became incessant, accompanied by erotic dreams and followed by pollutions. M. D... attributing this to the vigour of his constitution, contracted several intimacies with women, and during six months he regularly had connection five or six times a day. But this regimen did not bring about the desired result, and during the nights which M. D... passed at his father's house, and consequently alone, the erections and seminal losses became even more frequent than before.

Soon he began to feel pains in the lumbar region; his strength diminished, his digestion was out of order, and intellectual work became less easy and more fatiguing, and M. D... decided to consult a physician. In spite of a severe treatment, which lasted for 18 months, the patient was not cured. Cauterization, which was performed on two occasions by Lallemand, gave no better results. The complaint made rapid progress, and M. D... went anew to consult Henry, who perceived that the patient had a congenital phimosis, and circumcised him. " Three weeks after, the erections and the seminal losses had entirely disappeared. M. D... had recovered all his health and a moderate intercourse with women was amply sufficient to satisfy his venereal desires ".

**Depression of the genital Senses.** When the phimosis is very pronounced, when the prepuce completely covers the gland, even, during erection, this defect of conformation gives rise to phenomena diametrically opposed to those which we have just described, and far from exciting venereal desires, far from provoking erections, and rendering the subjects more inclined to intercourse with women, it produces a kind of very curious anaphrodisia.

The volume of the penis and the testicles is usually very small in cases of this class, a circumstance which may be explained by the compression exercised by the prepuce, and the repose in which the organ continually remains: venereal desires are but slightly pronounced; erections are rare and incomplete; venereal pleasure is almost nil, if it is not even replaced by a more or less violent pain, which sometimes, being produced by the friction against the prepuce, is felt during the whole duration of coition, and sometimes, being due to the obstacle in the way of the free and easy expulsion of the sperm, is manifested only at the moment of a tardy and incomplete ejaculation with but little energy, and is seated either at the extremity of the penis, or, as is more frequent, towards the perineum and the prostatic region.

But independently of the painful sensations which accompany coition, the anaphrodisia is explained by the shape of the organ. In fact, the prepuce by constantly covering the gland, this portion of the penis is constantly withdrawn from the excitatory causes of erections and of venereal desires, and in particular from the contact of the air, from the friction of sheets, of linen, and *above all of the vaginal walls*, which explains why the venereal spasm is less intense, or absolutely nîl. On the other side, the compression which the penis suffers from the prepuce, to which we have attributed the slight development of that organ, must impede the afflux of the blood into the cavernous bodies, and consequently render erections more rare, more difficult, and less energetic, and the venereal desires less imperious; it results from this that in subjects who have a very pronounced congenital phimosis, erections are not provoked as usually happens, by riding, by the jolting of a carriage, by the retention of fecal matter in the intestines, or of urine in the bladder.

Let us quote in support of what we have said, a very conclusive observation by Henry.

" Anaphrodisia;—congenital phimosis;—circumcision;—cure;—M.N..., aged 35, of a robust constitution and a nervous temperament, decidedly corpulent, practised coition for the first time at the age of 25, without having previously indulged in masturbation. " I have never, " he said, " been troubled by erections, venereal desires, or erotic dreams; the perusal of a few licentious books has not either had any effect upon me, and when I knew a woman, it was less to satisfy a want or a desire, than from curiosity and in order to perform the virile act : it seemed to me that I was not a man, and I wished to gain for myself that title ": The effect produced by the sexual relation was far from agreeable; the erection was slow, and with but little energy; the friction against the walls of the vagina gave rise to painful twinges of the prepuce : there was no pleasure, and the ejaculation was incomplete and accompanied by a sharp pain at the perineum. Dissatisfied with this trial, M. N..... did not repeat it until the end of several months, and without any greater success; during nine years he had but very rare sexual relations, to which he was led not by his desires, but by the influence of his companions, or by the thought that things might be changed; this however was not the case. When he was 34, M. N..... met with a young woman of remarkable intellect, and very amiable character, and formed with her a continuous connexion, imagining that under these conditions he would find more satisfaction than in casual and infrequent sexual relations with prostitutes. At the end of a year, the state of things being always the same, M. N... asked himself if it was not a pathological condition, or an organically faulty disposition, which made him so different to other men, and so little sensible to

what, by a derisive metaphor in his opinion, are termed the *pleasures of love*. M. N..... came to consult me on Feb. 10th, 1840; I ascertained the existence of a decided congenital phimosis; I proposed an operation, which I performed on Feb. 19, with the assistance of my lamented friend, Marchessaux, one of the most eminent physicians of Havre.

Three months after, M. N. . had undergone a complete transformation. The expression which for years had seemed to him but a derisive metaphor, seemed to him now but a too-feeble expression of the truth, and he was disposed to make an ample reparation for lost time ".

**Different lesions of the genito-urinary functions and organs.** Independently of the phenomena which we have just indicated, and which are connected with the genital senses, phimosis often gives rise to symptoms more or less serious on the part of the urinary organs. The compression applied to the penis, the pains which accompany erection and ejaculation, the obstacle opposed to the expulsion of the sperm, provoke and maintain an excitement which is translated into chronic urethritis, obstructions of the prostate, irritation of the ejaculatory conduits, and form a total of grave symptoms for the subjects.

Henry cites in an observation a case of chronic blennorhagia, which gave rise to serious symptoms, and notably to strictures of the urethra, in a patient who suffered from congenital phimosis, after an energetic coition effected on a young virgin aged 16, and which was only cured after circumcision.

In certain patients, the influence of congenital phimosis affects equally the urinary apparatus, and causes dysury and vesical tension more or less painful. This was the case

with a patient of Henry : he had a small penis, and suffered from a complete congenital phimosis, with a small preputial opening, and a frænum so short that in erection it bent the penis, drawing the gland down and backwards.

**Calculi of the Prepuce.** But the evils of phimosis are not limited to this. The cavity of the prepuce may become the seat of lithic concretions formed by the salts of the urine. It may also contain genuine calculi, developed on the spot, or arising completely formed from the urinary organs : about thirty cases have been observed in France by different physicians.

The perusal of these different observations shows that the preputial calculi vary in size from that of a grain of millet to that of a hen's egg, and in weight from a grain of sand to 225 grammes.

**Accumulation of the sebaceous matter.** The retention of the sebaceous matter secreted by Tyson's glands is a cause of the prurience and irritation which leads children and young persons to masturbation.

In the case, says Civiale, where the opening of the prepuce is so narrow that it allows only a very small probe to pass, it happens sometimes that the sebaceous matter becomes abundant and solid enough to obstruct the urethra, impede the excretion of the urine, and render the upper portion of the canal so sensitive that the subject could not endure the passage of even the smallest instruments. I have met with two cases of this kind : in one, the tumour formed by the gland and the sebaceous matter gave rise to a belief in the existence of a cancer, the more so as the patient felt acute pain from it. Fano observed in 1867 a sebaceous sub-preputial cystis of the size of an almond in a

child three years old, who suffered from congenital phimosis.

**Balano-posthitis**. By hindering attention to cleanliness, phimosis is a preponderant cause of balano-posthitis in children and adults, which has sometimes been seen to assume a gangrenous form. " In a case of very close congenital phimosis ", says Duplay, " the smell *sui generis* of gangrene allows me to establish the diagnosis before any incision of the prepuce ".

Often this balano-posthitis degenerates into sphacelus of the prepuce and of the penis, if the subject has contracted a serious illness. But frequently also the balanitis terminates rather by the formation of glando-preputial adherences, which impede, or even prevent, the function of the virile member. These adherences are formed in different degrees by simple agglutination, or by fusion of the two mucous leaves. " One would say that the two mucous membranes were stuck together with strong glue ", says Ricord.

**Eczema of the gland**. By the want of cleanliness which it entails, phimosis favours the development of eczema of the gland.

**Elephantiasis of the Prepuce**. Berger does not think (contrary to Voillemier), " that phimosis is capable of producing elephantiasis of the prepuce, but he thinks that it is only capable, through the chronic irritation which it entails, and the repeated balanites of which it is the cause, of producing in the tissues of the prepuce, and even of the sheath of the penis, either an induration in certain cases, or a hypertrophy of the penis, a variable relaxation which presents some of the characteristics of elephantiasis ".

Luntem quotes two instances, reported by Moulinier, in

a child aged 12, and a man aged 37, and a third case, a remarkable one observed by Jobert de Lamballe in a child aged 13, whose penis had thickened, had become hard and cartilaginous, and had the gland atrophied.

**Atrophy of the Penis.** Henry, in speaking of the genital sense, had already pointed out the atrophy of the penis consequent on congenital phimosis. Other observations have come to confirm his. " I performed an operation for phimosis ", says Richerand, " on a child aged 10. The penis and the gland were remarkable for their exiguity. In less than a month they tripled their dimensions, when the excised prepuce carried no longer the obstacle to their growth ".

" In a case observed by Jullien, the hypertrophy of the mucoso-cutaneous folds prevented any estimation of the size of the gland. When circumcision was performed, the latter organ, flattened and deformed, appeared hardly the size of the little finger ".

There is ground for belief also, that in a great number of Lallemand's observations, the exiguity of the penis resulted from the existence of congenital phimosis.

Siredey observed a young man affected with Addison's disease, whose penis was like that of a child of 4 years old; five centimètres in length, including the prepuce which was much hypertrophied. The scrotum was small, flaccid, and empty.

Delaney, an American army-surgeon, has observed 12 soldiers with congenital phimosis, who were affected with atrophy of the penis and testicles.

According to our observations, which have extended over a large number of subjects, I believe I have found that, generally speaking, those who had an atrophy or a marked exiguity of the penis, have a complete phimosis, and did

not uncover the member. But when the subject was able to make the gland protrude, and if in addition he became a masturbator, the gland was able to attain dimensions even above the average.

**Cancer of the Penis.** Finally it is known, since the observations of Hug and Roux, that congenital (or accidental) phimosis is a condition very favourable, if not for the production, at all events for the development of cancer of the penis. In 46 cases of amputation of the penis owing to cancer, phimosis has been found in 35 instances. According to Demarquay, phimosis would exist in a proportion of 70 o/o, since in 59 cases of cancer he has noticed phimosis 42 times. Travers says that he has never observed cancer of the penis in a Jew.

**Difficulties of micturition.** Micturition is rendered difficult by phimosis. " When the preputial orifice is narrower than the urinary meatus, " says Tillaux, " micturition is in a manner effected twice; a portion of the urine accumulates in the preputial cavity, and then trickles out without any force ". " I have seen children, " says Guillemain, " with the penis deformed in such a way that when it stiffened, the gland was distorted and bent downwards, so that they were not able to make water in a straight line. This defect results from the fraenum being too short. "

By reason of the obstacle occasioned to micturition by the preputial narrowness, there results sometimes, as the real strictures of the canal, a dilatation of the urethra and even of the kidneys. Reliquite quotes several cases.

When the phimosis is complicated by even slight balanoposthitis, the inflammation may reach the meatus, the urethra, and produce a genuine stricture of the canal. Jo-

bert de Lamballe observed, in 1855, a case of this kind. The phlegmasy may also reach the bladder, which being the more induced to contraction as it encounters obstructions to the emission of the urine, becomes chronically inflamed, and takes the shape of a columnar bladder. Thence arise the curious phenomena of dysury presented by youthful subjects.

"I have seen", says Delechamps, "in a young child aged 6, a natural astriction, the hole of the prepuce being so small that the gland was not able to uncover itself except when making water; it felt very great pain, and almost convulsion, with blackness and lividity of the end of the penis, prolonged efforts to pass the urine, and was cured by circumcision". And Guilleman: "I have observed in some young children that when making water the end of the penis became quite livid, and that they felt great pain from it."

The urine, by dint of flowing back through the urethra, may dilate the cavities of the kidneys, causing them to become inflamed, and the patient may die of nephritis.

In the adolescent and the adult there may be prostatic obstruction, and some observations of so-called seminal losses, reported by Lallemand, may probably be attributed to inflammation of the prostate.

**Difficulty caused to Coition.** The prepuce restrains the gland during erection, the same as the shortness of the fraenum causes the penis to assume a slightly bent shape. "Some have the ligament of the penis very short, so that during its erection, it is not straight, but crooked". (Ambroise Paré.) There is difficulty and pain during coition, and according to Henry, who has been quoted above, the ejaculation is accompanied with a sharp pain at the perineum. The subject is liable to the fraenum

being torn, and to the preputial orifice being frayed, and this being repeated may become the starting point of sclerosis of the prepuce, in the same way as balanites.

**What is the real influence on Generation?** It is certain that the untoward fact of phimosis causing a difficulty to coition, must also cause a difficulty to generation, without being the absolute grounds of sterility. Numerous observations confirm the fact that different husbands, who have been sterile for years, have been able to procreate immediately after being circumcised.

According to the surgeon Louis, King Louis XVI was unable to fecundate the couch of Queen Marie-Antoinette before he was operated on for sub-phimosis.

In ancient time, the philosopher Plato of Alexandria remarked the greater fecundity of circumcised peoples.

**Phimosis favours venereal infection.** We find also in the ancient authors (Fabrice d'Aquapendente, Keister, Sydenham) that congenital phimosis facilitates venereal infection of every kind.

"They who have no prepuce," says Sydenham, "rarely have chancres on the gland, but gonorrhea only. The gland being exposed to the air, and to the frequent friction of the linen, becomes hardened, and by this means does not easily receive the virus". And Chassaignac: "The distension which the gland tends to produce from within and without of the preputial orifice, gives rise to small fissures, which become so many ways for the inoculation of the virus of the chancre. Therefore it is to be remarked that individuals affected with phimosis and chancres, usually display the latter on the very edge of the preputial orifice".

According to Mareschal, out of 100 syphilitic patients, 80 owe it to chancres on the prepuce. And Noguis, during

a residence of 5 years in Algeria, has remarked that chancres of the gland are rare among the Arabs, who are circumcised when seven years old.

Hutchinson has also found out by statistics that syphilis is much less frequent among the Jews than among nations of other religions. He believes that circumcision is the cause of this relative immunity.

This is positively our opinion, and what we have proved in Senegal and in the Soudan.

Rohart says, " that he had as house-surgeon of the provincial hospitals, a subject who had a long prepuce, but not contracted, and that he was unable to perform coition without seeing some vesicles of herpes appear the next day on the mucous membrane. He did not always escape balanitis. "

When venereal infection exists, congenital phimosis occasions complications to the principal malady. Rollet, not without reason, has compared urethral chancres and subpreputial chancres from the point of view of their hidden situation and of the difficulty of diagnosis and treatment.

Congenital phimosis aggravates the intensity and prolongs the duration of urethritis and blenorrhæa. According to Fleury, we must attribute most frequently to this disposition of the prepuce the obstinate persistency of drops, which some subjects are unable completely to get rid of.

**Hernias and hydroceles.** Finally, Dr Berger, whose thesis has been of the greatest assistance to us in the preceding remarks, has pointed out, to the charge of phimosis, two other little-known complications, namely hernia and hydrocele. He devotes a special chapter to their study, and quotes the opinion of numerous English, American, and German physicians. According to them, in 452 hernias in infants and adults, there were 208 hernias;

in his own observations on 26 of cases of hernia, he has noted 9 times phimosis alone, once phimosis with œdema of the scrotum, 5 times with hydrocele, and 10 times phimosis complicated with hernia.

These different statistics show beyond doubt that hernias depend very much on phimosis. Berger gives an explanation of it which appears to us to be correct when he attributes the merit of the first observation on hydroceles complicating phimosis to Jarvagay, who had pointed out this dependance to Henry. Each time circumcision was performed, the hydrocele disappeared.

Schmidt has found 3 small patients affected with simple hydrocele, while he has seen 18 cases of hydrocele with phimosis.

Karewski, in 17 cases of phimosis, has found simple phimosis five times, five with hernia, and seven with hydrocele.

Wetteshofer (1887) finds an equal number of hernias and of hydroceles associated with phimosis.

Berger points out 5 cases of hydrocele with phimosis against 10 cases of hernia, and 1 case of hydrocele and hernia at the same time with phimosis. He gives the reason of it. "If the inflammation proceeding from the extremity of the gland by spreading to the neighbouring parts can lead to an effusion of serosity in the vaginal cavity (Jarjavay, Karewski), we believe that in order to explain the hydrocele, it is necessary above all to take account of the abnormal phenomena which are observed in children affected with dysury and retention of the urine. The frequent cries, the repeated efforts, the contractions of the abdominal muscles and of the muscles of the diaphragm, push the intestinal mass against the spermatic vessels, which may thus become compressed against the internal orifice of the inguinal canal. Thence, in our opinion, is produced an effusion, generally inconsiderable, in the testicular."

"It is a remarkable fact," says Karewski, "in the coincidence of hydrocele with phimosis, that the operation for phimosis brings about after a very short time, about three weeks, the absorption of the hydrocele."

**Reflex symptoms and general nervous troubles.** Henry is the first to make known the curious facts which he had observed, since 1840, in 97 subjects affected with congenital phimosis.

He performed circumcision in every case, and in 86 he thus dispelled the different morbid phenomena which he had observed.

Henry's observations were made on adults. It is in children principally that congenital phimosis is capable of occasioning the most serious and most varied reflex troubles; the observations of American doctors in particular have elucidated this important question.

**Serious troubles of the genito-urinary organs.** We have pointed out the local troubles of the genito-urinary organs. They may become very serious. Briant has observed that a simple phimosis may occasion hæmaturia, and produce retention of urine as well as priapism.

Other surgeons have discovered that it may produce a painful contraction of the neck of the urethra, and a spasm of the urethra, leading to retention. At other times, there is on the contrary, especially among children, incontinence of urine. We have observed that the excessive sensibility of the glando-preputial mucous is favourable to precocious masturbation, to priapism, and to venereal desires. According to Henry, with the excitement of the genital sense sometimes there coincide congestions of the face and palpitations. According to Civiale, the excitement due

to the prepuce reacts on the ejaculatory canals, the seminal vesicles and the secretory organs of the sperm, and provokes a secretion more abundant than in the normal state. From this results the relative frequency of diurnal, but especially of nocturnal, pollutions in adolescents and adults afflicted with phimosis.

Berger quotes in a thesis, 6 observations relative to the preceding.

**Various disorders of the Intellectual faculties.** In addition to the number of general reflex disorders which the irritation due to phimosis may produce, Henry has pointed out very varied disorders on the part of the intellectual faculties, notably an inability to work, and fatigue at the least application of mind. Similar disorders have been observed in children; they become idle and inattentive at school, and lose their memory. The character becomes strange, capricious, and in extreme cases, melancholy. The Swiss Professor, Reverden, points out a case of this class in a youth aged 18, who fired a pistol at his head, and who when he was once cured and his phimosis operated on, completely changed his character.

**Disorders of the general Health.** In the young child, phimosis, by keeping up an habitual state of irritation, may prevent nutrition and the development of the child in extreme youth. One of the chief characteristics of preputial irritation is to create in the boy a nervous condition (Béare) which may be manifested in every shape, from simple irritability to convulsions, from agitation which continues during the night and induces insomnia (Henry, Park, Magrüder, Picard, Blanks, Freeland, Warner) to chorea (Hickford, Chapman).

The convulsions so frequent in early infancy, and which at dentition are often ascribed to worms, ought to be ascribed in the majority of cases (Hett, Henry, Stewart, Buscy) to the genital irritation caused by phimosis.

Certain forms of epilepsy appear to proceed from the preputial irritation, which is proved by the cures effected through circumcision (Sinkler, Growers).

Sayre, having remarked that the majority of the idiot children at Randall's Island Asylum had phimosis at the same time, operated on a certain number, and among them several derived evident benefit from the operation.

In Berger, we find 14 observations relating to the above. The most interesting is that of a Professor, pointing out convulsions of an epileptic nature, in the case of child aged 5 years, who had commenced to masturbate himself when about *nine months* old, and who was cured of his masturbation and crises by circumcision.

Sayre has cases of reflex paralysis due to phimosis. According to Brown-Séquard, these paralyses result from the chronic irritation of the genito-urinary organs, with consecutive contractions of the vessels of the heart and atrophy of the corresponding regions. And according to Gull, they proceed from the spreading of the irritation in the urinary channels to the spinal marrow.

Moreover, muscular contractions and troubles affecting the coxo-femoral articulation have been remarked, producing the same symptoms as coxalgia. There would even be a very close relation between coxalgia and phimosis (Baerville).

Kelley asserts that his very wide experience of coxalgia permits him to affirm that children affected with coxalgia almost invariably have phimosis.

A. Riverdin, who has remarked the great tendency which children have to urinate when their coxo-femoral

articulation is examined, considers that there must be a certain dependance between these different organs, the bladder, the prepuce and the coxo-femoral articulation, since in operating on the one there is a reaction on the others.

It is credible that a pathological relation exists between phimosis and coxo-femoral troubles, since it is enough to suppress the causes of irritation to observe the disappearance of the symptoms of pseudo-coxalgia.

(Thompson, Magaudes, Reverdin.)

We find, in Berger, 27 observations relating to cases of paralysis and coxalgia. As regards the vision, Sayre, Ray, Chapman and Reverdin have pointed out in addition, strabism, amaurosis, and amblyopia. And as regards the apparatus of digestion, Saunders has noticed the appearance of gastric crises which can only be ascribed to phimosis. Henry had already observed gastralgia in an adult, produced in the same conditions. Obstinate diarrhæa and constipation have also been noticed, which could only be definitely cured by amputation of the prepuce.

American physicians have detailed several cases ot sugary diabetes, resulting as a reflex phenomenon of phimosis (Maxwell). Park says that he has seen a case of persistent glycosuria in a young man who had congenital phimosis.

Béard, among 84 adults who displayed different neurasthenic symptoms, found in 31, more than a third, either phimosis only, or a long and adherent prepuce. The principal symptoms observed had especial relation to sensitory troubles, such as general or local prurigo, painful joints, etc.

Berger's observations, 41 to 52, confirm that which has been detailed above.

**Opinion of an American physician on Phimosis.** The knowledge of all these complications and general disorders is so general in America at the present day, that it is the rule with surgeons when a child is brought to them for nervous troubles, and for ill-defined symptoms, to devote their first examination to the condition of the genital organs, and to the prepuce in particular. " When mothers bring me male children, " says Freeland, " with the presence of worms previously diagnosed, I immediately examine the prepuce, and, only after satisfying myself of no anomaly in that organ, do I direct my attention to the intestinal irritation. "

" Amidst all these facts concerning glando-preputial irritation, which thoroughly justify the expression of " unfortunate organ ", which Ricord employs to designate the prepuce, there is one which appears to us to be of the highest importance, — the nervous condition gradually and at length created by congenital phimosis. The simple defect of conformation which constitutes phimosis, demands the attention of physicians, and the watchfulness of parents. Attention to cleanliness is too much neglected in infancy, Civiale says. Now, in the majority of cases, attention to cleanliness, in a few, enlargement; and in extreme cases, circumcision, would protect the child from any reflex accident ".

Our opinion is the same.

**VI. Paraphimosis.** Paraphimosis is the opposite to phimosis, and is generally the consequence of it, although it may result, in exceptional cases, from subjects having their gland habitually uncovered. Paraphimosis is especially frequent in children, who through vice or curiosity, have forcibly slipped the prepuce to the base of the gland. Cullerier says that he has operated for paraphimosis on

men with a narrow prepuce who endeavoured to keep their prepuce behind the gland, believing that they would be less liable to contract a venereal complaint by keeping the gland uncovered.

In the majority of cases, what occurs is the following; an individual affected with accidental, or even congenital phimosis, draws back the prepuce either to proceed to a necessary examination, or to perform an ordinary washing for purposes of cleanliness or for a medical reason. Sometimes again, from a feeling of curiosity or through a lascivious sentiment. Then, if the prepuce is already in that state of semiturgescence which often accompanies lesions and even examinations performed upon the organ, it happens that the free edge of the prepuce, which already has only been brought with difficulty behind the gland, and which is dilatable only to a slight extent, constricts the base of the gland, which naturally increases in size in proportion as the turgescence of the extremity of the penis grows.

When the congestion has lasted for a certain time, inflammatory phenomena are produced: the penis is stretched, the gland is of a purple-red; micturition is performed with difficulty and not without pain.

Later on a plastic exudation may occur, capable of leading to adherences among the inflamed folds of the prepuce; and finally gangrenous symptoms may be manifested, sometimes confined to the compressed fold of the prepuce, but occasionally extending to the gland also. Cases, in fact, have been observed (Ricord) in which the gland has been completely separated from the penis by the effect ot gangrene resulting from paraphimosis. Happily these cases are rather rare, and hardly occur except when there is a very violent inflammatory condition proceeding from venereal diseases.

When paraphimosis supervenes apart from any other affection, the case is less grave, and the reduction is more easily obtained. The following case, reported by Demarquay, according to facts supplied by Bourgeois, may be considered as typical.

" A young man aged 24, residing in the country, came with his parents, his wife, and his wife's parents, to consult Dr Bourgeois on a paraphimosis which had been in existence three days and was produced on the night of his wedding. As the parents of the young man attributed their son's accident to a venereal complaint with which the young woman had been affected, the physician proceeded to examine the supposed guilty party, and ascertained only that the orifice of the vagina was to a great extent obstructed by a very unyielding membranous portion, which stretched in a segment into the posterior and slightly lateral right portion of that conduit. It was easy to feel that this appendix had been expanded by violent efforts, for it yielded to the pressure of the finger, and when pushed by it was removed to a certain depth. Then, while endeavouring to overcome the resistance which it opposed, the finger slipped into a very narrow opening, the edges of which were irregular.

" The paraphimosis therefore resulted from this natural disposition on the part of the young woman, and to a natural phimosis which her husband had.

" The patient, although he suffered greatly, for the penis was considerably swollen, and the urine flowed only drop by drop, was unwilling to submit to any surgical operation : he only consented to allow twenty leeches to be applied on the penis and the perineum. After a few days the outflow was such that the paraphimosis was operated on without difficulty (1) ".

(1) Demarquay, *Maladies chirurgicales de Paris.*

When the paraphimosis is of recent date, the reduction should be attempted by the ordinary manœuvres recommended in such an emergency. The gland and prepuce are first coated with a greasy substance; then, covering the body of the penis with a compress, the organ is grasped in the middle of the hand by its mesial portion, and drawn towards one while forcing the sheath of the penis to slip over the cavernous bodies, while with the other hand the gland and the preputial pad are compressed in such a way as to reduce their size as much as possible. Refrigerants, previously applied, will greatly contribute to the success of this small operation, if they are not even sufficient of themselves to produce relaxation and consequently reduction. Slow and methodical compression of the penis by bandages is an efficacious means of bringing about the same result. Finally, if the above means fail, or if the strangulation is so considerable as to cause a belief in the imminent sphacelus of the organ, there must be no hesitation in removing the constriction by incision on several points of the pad, after destroying the adherences, if any have already formed.

This observation will be met with again in the chapter relating to the external causes of generic excitement. Happily the phimosis, although complete, had a large preputial opening.

## CHAPTER IV

### DEFECTS OF CONFORMATION OF THE MALE COPULATIVE APPARATUS (CONTINUED)

Defects of Conformation of the Urethra.

I. Absence of the urethra.
II. Imperforation of the urethra.
III. Imperforation of the meatus.
IV. Congenital stricture of the Urethra.
V. Congenital stricture of the Meatus.
VI. Congenital enlargement of the Urethra.
VII. Double Urethras.
VIII. Hypospadia. — Kinds of Hypospadia : balanic, perineal, scrotal hypospadia. — This defect of conformation incurable.
IX. Epispadia.
Forms of epispadia. — Complete epispadia. — Incomplete epispadia. — Functional disorders of epispadia. — May be cured by a surgical operation.

## Defects of Conformation of the Urethra

**I. Absence of the Urethra.** The Urethra is rarely wanting in man. Nevertheless instances of it are quoted, witness the case of Chopart, in which a subject, aged 17, had never urinated by the penis, but by the anus. He had been affected with nearly continual diarrhæa. The bladder and urethra were absent; the ureters opened directly into the rectum.

There is no remedy for such an infirmity. There cannot be a default of the urethra without there being also

an arrested development in the other parts of the genital apparatus.

**II. Imperforation of the Canal of the Urethra.** This imperforation may be either total or partial. It was total in the case of Pugoré, when the urethra was wholly in the state of a filled fibrous cord. It is partial when it affects only one or several points of the canal, and when there is or is not, concomitant imperforation of the meatus. In certain cases the occlusion is formed by a simple agglutination of the mucous membrane : the passage of a probe is then sufficient to establish the flow of the urine. At another time it is a matter of a mucous diaphragm, which may be destroyed. But the defect of conformation is nearly as incurable as total imperforation, if it is a matter of a transformation of the canal into a fibrous cord.

**III. Imperforation of the Meatus.** Sometimes the lips of the orifice are fastened together, and a fluted probe is sufficient to restore the orifice. Sometimes there is no orifice hole. In this latter case the hole is made. The small wound heals quickly, and of its own accord. In exceptional cases, the obliteration may be prolonged more or less towards the base of the gland. Without being frequent, this malformation is less rare than the preceding ones.

**IV. Congenital Strictures of the Canal of the Urethra.** They may be annular, as in the case of reported by Philipps of the patient treated by Nélaton : the stricture was very narrow, and was situated at the extremity of the bulb : it was cured by urethrotomy. Nélaton has observed another case of it, which was annu-

lar like the preceding one, and two besides which were cylindrical; the two latter occupied a great extent of the urethra between the bend and the gland, and they had converted this canal into a hard and narrow tube.

**V. Congenital stricture of the meatus.** Congenital narrowness of the urinary meatus may not be very marked, and this abnormal disposition has no other result than to augment the force of the stream of urine, provided that the bladder and the vesical neck are healthy. But when it is necessary to introduce a probe into the canal, this defect prevents any manœuvre, for the fibrous tissue of the meatus is retractile rather than extensible. In certain cases an enlargement of the canal superinduces, behind the meatus, a pocket, in which the urine remains. On a level with this, inflammations and ulcerations may be produced, just as behind every stricture.

In place of a narrowness, properly so called, there sometimes occurs an obstruction by a *bridle*, usually transversal and dividing the urethra into two secondary orifices, one above and the other below, and both giving passage to the urine. Sometimes one only of the orifices is pervious, the other ends in a *cul-de-sac*, the bridle then presenting the appearance of an absolute valvule.

The bistoury alone can do justice to this defect of conformation. The operation is very simple, and has no painful result.

**VI. Congenital enlargement of the Urethra.** The Urethra may display at different points of its length congenital enlargements. They may be seated on a level with the gland, behind the urinary meatus. The stagnation of the urine, the presence of lithic deposits, and imperfect ejaculation, are consequences of this.

In a case reported by Guyon, the enlargement commenced two centimetres in front of the scrotum, and extended to the urinary meatus.

In a case of Hendrikez's, the pocket extended from the navicular fossa to beneath the pubic arch.

At other times the enlargement is formed by the exaggeration of a normal condition, the *cul-de-sac* of the bulb.

Finally there would be sometimes, according to Lisfranc, a depression on a level with the prostate.

**VII. Double Urethra.** The gland may display multiple openings, and certain authors have concluded the existence of two orifices. In the majority of cases it is a matter of an arrest of development, formed by a gap in the round surface of the walls of the urethra; this gap is seated at a point more or less near to the meatus, and the orifice may sometimes present the shape of a small canal. It is not therefore a matter of double urethras. In other cases the penis has been observed to be traversed by two canals, placed one above the other; one was the urethra, the other was only a *cul-de-sac*. In one circumstance, Proveilleur observed a fact which he thought constituted an anomaly of the ejaculatory conduits, which instead of emptying into the urethra, were joined together in a single canal, opening on a level with the crown of the gland on the mesial line.

**VIII. Hypospadia.** Hypospadia is a defect of conformation, characterised by the prevence of an abnormal, congenital opening, occupying the lower part of the urethra.

This defect ot conformation is somewhat frequent. Rennes, a military surgeon, has met with it a dozen times in 3000 conscripts, say 1 in 300. In 10,000 observations, I

have met with it 29 times, which would be very much the same proportion. Hypospadia is often hereditary.

**Kinds of hypospadia.** Three natural kinds of hypospadia are admitted. One, in which the urethra opens on a level with the navicular fosse, towards the base of the gland. Another in which it opens in the space included between the gland and the root of the purses; and the third in which the scrotum is pierced from the front to the back, like a vulva : the urethra, which is wanting in the greatest part of its extent, then opens into the two lips of the division.

2nd *Balanic hypospadia* is the most frequent. The abnormal orifice is situated at the base of the gland; in a case mentioned by Ripoll, it admitted only a pig's bristle: most frequently it displays a diameter about equal to that of the urethra. In front the canal is replaced by an gutter, open below, and formed by the navicular fosse deprived of its lower wall. Laterally, the mucous membrane which lines this gutter is continuous with that of the gland; behind, it is continuous with the cutaneous tegument. In some a gutter does not exist, and the canal is continued to the front of the opening, but terminates in a *cul-de-sac*. Lastly, the canal has been observed to continue in front, and to open by a second aperture at the anterior extremity of the gland. The urine then nearly always passes out by the abnormal aperture, exceptionally by the two at the same time.

The extremity of the penis displays a peculiar appearance; the gland displays a pronounced incurvation, allowing an hypospadia to be recognized by that alone, without its being necessary even to lift up the penis (Lavrey). The frænum is most frequently wanting. The prepuce presents a special appearance. " Instead of surrounding

the gland, as it ordinarily does, this membrane is hollowed out at its lower portion as far as the seat of the accidental aperture of the urethra; whilst it is long and folded on its upper portion, it forms underneath the gland a kind of carneous napkin, cut square, which extends as far as the obliterated extremity of the penis, and in a manner distorts it. The inferior hollow, lined by a mucous membrane, extends however further back in proportion as the aperture of the urethra more closely approaches the pubic symphysis" (Rennes).

**Perineal hypospadia** is seated at any intermediate point between the base of the gland and the root of the purses. The orifice presents variable dimensions. It is nearly always single, but it may have two apertures situated at different altitudes. In front of the abnormal orifice the canal consists of a gutter. But sometimes the canal is carried forward and opens on the urinary meatus. More frequently it is obliterated at some point or other of its course. The penis generally displays but slender dimensions, and the gland is more or less atrophied.

In *scrotal hypospadia*, the purses display a defect in the shape of a vulva. If the two symmetrical halves are parted from one another, a rosy, damp surface is perceived, apparently mucous; it terminates in a *cul-de-sac* more or less deep. In this hole is formed the urethra. The penis is *rudimentary*, and presents more the appearance of a clitoris than that of a penis. The canal terminates sometimes at the base of the penis, and is hollowed out into a simple gutter; more rarely the canal is continued in front to afford a second orifice to the gland. Cryptorchidis frequently exists at the same time.

**Functional disorders of hypospadia.** Mic-

turition is more difficult in proportion as the orifice is narrow, and is situated nearer to the root of the purses. In balanic hypospadia, however, if the penis is lifted and the teguments drawn backwards, the urine is passed in almost a normal manner. It is not the same in perineal hypospadia, the liquid flows vertically in the usual way and if the orifice is near the root of the purses, this fact constitutes a somewhat serious trouble. The inconvenience is still more serious when scrotal hypospadia is in question; besides, in the latter case, the contact of the urine produces a constant irritation of the region.

The genital functions are hardly affected in balanic hypospadia; all that can be said is that the sperm is not projected straight forward to the neck of the uterus, a fact which, it is true, constitutes a condition unfavourable to fecundation. The obstacle becomes the more serious the further the orifice is situated from the gland, for then it may happen that the sperm is not even deposited in the vaginal cavity, but only at the entrance. As for scrotal hypospadia it does not allow of coition, or normal fecundation.

**Curability of Hypospadia.** Scrotal hypospadia may be considered as absolutely incurable. Perineal hypospadia is curable, but it does not cease from being the source of numerous disappointments. As to balanic hypospadia, it is also difficult to cure; but the inconveniences of it, most generally, are not of a nature to necessitate a surgical intervention, the result of which besides would not pass away without being a more or less eventual quantity.

Surgeons have discovered various methods of curing hypospadia. For our own part, we have not concerned ourselves with this work.

**IX. Epispadia.** Epispadia is a defect of conformation, consisting of an aperture of the urethra on the upper surface of the penis. Considering that the fissure may be prolonged behind as far as the level of the neck of the bladder, that the pubic symphisis may not have effected its union, and that the separation of the cavernous bodies has been observed besides, some authors consider epispadia as one of the degrees of vesical atrophy. " In epispadia, as in complete atrophy, of which it is the least advanced degree, the cavernous bodies and the ischio-pubic branches are not united, and the urethra opens through its upper portion into the bottom of the cavernous gutter but the anterior wall of the abdomen and that of the bladder are in existence, only this latter forms, between the separation of the two walls, a hernia more or less marked. Between these two degrees all the intermediary ones are met with ". Richet adopts these ideas, and Ricord defines epispadia as " a fissure of the cavernous bodies ". On the other hand, Guyon, Dolbeau, and Voilmier only see in it, " a defect of conformation, consisting of a longitudinal division, more or less extended, of the upper wall of the urethra ".

Epispadia is a defect of conformation infinitely more rare than hypospadia. Marchal de Calvi has been able to observe 300 cases of hypospadia, and has only met with *two* of epispadia.

**Forms of Epispadia.** Epispadia is said to be complete if the fissure occupies the whole portion of the penial length of the urethra.

In complete epispadia, the urethra does not appear in the form of a canal till in front of the pubis. Its anterior or external orifice is found at this point. It is continued beyond by a groove going along the dorsal surface of the

penis to its anterior extremity. This gutter is lined with a mucous membrane; the latter displays the characteristics of the urethral mucous; it is continued laterally with the teguments, and in front with the fraenum.

Epispadia is said to be incomplete if it lies only on a portion of the penial length of the urethra. If the aperture is on the dorsal surface of the gland, the epispadia is said to *balanic*. It is denominated *spongio-balanic* if it encroaches on a more or less considerable part of the spongious portion of the canal. In front of the orifice, the urethra is continued in the shape of a groove.

**Functional disorders.** When the defect of conformation consists in a simple orifice, and when the latter is situated in front, the emission of the urine is less inconvenienced than in hypospadia. This liquid may, in fact, be projected straight in front. It is not the same in the case of a fissure extended towards the pubis; during micturation the parts are contaminated, and the repeated irritation to which they are subjected results in promoting a persistent erythema very troublesome to the patient. *Incontinence* of urine is also noticed in these latter cases.

The genital functions are also compromised not only from a view of fecundation, but also of coition itself.

Nélaton and Duplay have cured epispadias by a very curious operation, too long to describe here.

## CHAPTER VII

### ANOMALIES AND SINGULARITIES OF THE MALE COPULATIVE APPARATUS.

Gland with multiplied orifices. — Gland with a horn. — A repeating horn. — Ossification of the penis.

The anomalies and singularities of the male copulative apparatus appear to us to deserve a special chapter. We will not enter here into the detail of the different diseases so varied in their nature, which render the lives of certain men so miserable, but with the reader's permission we will say a few words on certain cases which appear to us to be of an interesting nature.

**Gland with multiplied orifices.** According to Demarquay the appearance of the double aperture depends on curious anomalies of the meatus. Thus, in certain subjects, the conformation of the orifice of the gland is very singular. At its upper part it has but one simple hole, but below this hole it is surmounted by two edges behind and drawn apart in front, which seem to belong to a hole distinct from the first and more superficial. Malgaigne as given to this singular hole of the anterior urethral orifice, the name of the meatus with four lips.

At its first degree, the meatus with four lips is formed by two holes, of which the anterior is extremely close to the other, and keeps its ordinary caliber. In proportion as the edges of the exterior hole are distant, the mesial hole

appears to ascend towards the upper portion of the gland. At a higher degree, the two holes are distinct, but only one of them is perforated; the other, and this is generally the upper one, exists merely on the surface. Finally, at the highest degree, there is an interval of 2 to 6 millimètres and more between the two orifices; the upper hole forms the continuation of a canal which terminates in a *cul-de-sac:* the lower hole occupies the position of the frænum of the penis, which is partly or totally wanting; this is the true orifice of the urethra.

The large upper *lacuna* however may have an internal orifice, as an observation of Marchal de Calvi proves; the subject for a long time had urinated through the two orifices. The upper one, smaller and very short (2 centimètres), gradually disappeared.

The two orifices instead of being placed one above the other, may be more or less removed from the first; a third even may be met with: Haller has published a case of this kind under the title: *Tria ostia in uno glande.*

Vidal has observed a case in which three apertures existed. Two passed through the gland, and the third was at the very lowest part of the navicular fosse at the very base of the fraenum. The last was the largest. The two apertures of the gland were very narrow, and did not allow the urine to pass, except where it was forcibly projected; the sperm was able to traverse them.

**Gland with Horn.** Several observations exist in medical science of genuine horns developed on the gland, which however is hardly their proper place. Caldoni has described and given a figure of a horn which a man bore on his gland; Ebers has seen a similar case; Breschet has amputated horny *lamellae* which rose from the gland of an old man.

In 1854, Caron displayed to the Anatomical Society a genuine horn which had been developed on the gland of a forester of St-Germain, 45 years of age; it was seated on the mucous membrane of the gland between the posterior border and the meatus, near the fraenum and on the left side. Its base, which adhered to the substance of the gland, occupied its whole height; its truncated top was dry, reddish, and slightly cracked. The body, in length from 15 to 18 millimètres, was irregularly prismatic and triangular; it was bent back on itself, so that the point looked back and downwards when the penis was in a state of flaccidity. The patient did not suffer from it in any way; only for some time coition had become impossible *both for him and for his wife,* by reason of the pain which it produced.

This growth, which dated two years back was removed with scissors, and the patient was cured in four days.

" Obs. 61. A young man aged 22 was operated on for congenital phimosis in 1846. Three months afterwards vegetations occurred on the cicatrice of the incision; they were cut away, but they increased again at the end of two years. They were cut away again. Directly afterwards, a small tumour formed at the side of the cicatrice, on the left portion of the gland. It gradually increased in size. In a few months it was three inches and a quarter in length, measuring three quarters of an inch in diameter at its base, and terminating in a point. Brown and lamellated, it had the appearance of horn, the odour of which it diffused when the patient burnt its extremity (a proceeding which he often adopted for the amusement of his friends). It did not occasion him any pain and was only troublesome when he performed his functions. He was relieved of it; a portion of the gland being included in the excision. At the present time, four years after the operation, there is

no re-appearance of it ". Demarquay (*Maladies chirurgicales de Pénis*).

Demarquay and Cruveillier consider that this abnormal growth is analogous to that of hairs, and especially to that of the nails, and that it is an imperfect corneous tissue.

**A repeating horn**. We give a still stranger case, after Victor Meunier (*les Excentricités physiologiques*. Paris, E. Dentu, éditeur).

" Three and a half centimètres in length, two centimètres and a half broad at the point of amputation, hard as a ram's horn, its point twisted in a spiral shape, and shed like a stag's antler : such is the nature of this excrescence. The man who displays it, is happily sixty nine years of age, a fact which diminishes the inconveniencies resulting from it. It appeared for the first time after a slight surgical operation, the only one which is inscribed in the Gregorian Calendar; fell off at the end of two years, and its structure, when examined under a microscope, revealed the fact that it was a case of corneous papilloma ; after that it was produced again. Without entailing any privations, considering the subject's age, it is a source of serious inconvenience. As to its situation, let us confine ourselves to remarking that it is in contradiction to the command of the Eternal to living creatures in general (Genesis, I, 22) and to man (ibid., verse 28).

Enough have I said
In not saying its name.

This is a case in which it might truly be called a repeating horn. "

Demarquay quotes the case of a horn developing on a cancer, an observation of Dr Richoud-Dubrus. This horn

was three centimètres in diameter and nearly six in height. The shape, the colour and the consistence of this growth were the same as those of an ordinary horn; if it was burnt, it diffused a very pronounced odour of burnt horn. The exterior lamina only of this horn was very hard, the others were more friable and porous. The patient, a peasant of Auvergne, declined to undergo an operation.

The condition of dried or solidified mucus or pus leads by insensible degrees to corneous growths, and in this category we must class the fact of corneous growths, and of the nail developed on the gland, reported by M. Nel, in the case of an individual whose cancerous prepuce had been removed, and some portions of whose gland which were affected had been cauterized; a hard, white, insensible body rose from the matrix of the gland, and, in the space of ten months, increased in length and breadth, so as to be nearly equal in size to the gland, and at the same time acquired the hardness of a corneous substance.

These horns on the gland have been observed in subjects belonging to different periods of life. They show themselves at the base of that organ, either in front or at the posterior surface, as in the observations collected by Caron. Sometimes the growth is single, and this case is the most frequent; sometimes a certain number of corneous lamellæ exist on the gland, as in a case which occurred under Demarquay's attendance.

These excrescences appeared on the gland in four months in the shape of two small pimples, which persisted in spite of the employment of suitable powder and ointment. Soon the pimples were changed into appendages which increased in number and size. The corneous vegetations sometimes grow with a certain rapidity; some have been observed which in a few months have gained a

length of 7 to 8 centimètres, and measured 2 to 2 1/2 centimètres at the base : they commonly end in a point, are brown and lamellated, display the appearance of horn, and diffuse an odour of it when their end is burnt. These strange growths occasion no pain to the unfortunate possessors, any more than a cuckold's horns, but less fortunate than the latter, they who are horned on the gland are unable to have connection, by reason of the pain which the appendage occasions. The patient has only one resource, which is to have it amputated. Unfortunately, to prevent their recurrence, it is necessary to amputate together with them a portion of the gland, which is often dangerous.

**Ossification of the penis.** The penis may become completely osseous; and so we find in the *Ephémérides des Curieux de la Nature*, that a butcher of Havre had a penis entirely osseous, and consequently always in erection, and of such rigidity that his wife felt the most violent pains during coition : how many impotent patients there are who would wish to have their genital parts formed after the fashion of the butcher !

However, most frequently the ossification is partial : thus Velpeau has seen a subject whose pubis sent out an osseous prolongation, 15 lines in length, on the left side of the penis; he would not undergo any operation.

Mac Clellan has observed an ossification of the partition of the cavernous bodies ; so much distortion existed that the emission of the urine could not take place without much difficulty and excessive pains, and that coition had become completely impossible.

" A man, aged fifty two, had the penis bent upwards, and on touching it the existence of a kind of hard stiff cord was recognizable. The distortion was so great that

the emission of urine could not take place without much difficulty and excessive pains, and that coition had become completely impossible. Dr Clellan in the first place divided the cord lately in question, which presented a ligamentous appearance; this division sufficed to considerably diminish the curvature, and rendered the emission of the urine very easy. But a few days after, the patient found himself again in the same state. Dr Clellan then discovered that the partition of the cavernous bodies was completely ossified, and displayed a narrow bone which reached the whole length of the penis; the latter organ, besides, possessed extreme excitability, and entered on erection at the slightest touch, during which it was concave in an upward direction.

An incision was made along the whole length of the urethra, and the ossified mass was carefully dissected as far as the posterior part of the spongious portion of the urethra. The partition had become so hard that it gave a grating sound under the instrument, and blunted the edge of it. During the course of this operation, intense hemorrhage was produced, which was readily stopped with cold water. The edges of the incision were brought together, and kept so by means of two sutures crossing one another; a light compress and a bandage kept the whole together. The curvature was thus dispelled; a slight inclination was shown in the opposite direction (1) ".

Another very remarkable case of ossification of the penis was shown to Demarquay, who however was unable to procure the observation upon it. All that he knew was that the subject of this case was an individual aged 50, and that the bone was 5 to 6 centimètres in length.

(1) *Nouveau journal des Sciences médicales.*

## CHAPTER VIII

### FOREIGN BODIES IN THE PENIS

*A.* Foreign bodies of internal origin.
Urinary calculi. Curious observations.
Foreign bodies formed by the sebaceous matter.
*B.* Foreign bodies introduced into the urethra.
Remarkable examples of Dr Pouillet.
The shepherd's split penis. Galien and his masturbating stick. Interesting observations of Demarquay. A fork in the Urethra. — Dangers which may result from the introduction of foreign bodies into the urethra.
*C.* Stricture of the Penis by foreign bodies.
Examples given by Pouillet.
Penitis induced by a constrictory place round the penis.

**Foreign Bodies in the Penis.** The foreign bodies in the penis are sometimes produced by the organism of the subject, or they are formed by external causes.

Among those of the first category we find, 1st the ordinary calculi, 2nd the sebaceous matter : the first may be situated in the canal of the urethra, or in the cavity of the prepuce; the second occupy only the latter region.

In the second category, we find the foreign bodies coming from without; they nearly always occupy the urethral cavity : they consist of needles, pins, pieces of wood or whalebone, fruit-stones, ends of probes, etc. At other times they occupy the body itself of the penis, whether they may be projectiles, or placed there by the subject himself.

**Foreign bodies of internal origin. Urinary calculi.** The urinary calculi may proceed from the bladder or the kidneys, where they are formed, or from the urethra itself in which they may be developed. In this case, it is not unusual to meet with a cavity, more or less deep, communicating with the canal, and serving as a reservoir for the accumulation of the salts which constitute the calculus.

The latter may besides be situated at the perineal, bulbous, membranous, or prostatic portion.

Sometimes these calculi are formed on the spot: these concretions have been seen developing behind a coarctation in a dilated point of the canal. But this is by far the most unusual case.

Nearly always these foreign bodies are calculi formed in the kidneys or in the bladder: at a given moment, they have been carried away outside, and are stopped in their migration at a given point of the canal. The latter are divided into two very distinct kinds, especially when they are regarded as to the accidents which they may involve; sometimes it is a calculus which has passed the neck of the bladder, sometimes it is the fragment of a calculus entangled in the urethra after the operation of lithotrity. In the first case the foreign body is rounded; it nearly always passes the canal without causing accident. At other times it is a simple agglomeration of grains of sand, which the stream of urine soon dissolves and drives out.

It is another matter, however, if it is a question of calculous fragments: their angular shape, while it facilitates the arrest of their passage, leads to accidents of variable nature and intensity.

The membranous portion is the point where the calculi most frequently take up their abode; they do so

also in the region of the bulb, in the navicular fosse, and even in any point of the spongious portion which lies between the two preceding points.

The calculus makes its ways under the impetus of the stream of urine which drives it forwards. If on the other hand it is stopped at a given moment, generally speaking it may be said that this depends on two classes of conditions, 1st the size of the calculus and its angular shape, 2nd regarding the urethra; a normally dilated or dilatable point, immediately followed by an immediately narrowed point; a pronounced sub-pubic curvature; a deep cul-de-sac of the bulb; a distended navicular fosse behind a narrow meatus; a pathologic stricture of the urethra; the irritation and swelling of the mucous membrane produced by the angular fragment, after a premature expulsion of the concretion when not completely crushed.

Volumes have been written and still may be written on the calculi of the urethra, and in this work we are unable to dwell for long upon this subject. We are content with giving a few curious observations which are out of the common. In the case of a Russian, a calculus extended from the urinary meatus to the collar of the bulb, and was withdrawn by M. Lanzet, Professor at St.Petersburg, who has related the fact in the following manner.

" On the 11th of Nov. 1828, a non-commissioned officer of marines, aged 21, entered the hospital. He had a considerable swelling of the penis, especially at its middle part, where on the lower surface an abcess had formed, the top of which was covered with a thin greyish skin. On feeling it it was possible to ascertain the presence of an enormous calculus in the canal of the urethra; this calculus occupied the space included between the urinary meatus and the membranous part of the urethra, and consist-

ed of several fragments joined together by false membranes ". (Voillemier. *Traité des maladies des voies urinaires.*)

We will pass in silence over the details of the operation. The 6 pieces which composed this strange calculus, reached about 80 grammes in weight.

A calculus as large as an egg, weighing 94 grammes, lodged near the prostate, was removed from an old man.

M. Maigrot of St-Dizier removed from an enormous pocket situated in the same region, a calculus 250 grammes in weight.

But the most curious example of the disorders which may be brought about by a calculus, is that of a peasant of the Ukraine, in whom a calculus, arrested in the navicular fosse, was able gradually to wear away the mucous membrane of the urethra, perforate the canal, and arrive in the sub-cutaneous tissue of the penis, the laxity of which allowed the foreign body to increase on all sides through the deposit of the salts of the urine, in which it was steeped at each emission.

But it is not in the urethra alone that calculi may be formed. They are also found between the gland and the prepuce, when phimosis exists, as we have already pointed out. Numerous instances of this are quoted. Here is a somewhat unusual one, published in 1840 by M. Remeaux in the Bulletins of the Anatomical Society, which we reproduce according to Demarquay.

" **Numerous calculi developed between the prepuce and the Gland — Operation.** On Jan. 25th 1840, a young man entered the Charité, under attendance of Velpeau, he was twenty-two years of age, of middle height, and of athletic constitution, never having had any serious disorder. He stated that since his infancy

he had had difficulty in passing his urine; the end of his penis was very long, and each time he wanted to urinate a ball was formed which disappeare dimmediately; but the stream of urine was irregular, shaped like a cork-screw, and nearly void of force, to such a degree that the liquid fell by its own weight. Towards the age oftwo-and-twenty, the genital organs assumed considerable development; up to that time the emission of urine became more and more difficult, but he suffered no pain in the interval. When venereal desires were developed in him, he frequently had at night painful erections and even emissions of sperm; nevertheless he had never seen anything of a woman, *knowing* that he was not shaped like other men. It appeared also that he had never indulged in masturbation; however that may be, commencing from the period when he had frequent erections and nocturnal emissions, he was affected with a continual running, through the preputial aperture, of a lactescent liquid which stained his linen like the liquid of gonorrhæa; at length, as the emission of urine became more and more difficult, as the extremity of the penis became more and more voluminous, and as he experienced very violent pains during the erections, the patient decided to enter a hospital, where we saw him in the following condition: The genital organs are much developed; the two testicles are of the ordinary size, but the dimensions of the penis are considerably larger than the normal condition; it is slightly voluminous at its root, and terminates in an enlargement the size of a hen's egg; at its upper part a small opening is visible which would hardly admit the point of a probe; but it is easy to recognize that the prepuce is distended, and the cavity filled by the product which forms the tumour; a lactescent liquid is continually running through the aperture; the patient states that since a few months back, the emission of urine

has become painful : a rather violent smarting is felt the whole length of the canal; sometimes too the liquid further distends the end of the penis; he was obliged to apply a pin in the aperture to repel the foreign bodies, which, seated in front of it, prevent the liquid from escaping.

By lightly pressing the tumour, it was easy to ascertain a peculiar crepitation which indicated in a positive manner the existence of gravel in the cavity of the prepuce; by compressing it in different ways, the substances were made to slide one over the other; however, the application of a probe through the aperture confirmed this first opinion : the diagnosis was therefore completely established, and the indication very precise; the prepuce was filled with calculi; it was necessary to extract them by performing the operation for phimosis; the patient did not display any of the rational signs of vesical calculus.

On Jan. 28 th , the operation was performed in the following manner : a channelled probe was introduced into the prepuce and directed downwards on the sides of the frænum; when the point was made to project under the skin, a long and narrow bistoury was introduced into the channelling, and by one stroke, drawing back the bistoury in the usual way, the lower wall of the enlargement was cut; a certain number of calculi escaped immediately; but when the largest had been extracted, there still remained a large number of them in the groove of the gland, the extraction of which was difficult; it was even necessary in several places to remove them by incision.

The gland had nearly entirely disappeared under the pressure of the calculi; it was completely deformed; the prepuce was thickened and lardaceous; at its root it was at least 1 centimètre in thickness, therefore M. Velpeau asked himself if it was not better to remove it immediately;

nevertheless he preferred to leave it, hoping that it would diminish in size (simple dressing).

The calculi were thirty eight in number, weighing 15 grammes; among the number there were some very small ones, but nevertheless one alone weighed 4 grammes. Their surface was very polished, their shape pretty regular; they nearly all had the shape of pyramids with four faces: the corners were rounded, a shape which allowed them to be placed exactly one on the other.

As to their external characteristics these calculi had a great similarity to those which are found in the vesicle of the gall; but their composition was that of urinary calculi; the centre was formed of a whitish matter, of slight consistency and very friable; round this substance was a rather thin layer of citric acid, but the principal mass was formed of ammoniaco-magnesian phosphate.

The patient has recovered; the prepuce remained deformed, but by a methodical pressure it has been restored to an almost normal shape.

Demarquay has observed an almost similar but less curious fact.

**Foreign bodies formed by the sebaceous matter.** These foreign bodies are invariably situated in the preputial cavity, between the gland and the prepuce. They result from the prolonged continuance of the sebaceous matter, when a narrow preputial aperture coincides with a complete phimosis. The matter secreted by the gland and the prepuce supplies the elements of these calcaceous growths; they are however very rare.

Demarquay quotes only one instance of them.

**Foreign bodies introduced into the ure-**

**thra**. These bodies present many varieties in regard to their nature, their shape, and their size. We enumerate them further on. If we examine the age of the individuals in whom these foreign bodies have been met with, we find that the youngest was 8, the oldest 71, while the largest number were between 20 and 30. If we enquire the motive which has led to this, we find that these individuals have but rarely had sexual relations, but that they had been a long time addicted to masturbation; but when that became insufficient, they adopted the plan of introducing a foreign body, in the first place at the entrance of the canal near the navicular fossa; but as the sensibility of that region soon became reduced, they were obliged to push the foreign body further forwards in order to procure a more or less abundant ejaculation. Others again have introduced these foreign bodies for a wager, when in a state of intoxication. If, at the moment when the erection is at its height, the patient lets go his hold of the foreign body, the urethra, irritated by its presence adheres to it closely and draws it back with it, in proportion as the erection ceases. The patient is unable to withdraw it, and his efforts only contribute to cause it to penetrate further, sometimes as far as the interior of the bladder. The penis swells, tumefies, becomes red, and a fluid tinged with blood oozes forth from the urinary meatus.Disury, and sometimes retention of urine, follow, with very violent pains the whole length of the penis and extending to the bladder. Ordinarily the aid of surgical art allows the foreign body to be withdrawn after an operation which varies according to the nature, shape, and size of the foreign body.

We give a few examples to show all the varieties, borrowed from Pouillet (*De l'onanisme chez l'homme*, par le docteur Pouillet. Paris. Bataille, éditeur).

" A man named H... a sergeant in the 6th reg. of the Line, used habitually to introduce a round body, such as a pencil, pen-holder, etc., into the urethra, in order to feel the voluptuous sensations. One day, while he was indulging in this practice, a sudden fit of sneezing caused him to let go the pen-holder, which soon penetrated into the bladder. It was necessary to cut for it.

" A young man of M... aged 25, living at M. B... du C...'s in the capacity of servant, came to see me on July 20th 1825, for a retention of urine, accompanied with very violent pains at the root of the penis. After examining and questioning him, I felt certain that the retention of urine as well as the pains, were due to the presence of a foreign body in the urethra. When I taxed him with it, the young man confessed to me that for a long time he had contracted the unhappy habit of introducing into the canal of the urethra, as a means of excitement, a very long brass pin, and that in a moment of inadvertence he had let the pin go; it had descended into the canal two days before and remained fixed at the lower portion of the penis. Its extraction necessitated a special surgical operation (1). " While I was house-surgeon at Lariboisière, in 1859 — says Moussaud (2) — I attended to an amateur of solitary pleasures, who in this manner introduced into the canal of the urethra two ear-rings of an irregular olive-shape. One had made its way into the bladder, the other had been stopped in the membranous portion of the urethra. The extraction of these foreign bodies involved difficulties, pains, and dangers, which I am convinced will not have resulted in curing the patient of his detestable mania.

(1) Letter of Dr Gazan de Vallauris to the *Journal de médecine et de chirurgie pratiques*, année 1850, p. 97.

(2) *Précis pratique des malad. des org. génito-urinaires*. Paris, 1876.

" In January, 1777, the head surgeon at the Hôtel-Dieu of Clermont communicated to the Academy of Surgery a case republished by Chopart as follows :

" A man, aged 45, who was seated near a vine, took a small vine-twig, which he introduced into his urethra in order to pollute himself, and to cause the ejaculation of the sperm. During the crisis of pleasure, he pushed the small stick too far into the urethra and let it go ; it made its way into the bladder, and soon produced the symptoms which are usual when foreign bodies are contained in that portion of the viscera. M. Bonnet operated on this man, by cutting and with the polypus forceps he withdrew the stick which was three inches long eight lines in circumference, and was incrusted with much calculous matter (1). "

Deslandes (2) borrows from the *Lancette française* of Oct. 1st 1831, the following story of a boarding-school master in the neighbourhood of Saumur:

" This man made especial use of an iron wire, seven to eight inches long, the end of which he had carefully bent into the shape of a hook, probably in order to procure for himself keener pleasure. One day when he was engaged in this singular manœuvre and abandoning his hand to the wildest movements, he felt all at once a sharp pain. The canal was torn in its membranous portion. The unfortunate man made numerous efforts to withdraw the long iron wire, but the hook, which had become entangled in the soft parts, rendered it absolutely impossible to do so. Enduring an agony of suffering and shame, he wished to free himself at any cost. With this view, he bent the free portion of the wire into the shape of a ring, inten-

(1) *Traité des malad. des voies urinaires*. Notes et addit. par Sigalas, p. 312, 1re col. Paris, 1855.

(2) *Loc. cit.*, pp. 281-282.

ding in this way to obtain a better leverage. He pulled in fact with all his strength, so as nearly to break the ring : but the iron still remained fixed in the place. He then abandoned himself to the most awful despair and expected death, when his excessive pain made him decide to summon a surgeon. This was Dr Jardeau, of Saumur. The penis as well as the skin of the scrotum was enormously swollen; all the tissues which are at the point of the insertion of the penis in the pubis were equally swollen, hot, and painful. The stomach was beginning to be distended; there was a suppression of urine, the face was red and the eye viscous; the brain was beginning to ramble; the pulse was hard, rapid and concentrated. M. Jardeau took hold of the disengaged portion of the iron wire, tried to draw it gently; and thus proved that its other extremity was arrested by an insurmountable obstacle. He then examined the parts with the greatest attention, and was considerably surprised to discover, beyond all possibility of doubt, that the hook was fastened in the inner edge of the ischiatic tuberosity. An oblong incision was made at this spot, he was able to seize the hook, and the wire was withdrawn by the perineum, etc.

M. Louis, in the *Journal universel des sciences médicales* of October 1829, reports the case of a young man, aged 19, who polluted himself by introducing into the urinary canal the stalk of a plant, which broke one day, and penetrating into the bladder was the cause of numerous calculi.

M. Rigal likewise saw a man, aged 38, who made use of a stalk for erotic purposes. It broke in the bladder, remained there for two months and necessitated an operation by cutting. It was nine inches in length, and was covered with a calcareous concretion one or two lines in thickness.

Dr Deslandes, moreover, quotes this observation, published

in the *Journal de médecine, de chirurgerie et de pharmacie*, vol. XXXIII, p. 290, by Dr Séraillé.

" The patient, aged 50, summoned a surgeon on Oct. 18th, 1813, informing him that he had had the misfortune to let slip into the canal of the urethra, a mattress needle, four inches long, with which he had masturbated himself for three years. This instrument had disappeared from his fingers at the moment preceding ejaculation. He thought at first that it would be expelled at the moment when that occurred; but this did not take place: the needle had been introduced into the urethra by the heel, and the point being directed upwards, had become fixed near the root of the penis. After eight days of suffering, during which the presence of this body excited frequent erections, M. Lallemand, of the Salpêtrière, succeeded in extracting it by means of an operation. "

We cannot terminate this list of instances of strange pollution better than by relating, almost in extenso, the case of the famous shepherd Galien with its surprising details, as Chopart has conveyed it to us.

**The split penis of the shepherd Galien, and his masturbating stick.** " Gabriel Galien indulged in masturbation from the age of fifteen, to such an excess that he repeated it eight times a day. A short time after, the ejaculation of semen became rare, and was so difficult that he wearied himself for an hour to obtain it, which brought him into a state of general convulsion, and yet he did not bring forth more than a few drops of blood and no seminal humour.

Until the age of twenty-six, he only made use of his hand to satisfy this dangerous passion. Not being able then to cause ejaculation by this means, which only served to keep the penis in an almost continual

state of priapism, he bethought him of tickling the canal of the urethra with a small stick of wood about six inches in length. He introduced it, more or less, without applying to it any greasy or mucilaginous substance, to soften the painful effect which it must make upon such a sensitive part. The occupation of a shepherd which he adopted,afforded him the opportunity of being often alone, and of easily indulging in his passion; therefore he employed repeatedly several hours of the day in titillating the interior of his urethra with the stick. He made constant use of it for a space of sixteen years, and it procured him a more or less abundant ejaculation. The canal of the urethra, by a rubbing of this nature so often repeated and continued for so long, became hard, callous, and absolutely insensible. Galien then found his stick as useless as his hand, and believed himself to be the most unfortunate of all men. The insurmountable aversion which he had to women, the abstinence to which he saw himself reduced, the continual erection which provoked his passion without his being able to satisfy it, appeared in fact to justify his idea.In this state of melancholy effervescence which affected him morally as well as physically, the shepherd often allowed his flock to wander; he occupied himself only in seeking for a fresh means of satisfying himself. After many equally fruitless attempts, he returned in desperation to the use of the hand and stick; but perceiving that these methods only irritated his artificial needs, he drew in despair a blunt knife from his pocket, and with it he made an incision in the gland along the length of the canal of the urethra. This incision, which would have caused the sharpest pain to any other man, only procured for him an agreeable sensation, followed by a complete ejaculation. Enchanted by his happy discovery, he resolved to indemnify himself for his forced abstinence, every time that

his desires prevailed. The holes, the rocks, the thickets served him as a refuge to repeat or to practise his new process, which always procured for him the pleasure and the ejaculation which he expected from it. At length, giving all the scope possible to his passion, he succeeded, perhaps in a thousand repetitions, in slitting his penis into two exactly equal portions, from the urinary meatus to the portion of the urethra and the cavernous bodies which reaches above the scrotum and near the symphysis of the pubis. When the blood flowed abundantly, he stopped the hemorrhage by tying a string round the penis, and he drew the ligature sufficiently tight to prevent the flow of the blood, without intercepting its course in the cavernous bodies. Three or four hours after, he removed this ligature and left the divided portions to themselves. The different incisions which he made in the penis did not obliterate his desires. The cavernous bodies, although divided, often entered on erection diverging right and left. M. Sernin, head surgeon of the Hôtel-Dieu at Narbonne, who communicated to me this fact, was a witness to the phenomenon of this erection. Being unable to make any further use of his knife, because the section of the penis reached to the os pubis, Galien saw himself in fresh distresses; he resumed the use of a second stick shorter than the first, he insinuated it into what remained of the canal of the urethra; and by titillating at his pleasure that part of the canal and the orifices of the ejaculatory conduits, he provoked the ejaculation of the semen. It is thus that this truly extraordinary masturbator amused himself during the last ten years of his life, without feeling the least disquietude regarding the division of his penis; the long practice which he had had in the use of his stick, made him bold and sometimes careless in what he did with it. On June 12th 1774, it slipped out of his fingers and fell into

his bladder. Soon afterwards grave symptoms made their appearance; acute pains in the viscera and perineum, difficulty in urinating, fever, passing of blood, hiccough, vomiting, diarrhœa tinged with blood. Tormented by these evils, he still made efforts to rid himself of such a cruel foe. He introduced, more than a hundred times, the handle of a spoon, forcing it from behind to the front, in order to make the stick come back by the same way as it had entered; but the evil was beyond any aid which he could render himself. He was induced to return to the hospital of Narbonne, where he had been received on three different occasions in the space of two months and a half, and whence he had gone without feeling any relief, because he would never consent to be examined in order that the cause of his malady might be discovered. What was the surprise of M. Sernin, when, on examining the hypogastric region of this unfortunate shepherd who complained of a retention of urine, he found two penes, each of which was nearly of the size of a natural penis! This singularity increased the attention of the surgeon. Although the patient declared at first that he was born with this conformation, the examination of the parts, the very apparent cicatrices, the callous hardness through the whole length of the division, caused him to believe that this was not a natural defect of conformation. M. Sernin assured himself by the aid of a probe of the presence of the foreign body in the bladder, and decided to extract it without delay by the operation of cutting. M. Sernin performed it on the 6th Oct. in the same year in the presence of a large number of members of the profession and spectators, who were attracted by the singularity of the case. Three months after the cicatrisation of the surgical wound, Galien died of pulmonary phthisis ".

To these observations we add others not less curious,

borrowed from Demarquay (*Maladies chirurgicales du Pénis*), already quoted several times.

**Ear of rye arrested in the membranous portion of the urethra, and extracted by means of a scraper-tube by Jobert de Lamballe.** X..., aged 74, had never had any affection of the genito-urinary organs until, on Nov. 14th, 1864, he felt an itching in the urethra. He had the unlucky idea of introducing into the canal an ear of rye, which became entangled by the end which is joined to the stalk. It was impossible for him to withdraw it, and little by little the foreign body made its way into the urethra. Four days after, he went and consulted Vigla, and by his advice placed himself under Jobert's care.

The day after he did so, Nov. 19th, the ear had reached the membranous portion of the urethra, where it occasioned pain; there was no purulent running; the emission of urine was effected with difficulty and pain, which gave place to an incomplete retention.

On Nov. 21st, Jobert introduced into the urethra the scraper tube, made, on his instructions, by Charrière. This instrument is intended especially to remove the detritus of calculi entangled in the canal. Once having reached the muscular part of the urethra, the scraper-tube took hold of the foreign body and brought it gently to the exterior.

The ear of rye, 4 centimètres in length, displayed a reddish colouration, was not covered on the surface with pus, and had its beard brought together and joined by the mucus, so as to leave no intervals in it.

For a few days after the extraction of the foreign body, the patient felt pains and smarting while urinating. But

when he left the hospital on Dec. 1st, ho did not experience any painful sensation during the evacuation of urine, nor was an obstruction observable in the membranous portion. Baths, which were taken every other day, and the administration of emollient drinks, induced the irritation, caused by the presence of the foreign body, to disappear.

This observation proves that at the end of a certain number of days, ears of wheat, barley or rye may be easily removed, because the beard draws closely together, and converges towards the same point, and thereby avoids any irritation of the conduit.

**Small branch of a chestnut tree introduced into the urethra.** An individual took home with him a young branch of one of the chestnuts in the Tuileries, and after stripping off the bark, introduced it into the canal.

When Voillemier was summoned, he found this foreign body projecting outside : but it was impossible to extract it, held as it was by the small projections which clung on to the urethral mucous. The story of Marchettis, and his process, soon recurred to his memory, but he was unable to slip a tube between the foreign body and the walls of the urethra. He then adopted the plan of cutting the branch pretty close to the penis and of breaking it on the spot, by introducing repeatedly a probe into its centre ; he was able to remove these fragments, of which in a way he had made matches.

The foreign bodies most frequently introduced into the urethra are pins and needles, and they are the most difficult to extract, for their small size often prevents their being seized with the forceps; when that does occur,

their points become entangled in the walls of the canal, and their extraction becomes the more difficult.

**Long pin introduced into the Urethra.** A man aged from twenty five to thirty, presented himself to Amussat, saying that wishing to probe himself, the probe had escaped out of his hands and become entangled in the urethra. Amussat discovered in fact the presence of a foreign body in the canal, situated two inches deep, the anterior extremity of which had penetrated into the walls of the urethra. By forcibly drawing the penis, the surgeon succeeded in freeing this extremity, then catching it in the canula of a lithotritory instrument, he extracted not a probe, but a large pin, six inches in length and proportionately thick !

**A Fork in the Urethra. Foreign body introduced into the Urethra and arrived at the perineum;** by Hérail, surgeon of the Royal Hospital of St-Symphorien-le-Chateau, in Lyonnais. — On the 28th of July, 1785, a man aged 22, residing in the country, came to consult me on a rare and singular case. He declared to me that he had a fork in his penis; that was his way of expressing it.

I was greatly surprised; by an examination of the part, I was convinced that it was a fork, but in shape like those which the peasants have in the handle of their knives; it was 4 inches 9 lines in length, and the distance from one prong to the other towards the point, which was very sharp, was 6 lines. The handle, which was of horn, shaped like a reversed pyramid, held three of them. It was two days since the foreign body had been introduced; the virile member was already very stiff and inflamed; it was three times its ordinary size.

The size, the shape, and the two sharp points of this instrument warned me of the imminent danger to which the patient was exposed. Under these circumstances, I would not act without due consideration; I summoned M. Gaydan, physician, and MM. Bras, father and son, surgeons; all agreed with me as to the impossibility of extracting this foreign body in any other way than by an incision at the perineum; this was performed on the spot. When the operation was completed, the patient urinated two hours after, and the radical cure was happily completed in six days. The patient obstinately maintained that it had occurred whilst he was sleeping, and that when he woke up in the morning he found the knife in his hand.

**Dangers which may result from the introduction of foreign bodies.** The introduction of these foreign bodies, of which we have been able to take only a rapid view, does not usually entail a serious prognosis. Nevertheless when it is an old man, or a subject exhausted by masturbation, when the canal has been more or less lacerated by the foreign body, there soon results from these an œdema of the penis and scrotum, the patient becomes greatly prostrated, and dies. The autopsy reveals the severity of the disorder. Demarquay quotes the case of an old man, aged 78, who had introduced into the urethra a small twig of white wood hung to a thread. It was necessary to make an incision of the urethra in order to remove the foreign body, which was fastened by its two ends diagonally in the urethra, having been introduced by the end to which the thread was attached.

The patient died 8 days after the operation. At the autopsy the penis was found to be red and œdematous through its whole length, and of a size considerably grea-

ter than when in a normal state. The bladder was healthy, but below the pubis there was a large abscess, filled with pus, communicating with the rectum, which by purulent infection, had caused the death of the subject.

**Strangulation of the Penis by Foreign Bodies.** Sometimes children have their penis tied with a thread or ribbon in order to prevent their urinating at night; but nearly always these who have inserted in their penis a foreign body, have done so at a moment of eroticism, and with no other object than to procure for themselves a pleasureable sensation by this singular manœuvre. The most unlooked for objects have been found round the penis, such as threads, ribbons, hairs, rings of wood-glass, and metal, etc. Dr Pouillet, in his work which we have quoted above, gives a very curious enumeration of them.

**Introduction of the penis into a foreign body. Bands tied round the penis.** This man, ner of self pollution, rather rare among children, is more usual among youths at puberty, who are not altogether ignorant of the way in which the sexual union is effected; for the most part, in fact, it is an imitation of coition. The objects which receive the penis are very various; some young men have made use of mattresses or pillows in which they had made a hole : others have utilised the cavities displayed by tree-trunks, or the holes left in the ground by moles; many have been satisfied with the sockets of different instruments. A butcher's boy of about 20 confessed to us that he polluted himself in the still-warm body of a calf in which he had made a hole for his purpose. Larrey found a gold ring throttling the penis of a young man addicted to masturbation. Sabatier has

reported several observations in which the foreign bodies were ferrules of iron or leather, key-rings, etc. Legros has seen a collegian, 16 years of age, whose penis had been thrust into the neck of a scent-bottle.

How many individuals have surrounded their penis with tight bands, of cord, of laces, of twine, ribbon, thread, etc., and, victims of their own erotic folly, have been obliged to have recourse to surgeons who then learned their proceedings ?

Lallemand considers that Dr Deslandes was in error when he attributed the introduction of the penis into foreign bodies, and the application of bands tied round that member, to lewd intentions. According to the eminent scientist, it is not the erotic fury — the expression which Deslandes uses — which induces them to commit these imprudent acts, but the eager desire to prevent involuntary and obstinate seminal losses. In support of his assertion, he quotes the observation of Deslandes relating to the cooper's boy who came to the clinic surgery of the Hôtel-Dieu with the socket of a candlestick round his penis, and adds, " Having been entrusted by Dupuytren with the duty of interrogating the patient, and of taking a sketch of the parts, I learned that he was exhausted by nocturnal pollutions, and that it was in order to prevent them that he had introduced his penis into this candlestick socket. I was compelled to believe him, for the very simple reason that his penis could never have passed through this leather passage if it had not been in a complete state of flaccidity ".

This latter reason does not prove anything, for, generally, the masturbators who have recourse to similar means are surfeited and semi-impotent, in whom erection is slow, and who endeavour to create it exactly by these singular proceedings. If, however, on the one hand, we are

willing to admit, with the Professor of Montpellier, that sometimes those who suffer from spermatorrhæa compress the urethra in the hope of preventing these nocturnal losses ; if we are persuaded, with Nélaton, that children sometimes tie up the penis in order that they may not urinate in bed during the hours of slumber; it is, on the other hand, beyond doubt and dispute for us, that in the great majority of cases, it is eroticism which brings these manual performers to adopt these dangerous actions. The desire for pleasure, let us repeat it, induces them to imprison the copulative organ in a hard or metallic instrument; the same cause, or more frequently the impossibility of any other manœuvre, and especially the wish to conceal the genital habit by preventing the sudden ejaculation of the sperm, gives them the idea of making use of a band tied round it.

Were those two soldiers tabescent, and desirous of avoiding involuntary seminal emissions who passed their penis, one into the socket of a fire-shovel, and the other into the socket of a bayonet?

Was it spermatorrhæa which urged that young man, in a public bath establishment, to introduce his penis into the hole made in the bath for the outflow of the water, who when he was unable to withdraw his penis, owing to the swelling of the gland, began, in spite of his shame, to utter loud cries for some one to come and put an end to the horrible torture which he was undergoing through his own fault.

One observation in conclusion.

In 1869, at Lille, we were called to a child aged 6 years and a half, who had divided all his penis except the urethra, at about half a centimètre from the pubis, by means of a noose of flax. The parents, knowing that he masturbated himself to excess, compelled him while in bed to

keep his arms and hands outside the bed-clothes, and for greater security they tied them up. But his desires had rendered the child ingenious, and taught him how to circumvent difficulties. During the day, he tied a thread round his penis, and in the evening towards bed-time, he placed the free end of the thread between his teeth. As soon as he was in bed, by drawing his head backwards and forwards he was able to tighten and loosen the string, and to give a to and fro motion to the penis, sufficient to generate pleasure. He had already on several occasions recommenced his manœuvres with success, but one night the thread broke close at the knot, the penis became swollen and gangrened, and the pain and the impossibility of walking compelled the youngster to acknowledge his misfortune and to confess to us the cause of it ".

**Shocking accident to a Monk.** It is interesting in this connection, to recall the following delightful, if not over-decent adventure of a too-gallant monk. The story is translated from the Latin of Poggio and we believe the student will agree that it casts a strong light upon the curious practices of the Middle-Age. In the " Book of Exposition, or Marriage Love and Woman amongst the Arabs " (Paris, 1896) a similar story of Oriental origin is also to be found, wherein the amorous congress had a happier and more natural ending. Our author relates :

" In the district of Piceno there is a town called Jesi : a Friar, Lupo by name, who lived there, was in love with a young maiden whom he passionately urged to gratify his desires. She at last yielded to his entreaties; but as, from fear of feeling too much pain, she showed some hesitation, the friar promised to put between them a wooden board, through a hole in which *telum mitteretur*. In consequence, he provided himself with a very thin deal board,

made a hole in the middle, stole into the girl's room, *missoque per foramen Priapo*, which was still asleep, *cum puellam deosculari coepisset, sublatis vestibus*, he went in search of the longed-for dainty. *Virga vero*, roused by the maid's sweet breath *et inferioris partis tactu, cœpit admodum, et præter mensuram foraminis, tumescere*, and was strangled like. It was held so tight that it could neither go in nor out without acute suffering. The expected pleasure was converted into harrowing pain, and the friar, writhing under the infliction, began to groan and scream. The lass, thoroughly scared, endeavoured to comfort him with her kisses, and to achieve the desired end; but the alleviation she tried to apply only increased his anguish, for, the greater the swelling, the more excruciating the compression. The luckless friar was on the rack, and begged for cold water wherewith to bathe and reduce the tumor which tortured him; but the damsel, afraid of the people of the house, did not dare to ask for any. At last, strongly moved by the poor wretch's screams and suffering, she went and fetched some, bathed profusely the painful locality, and the swelling soon decreased. The friar, hearing somebody stirring about already, felt anxious to get away, and *e tabula membrum deduxit*, galled to the quick. He had to put himself under medical care, and his mishap became public. If everyone paid such a high price for his freaks, many people would become more reserved.

**Penitis induced by a constringent band.**

'*Penitis* is nothing else but the inflammation of the whole mass of tissues which compose the penis. Penitis nearly always occurs when the constringent band or object has not been removed in time, as in shown by the observations borrowed from Demarquay below.

" All the causes which may lead to any inflammation

of the penis, may, by that fact alone, cause penitis by the simple development and extension of the inflammation. The following observation shows us a case of this affection following on a contusion.

Obs. LXXIV. A man aged 40, while riding on horseback, had the penis violently contused by the pressure of the saddle. Some time afterwards, he had a violent inflammation of the penis, the skin of which, as well as the scrotum, were soon seized with gangrene. The cavernous body laid entirely bare, putrefied and fell off; the soft parts which compose it disappeared as though melted, and (a remarkable fact) its fibrous tissue, which is thick and elastic, did not yield but contracted together, and soon the penis was only represented by a string of the size of a penholder. The two testicles, completely stripped of their membranes, hung bare from their cords, and were completely detached and dissected. The patient died of fever and debility.

I will also borrow from Montimé the following observation, on a severe inflammation of the penis induced by a foreign body applied to the exterior of that organ.

A child, aged 11, entered the hospital on July 26th with a violent inflammation of the penis. This organ had swollen irregularly; it had a strangulation at the centre, and it was soon easy to recognize that the depression was due to the action of a foreign body. A metallic ring closely embraced the penis; it was a tailor's thimble, one of those thimbles with two openings, into which the child had passed his penis. The gland had swollen immediately and an inevitable strangulation had produced the inflammatory symptoms. When the patient entered, we succeeded in cutting the thimble, which fortunately was made of leather.

A very active inflammation had set in, and displayed a bluish colour, and gangrenous spots had appeared. On

their falling away, a deep ulceration was apparent, running round the whole organ. Anyone who saw the state of things then, with the appearance of a deep ulcer with a greyish bottom and thick edges, would have believed in the existence of a venereal ulcer, whereas it was only a wound of mechanical origin. One remarkable fact was the persistent swelling of the prepuce and gland after the removal of the ring.

The strangulation had produced an accumulation of fluid matter,and consequently a considerable tumefaction; this tumefaction was persistent, and the tissues had remained, swollen and indurated, in a word, scleremiated; this was accounted for by the arteries, veins, and lymphatic vessels, having been cut by the inflammatory action created by the ring. There was no way for the fluids contained in the anterior part of the penis to return. It appeared as if this organ, in its centre, was reduced to the canal of the urethra, which still kept its continuity; the cavernous body was divided; very little was required to make the anterior portion of the penis fall off. It was therefore necessary to use the greatest care to succeed in preserving a portion of the organ, hanging by a thin neck; the dorsal arteries of the penis were no longer supplying the materials of nutrition; it was possible to count on the central arteries only of the cavernous body, and even their integrity was doubtful.

Evidently the principal vessels were destroyed; the slow progress which the cicatrisation made was a proof of this. It was proposed to bring the skin of the root of the penis near to that which covers the gland, but it would have been necessary to lap one over the other; this would have led to a greater loss of substance, and the result would have been doubtful; it seemed better to observe and aid nature. It was observed with satisfaction that the ino-

dular work progressed, and that the membrane of the cicatrisation was formed. The skin behind imperceptibly drew near to the skin in front, and the surface of the wound gradually became less.

But it was not a simple reunion and cicatrisation only which had to be effected : ways of return were still required for the fluids which remained accumulated in the prepuce and in the gland, and kept them a quasi-hypertrophical state. All these were formed at gth.

**The husband caught by his penis, or the tale of the refractory Cuckold.** In a village not far from Lodive Salase in l'Hérault, some young men were rendered infuriate by the marriage of a young girl with whom they had been on terms of improper intimacy. They obtained admittance to the conjugal chamber on the wedding-night, laid hold of the bridegroom, who endeavoured to prevent their entrance, and tied round his genital parts a thin cord ending in a running knot. Then one of the confederates, drawing the cord tight, compelled the bridegroom to follow him, and led him for a walk round the country until break of day, while the others in succession satiated their passion upon the bride. This story, which I heard related in my early youth by an old physician, who was a friend of my grandfather, and whose memories dated back, I believe, to the time of Louis XVIII, has suggested to Dr Vigné d'Octon, deputy for l'Hérault and a native of the district mentioned above, the description of the melancholy end of one the principal characters in his novel, " Fauves Amours " (289 to 290, and 292 to 295).

" Tis a fact, boys, that only that devil Pandit could think of such an amusing idea ".

And the farrier gave vent to a hoarse chuckle.

" Damn it, Charbonnet, you would never have thought

of that " said Nicolas, almost at the same moment.

" Certainly not " muttered the drovers, shaking with spasmodic mirth.

" And now, boys, mum's the word, and mind how you tread, for here's the house, " said the farmer in a muffled voice.

" You, Isidore, will put the noose round this featherless bird. That's your business. And mind you don't miss him, for he musn't lift his beak this time ".

— " Don't be anxious, Pandit, I know how to manage it ".

— " And you, boys, this is what you will do: two of you will carefully lift the tiles in the middle of the roof, just over the place where the sweethearts' bed lies; the others will slip gently into the cottage, and Charbonet, rope in hand, will make them fast. If the turtle-doves are sound asleep, we shall manage it without any fuss; if the fellow wakes up and resists, we'll make him fast, and then each of us will have the girl in turn, as we used to in the good old times. You understand, boys ? "

" Yes, yes, " replied the five men in chorus; they had fully grasped the idea of the dismal, cruel jest.

White, round, and glittering like a crownpiece, the moon was now hanging in the blue heavens where the gleaming gold of the stars had grown pale. Through the hole which was slowly and silently being enlarged by the drovers' hands, its pale rays penetrated into the hovel and lit up the stalwart form of the herdsman, and the sculptural nudity of his companion. They were sleeping folded in one another's arms, and on their lips, parted in very weariness, wandered the smiles of fully satisfied desires. Slowly, and with furtive movements the two drovers had slipped into the room, and after them Isidore Charbonet.

Nothing stirred. Nicolas Pandit and the two others ef-

fected their descent. All at once, through the silence of the night rose a terrible cry like the roar of a wounded wild beast, awakening the valleys and re-echoing through the hollows of the ravines. The door of the hut was shivered into splinters, and through the dark hole the broad shoulders of the farrier emerged, then behind him, jostling one another, came the drovers, uttering peals of wild laughter. The unhappy Beyot, completely naked, was struggling in their arms, with his virile organ tied in atrocious fashion with a cord, and his athletic form rendered powerless, writhing and shaking, with the horrible agony. "Trot! Trot!" shouted Charbonet, and across country the wild chase set forth. On they went, through brake and over moor, across meadows and wheat-fields, leaping walls, clearing hedges of quickset, the thorns of which drew blood from the poor devil's flesh. All the hate which jealousy had stored within their soul now burst forth; nothing could stay their wild revenge, neither their victim's supplications nor the sobs wrung from him by pain when his course being arrested by an obstacle, the cord was strained, and the slip-knot which encircled him almost tore him in pieces in the most sensitive portions of his being.

On, on they went, never stopping, tearing over fields descending the ravines which re-echoed with their bursts of ribald laughter. They did not stop until their legs gave way under them at the outskirts of a wood where Roubignac's farm began.

Désiré, breathless, broken down, crushed, and bleeding, fell exhausted beneath an oak.

. . . . . .

In the herdsman's hut another scene, no less painful, was being enacted. Nicolas Pandit had thrown himself upon La Nemine. Between the man with his muscles of

iron and the woman who had naught but the savage power of her love, there was a terrible struggle in which the farmer was compelled to relinquish his hold when he felt the girl's nails tearing his belly like panther's claws, and her ferret's teeth burying themselves in the flesh of his neck in rage.

When she had freed herself from him, she rushed in the direction which the men had taken, and for a while her shadow, fantastically enlarged by the moon-light, stood out clearly against the hill, while her voice, as she called for Désiré, echoed through the valleys in anguish.

. . . . . .

At length she found him, pale, stiff, and icy cold, with his features distorted, and his arms and legs drawn up in pain, beneath the oak, the branches of which, as they waved to and fro in the morning breeze, seemed modestly to veil the nakedness of his bleeding and mutilated body.

She bent over him, and pressing his heaving breast to hers, she tried to bring warmth into him again. When he felt this embrace, Desiré opened his eyes, and in their troubled depths, Antoinette could read an expression of the most unutterable terror. She gave a sob of joy when she perceived in her husband's contorted features this first sign of life. He had recognized her, and his mouth opened, as though to tell her so, but after a supreme effort there only came from his purple lips a flake of bloodstained foam, which she gently wiped away with the back of her hand.

Standing up, pale and tragic in the changing light of the rising day, she gazed wildly and sorrowfully upon the motionless form. On the livid belly, which seemed strangely hollow, the rays of the sun filtering through the foliage of the oak brought large red spots into relief; and out of a tawny mass of hair there rose a black, mangled phallus, covered with dust and horribly swollen.

"Poor thing! Poor thing!" cried La Nemine in a choking voice. And, not knowing in her distress how to render him assistance most quickly, she longed to cry out and call for aid, but suddenly, in front of that unnatural, pitiably naked form, a feeling of shame overcame her, and taking off her cotton gown, she covered him with it; then thinking of the rough fellows, who hearing her cry would laugh and mock at her trouble, she put her feet against the trunk of the old tree, and tried to raise her husband, whose eyes dilated with neverceasing agony kept ever rolling in their sockets and yet saw her not.

She succeeded in lifting him to his feet, and the poor martyr, to whom the idea of his surroundings was slowly returning, began to aid her in her efforts; and sometimes supporting him by his shoulders, sometimes lifting him in her arms, like a wild she-wolf her wounded partner, she bore him away to her hut.

Amid the terrible destruction wrought by their six assailants, amid the scattered fragments of the door, and the ruins of their poor crockery, and their little bed, she knew not where to lay him. Then, collecting round her the wreath of ivy and the handfuls of wild flowers, which had not been too-much trodden under foot, she made a couch with those; on this litter, still sweet with the daisies, periwinkles, and buttercups which but yesterday they had gathered with entwined fingers on the mountain-side, Désiré pressed his wife's lips for the last time to his own, and died.

Behind the Soukaret which it tinged with flame, the sun was mounting ever higher into the radiantly limpid azure, the swallows with their forked tails were describing their joyous flights, and the mountain was filled with trills of gladness and twitterings of love (1)".

(1) Vigné d'Octon. *Fauves Amours*

# CHAPTER IX.

## SURGICAL AND OTHER OPERATIONS PERFORMED ON THE MALE COPULATIVE ORGAN.

Circumcision. — Its Antiquity. — Circumcision after the Jewish manner. — Surgical methods of performing circumcision. — Incision. Excision. Forced Dilatation.
Instances of the employment of these differents methods.
Methods of circumcision in differents tribes.
Physical Advantages of circumcision.
Reasons why circumcision was rejected by Christians.
Inconveniences of circumcision.
Erroneous opinion of Mantegazza
Effects of circumcision on the size of circumcized Penis.
Moral advantages of circumcision.
Total circumcision of the skin of the penis.
Infibulation. — Antiquity of Infibulation.
The Ring of chastity. Masturbator infibulating himself. — Cancer of the prepuce induced by infibulation. — Mutilation of the Cahiragans of India.
Artificial hypospadia of the Australians.
Observation of a mutilation of that kind made by the author.

**Circumcision. Its Antiquity**. Circumcision is one of the most ancient mutilations which have been performed on the penis since the beginning of the world. Was it Abraham, the Father of the Jews, who invented it, or did he borrow it from the Egyptians? That is a question regarding which there has long been a controversy. Jewish writers and physicians assert that it is a providential institution for humanity, and that it is of divine origin. It is the Baptism of Blood by which Jehovah selected the Jewish people, and rendered it obligatory

by the law of Moses, who declares that the Jew is cursed who is not circumcized on the eighth day after his birth.

Voltaire, on the other hand, attributes circumcision to the Egyptians, who would have transmitted it to the Hebrews during their sojourn in Egypt. This is not the moment to study circumcision from the philosophical point of view. We will do so in another work. For the moment, let us regard the question from a medical point of view, and consider its advantages and its disadvantages.

## Circumcision after the Jewish manner.

" Honour where honour is due ". Since Father Abraham is the inventor of Circumcision, let us describe the manner in which it is practised among his descendants.

In the work of Dr Marin (*les Maladies de l'Amour*. Paris, Ernest Kolb, éditeur) we find the account of the Jewish ceremony given by Montaigne, in the story of the journey which the author of the *Essays* made in Italy in 1580.

" Let us first state how the practise of circumcision became with Moses the fundamental basis of the Jewish religion.

" Tis is the sign of the eternal covenant which God makes with his people to the last generation. You shall circumcize the flesh of your foreskin. In taken of this covenant, every male child shall be circumcized on the eighth day from his birth, whether he is free or a bondman. He who shall keep his foreskin whole shall be accursed ".

" On the 30th day of January was seen the most ancient ceremony of religion among men, that is the Circumcision of the Jews, and I considered it very attentively and with great convenience. It is performed in private

houses in the lightest and most convenient chamber of the house where the child resides. They circumcize it on the eighth day from its birth. The father sits on a table and places a pillow on his lap: the mother brings the child to him and then retires. On the table where the father is seated there is a great preparation of all the things required for this operation. Besides that, a man holds in his hand a phial full of urine, and a glass. There is also a brazier on the ground, at which the minister first warms his hands, and then taking the child with its clothes turned up, as the father held it on his lap, with the head towards him, he takes helds of its member, and draws towards him the skin which is above with one hand, passing the gland and the member inwards with the other. At the end of the skin which he holds towards the said gland he places a silver instrument which stays the skin there, and prevents his hurting the gland and the member while cutting it. After that, with a knife he cuts the skin, which is immediately buried in the earth which is there in a bason among the other preparations of this mystery. After that the minister comes and tears off with his bare nails any small piece of skin which is on the gland, and rends it with force, and pushes it backwards, beyond the gland. It seems that there is always much effort and pain in that, however there is no danger, and the wound heals in four or five days. The cry of the child is like ours when it is baptized. As soon as the gland is thus revealed, they quickly offer urine to the minister, who takes a little of it in his mouth, and goes and sucks the child's gland, all bleeding as it is, he then spits out the blood which he has withdrawn from it, and directly he takes more urine again, and so three times. This done, they offer him in a little horn, a red powder which they say is dragon's blood, with which he covers all the wound, and then he neatly

envelops the child's member in linen-cloths cut for the purpose. This done, they give him a glass full of urine, which urine, through some prayers which he offers, they say he blesses. He takes a mouthful of it, and then, dipping his finger into it, he bears three times with his finger a few drops to be sucked in the mouth of the child; and afterwards the glass is sent in the same state to the mother and the women, who are in some part of the house, to drink what is left of the urine ".

The proceedings were the same till almost our time. In 1847, Dr Vaucer of Havre in his very interesting treatise on circumcision (1) protested against the Jewish manner of performing circumcision which is completed in four acts.

1st Destruction of the adherences, which may exist between the prepuce and the gland.

2nd Removing, in the shape of a ring or crown, the extremity of the prepuce (Hitouch, cutting).

3rd Longitudinal division of what is left of the prepuce at the part opposite to the fraenum (Periah, Denudation).

4th Sucking the gland and the wound of the prepuce (Mazizah, sucking).

He protests vigorously against the Periah, or denudation, tearing of the prepuce which is done laboriously and always with pain, by means of sharp nails, or in default of them with a metal instrument.

He protests no less vigorously against the act of Mirzazah, or sucking, by which a syphilitic operator may poison the children whom he circumcizes, and he quotes, in support of this, the opinion of the learned Ricord.

The latter, summoned to give an opinion as a medical

(1) *Cause morale de la Circoncision des Israëlites, institution préventive de l'onanisme des enfants*. Paris, Napoléon Chaix, éditeur.

expert, in a complaint made against a Mohel (Israelitish circumcizer) who was accused of having communicated syphilis to 12 children on whom he had operated, did not hesitate to give an affirmative opinion, and to incriminate the Mohel. The syphilis communicated by this unfortunate operator, presented very grave symptoms, and four children died of it.

We do not know how the Jewish Mohels still operate, but we give, according to Delfan (1), the manner in which circumcision is performed surgically according to the principles of modern science.

**Surgical methods of performing circumcision. Treatment.** The treatment of phimosis is always surgical. Recourse may be had to the three following methods, namely incision, excision, forced dilatation.

1. **Incision.** The patient is placed against a wall or against some piece of furniture which will resist. The operator, placing himself in front of him, introduces in to the preputial cavity on the upper surface of the gland a straight bistoury, the point of which is capped with a little pellet of soft wax.

The instrument must be introduced flat, but the back resting against the prepuce. When the point has reached the balano-preputial groove, it must be observed if the two laminae of the prepuce are quite on a level with one another. Then, turning the bistoury so that the edge faces the prepuce, the handle is strongly bent, and the point of the bistoury pushed so that it passes through the

(1) *Manual pratique des maladies des organes génito-urinaires.* Paris, 1890, Gustave Doin, éditeur.

pellet of wax and the prepuce at its base. The hand is immediately lowered, and the instrument drawn towards the operator, so as to divite the prepuce in its whole length from back to front.

Instead of a straight bistoury capped with a pellet of wax, a Blandini bistoury with a sheath may be used. As before, the covered point is conveyed to the balano-preputial groove; the bistoury is turned round so that the edge faces the prepuce while the sheath is withdrawn; the prepuce is penetrated at its base, and it is divided from back to front.

When the prepuce is large, two strips are thus formed, which, falling on either side (dog's ears) not only give the prepuce an unsightly appearance, but may prove troublesome in coition; it is often necessary to excise them.

2. **Excision.** Different processes have been employed: thus a strip may be removed on the dorsal surface by an incision in the shape of a V. at the posterior summit, or by a semi-circular incision at the anterior concavity. These two incisions are made with strong scissors on the penis stretched out, following a line previously traced in ink.

The following process (Ricord's process) is the most frequently employed; after the two leaves of the prepuce are suitably brought together, a line is drawn on the prepuce in ink following the direction of the crown of the gland; the prepuce is drawn forwards, and seized with the forceps, at the level and in the direction of the line of ink; then all that is in front of the forceps is cut with a bistoury or with strong hare-lipped scissors; the sheath of the penis immediately draws backwards towards the pubis. What remains of the preputial mucous membrane is incised and turned backwards, the groove of the penis is brought forwards, and the two edges, the mucous and the cutaneous,

are kept in contact by means of a pair of small spring forceps. The lower one is first placed on a level with the fraenum, the upper one at the opposite point, then the two laterals, each of them at an equal distance from the two former.

**Forced dilatation.** This operation, contrived by Nélaton, is performed with the help of a pair of forceps with three branches, similar to that used by Laborde for tracheotomy. In proportion as the two rings are brought together, the three branches, which are placed perpendicularly to the shank, open to a distance which has been limited beforehand by a screw. To perform the forced dilatation by the aid of this instrument, the extremity of the three branches, which are brought close together is introduced across the preputial orifice. Then the two rings are brought sharply together, and the three branches opening instantaneously dilate the preputial orifice. — The precaution has been previously taken of limiting the separation, by means of the screw.

For several days care is taken to draw the prepuce back, and to keep it there for a longer period on each occasion. At the end of 8, or at the most of 15 days, the prepuce remains there for good.

**Choice of the mode of operating.** If the prepuce is long, incision, and forced dilatation especially, is not sufficient; it is indispensable to bring about a diminution of substance; in this case, which besides is the most frequent, preference will be given to excision, and especially to excision by Ricord's process. — If the prepuce is very short, and if the phimosis is due merely to the narrowness of the orifice, the advisability of forced dilatation would be indicated. — Nevertheless even in the latter case, if adhe-

rences existed between the gland and the prepuce, recourse would not be made to this latter mode of operation; preference would be given to incision, after which the adherences could be removed."

**Instances of the employment of these different methods.** Dr Garnier (*Anomalies sexuelles*) gives a certain number of observations on the different modes of circumcision.

"(30). Among all those who consulted us, no one agreed to allow himself to be relieved from it, until a youth of 19 wrote to us recently on the subject. The gland was covered by the prepuce, and could not be raised, owing to the narrowness of its orifice. The mere fear and shame of not being able to completely effect the act of coition had hitherto prevented him from attempting it, for the company of women excited him to it. Ever since the age of 16 he masturbated himself on any pressing requirement, perhaps once or twice a week as the occasion might excite him. He had not felt uncomfortable at this, on the contrary he believed it to be necessary though repugnant to him, and he confessed it with a blush. Lascivious dreams and seminal losses were rare.

"Rendered despondent at this condition, which prevented him from indulging in the pleasures and amusements of his time of life, from which he derived only weariness, and harassed unceasingly by the thought of his deformity, he earnestly demanded a means of cure, believing that without that he would never be able to marry.

"I assured this young man that his foolish fears were exaggerated, and showed him that a simple cut with the bistoury, by freeing the opening of the prepuce, would relieve him instantly of his malformation; that if he did not submit to it, the symptoms which I pointed out would

fatally increase with dangers in their train; incomplete development and insensibility of the imprisoned gland, irritation, inflammation, venereal complaints, onanism and other troubles.

"Five days afterwards this handsome young man arrived from the Pas-du-Calais to be operated on. Having satisfied myself that there were no adherences, I sent him to the hospital, where, three hours afterwards, I removed the contractedness, in spite of the irritation and the pad of the preputial orifice. The previous application of a solution of cocaine for five or six minutes was sufficient to reduce the pain and bleeding. Two days after, the patient departed, cured, happy, and in good spirits.

" (31). A young man with a congenital phimosis had just married, and suffered much inconvenience from it during coition with his wife. Having made up his mind to be circumcised, he went to a physician in Germany, who no doubt became a surgeon for the occasion, and neglected to leave enough skin to the prepuce. The unfortunate man found himself with so small a groove that when he entered on erection, he felt a violent pain, which compelled him to retire immediately. There was here a serious wrong done to the wife which might have led to a divorce, in spite of the good will he displayed in endeavouring to improve his apparatus ". (Brouardel, *Questions medico-légales.*)

A commercial traveller, in Brittany, aged 27 years, five of which he had passed under the colours, writes on the eve of his marriage. " My penis is relatively small, and much withdrawn, although it is very healthy and very stout. I am unable and it is impossible for me to induce it to develop and stiffen when I find myself in contact with a woman, although I feel the same desires as any other man. If, when I am lying on my back, sleep or any

circumstance occasion a slight erection, it completely disappears when I turn on my stomach.

"When 12 or 13 years old, I had an abscess opened to a considerable depth on the stomach, near the left groin, and then panaris resulted from it. In spite of the lapse of years, I still feel a numbness on the top of the left thigh.

"When 14 or 15 years old, not being yet formed, I took pleasure in separating the cap which still partly adhered to the gland. Since then the proportions of the penis have remained nearly the same, not sharing in the progress of the constitution. While I was in the regiment, my prepuce was obliged to be partly cut, being very short and completely retaining the skin at the extremity of the gland; which made it very troublesome for me to urinate when the penis was slightly swollen. Even at the present time, the skin, not being sufficiently open to allow the gland to pass freely, does not permit me to uncover it, except during erection.

"After trying many times to perform coition without ever being able to succeed, although erection was artificially produced very easily, I had recourse to satisfying myself; which has had the result of weakening the genital organs. But never having dared to try coition at the period of artificial erection, I have not abandoned all hope of succeeding with my wife.

"You can thus judge of my case and estimate if I have reason to disquiet myself, and I beg you to point me out a *remedy*, or merely a *method* which will be efficacious in relieving me from the embarrassment of my situation".

From an æsthetic point of view, as much as to avoid the dangers of balanites and venereal diseases, or to prevent their return, the excision of the exuberant portion of the prepuce has been highly recommended. Dilatation, when it is necessary, always appears to be preferable in

such a case; except we fasten the prepuce when it is lifted up above the crown with a small band of diachylon plaster, without any striction, in order to habituate it to the air. In what way, besides, can we perform this amputation in the desired proportions, unless we fix them beforehand on the penis in erection? Otherwise, we risk excising too much or not enough. The cautions given on this subject by Professor Lannelongue, regarding phimosis, are perfectly applicable here.

"With the bistoury," he says, "either we obtain a cicatrice which retracts in front of the gland, or a ring which encloses its base and maintains a continual inflammation; without reckoning the œdemas of the lower portion of the penis which may last for two or three months. Dilatation is preferable, if care is taken to remove previously, with a channelled probe, the adherences of the prepuce to the gland, if any exist. Exception is made, be it understood, of cases where it is necessary to remove the deformity in order to cure an anomaly, or an affection far more serious, maintained through the length of the prepuce. This applies to phimosis.

(41). An application of this principle was supplied to me in June 1888, in the case of a tall young man, aged 25, fair, slim and slightly effeminate; he had had, for this reason, his period of military service adjourned on two occasions. He had just undergone a balanitis as severe as that in the preceding case, and it had kept him for several days in bed. It had occurred after a night spent with his mistress, following a dinner with too copious libations. He asked me if an operation would relieve him from his deformity.

The penis, rather swollen and voluminous, displayed in fact a prepuce still swollen, overlapping the gland a centimètre and a half. Its opening was slightly contracted, so

as not to allow him to clear the gland without a rather sharp pain, which caused him to recoil; he drew it back completely himself afterwards. The redness and swelling still remained. The testicles were ordinary, pendent, the left affected with variocele established since his enrolment.

I had to determine if an oblique amputation from above downwards and from the front backwards was indicated as legitimate.

— Do you suffer habitually from this deformity?

— By no means.

— For how long have you indulged in coition?

— Since I was eighteen.

— How many balanites or blennorrhagias have you had?

— None, except the one which has just occurred.

— Are you troubled or embarassed by your preputial exuberance in your sexual relations?

— Not at all.

— Do you clean yourself without difficulty?

— Quite so; but I feel a smarting, and tickling directly I neglect it.

— Well, sir, it is preferable in my opinion to keep this unsightly and unpresentable exuberance than to try and cut it away, since it is endurable. The cicatrisation of the wound, in such a case, always tends to bring about a nodular constriction of the prepuce, which may become more troublesome than its exuberance. Take the precaution and care of bathing the parts, and giving them a lotion of aromatic wine or a simple decoction. From time to time fasten the prepuce behind the gland, after applying to the aperture some belladonna ointment, and you will suffer no more from it; but, at the slightest venereal symptom, apply instantly to the doctor, in order to avoid complications.

(42). In the month of April preceding, an absolutely similar case was shown by a youth of the same age, just as tall, thin and slender, of dark complexion, and having also completed his military service after two successive postponements, and affected alike with variocele on the left testicle but complicated by impotence. When writing to me about a year before on this subject, he said: " until I was 22, the prepuce completely covered the gland. Instructed by the advice given in your works, I endeavoured to uncover it, believing that that was the cause of my impotence, and I completely succeeded. During erection, when I force it behind the crown, it slightly squeezes the gland ".

Suspecting that this constriction prevented copulation through want of erection, since the latter was sustained by masturbation, I induced my correspondent to see one of my colleagues. No obstacle close enough to impede the functions of the organ was found, and in fact none existed. But the penis, very voluminous and swollen, terminated in a club-shaped gland resulting from prolonged masturbation, which prevented intromission. This young man continued, several years after he had ceased this practise either alone or with another, to practise a sort of vulvary onanism with girls, in constrained positions, sitting or standing, and always privately, without ever having been in bed with one.

**Methods of Circumcision in different races of Asia, Africa, and Oceania**. Among all races who practise circumcision, the ablation of the prepuce gives occasion for a small festival, either confined to the family, or of a public character when circumcision is performed on several subjects together. The Jews as a fact are the only ones who circumcise the young children;

among all the other races it is performed at the age of 13 or 14, at the dawn of puberty, and this operation makes the child a man. We have no space here to describe these festivals, we shall be satisfied with speaking of the mode of operation.

The simplest and the most primitive consists in a vertical incision which starts from the antero-superior edge of the prepuce, above the meatus, and is prolonged as far as the crown of the gland. It is thus that the sorcerer-surgeon of the anthrophagous tribes of New Caledonia operates on those of the age of puberty, from 14 to 15, whom this operation classes in the rank of future warriors. They pierce the upper part of the prepuce with a point of sharp, polished quartz, from the meatus to the crown of the gland. This operation, far less painful than complete circumcision, produces nearly the same effect, and the gland, even in a state of flaccidity, remains entirely free at its upper portion. The prepuce, thus divided, is surrounded with leaves of *buras*, steeped in the juice of certain herbs which the sorcerer-surgeon chews, and which quickly cause it to cicatrise, while drawing it back from the gland. The Tahitian priests operate in the same manner as the sorcerer-surgeon of the New Caledonians.

This mode of operation presents the following inconvenience. At the moment of erection the penis displays a kind of double crest, more or less protruding (in the shape of a dog's ears cut) and this projection is unsightly, without, however, being troublesome in coition.

Let us remark in passing that the Maoris of New Zealand are not circumcised, and on the contrary keep the prepuce in front of the gland.

The savages of Australia, who occupy the lowest rank of humanity, are circumcised. The travellers Lechard and Dawson point this out. Broug Smith gives very precise

details concerning the circumcision of the Australians. He says that it is the custom on the west coast of Spencer's Gulf, at the Gulf of Carpentaria, at Cooper's Creek, and in Central Australia. It is unknown in the more southern countries. He describes it thus, according to the account given by his correspondents. An hour before day he saw about twenty natives gathered near a tree far away from any habitation. They were clothed in their festal garb, and sang alternately. At a certain distance there were seven other natives with the young boy who was to be circumcised. The latter remained standing and might not speak. At sun-rise the neophyte was brought to the first group, his eyes were bandaged, and he was laid upon the grass. Two men held him, and about a dozen performed the operation, each one furnished with a piece of quartz. It was the affair of an instant, and immediately afterwards the spectators raised a cry.

Gason, speaking of the different mutilations which the young man is made to undergo, instances Naravellie (circumcision) at puberty. According to Teichelmann, in some countries of Southern Australia, the young men at puberty are beaten with green branches, and sprinkled with blood taken from the arm of a warrior. They are then laid on the ground and covered with dust. A line is drawn on the earth : at the right of the young man is placed an old man who represents the *Autumn Star*, and at his right one of them is placed who represents a fly. They bring a woman's stick turning it round. He who holds it, plants it in the ground and prostrates himself : all the assistants then fall upon him, forming a kind of human altar, on which the young boy is laid to be circumcised.

In the whole of Asia, circumcision is a question of religion, for only the Mussulmans, Hindoos and Malays, as well as the Chinese Jews are circumcised.

In Africa, circumcision is naturally found among the Mussulmans, but it is equally found among other peoples. Thus, in Madagascar circumcision exists. It is true that the tribes of that island have had communications with the Malays, and the Mahometans, since we know that the Hovas are of Malay origin. We read, in the memoirs of Martin Flaccourt, formerly governor of Fort Dauphin, that among the Madigasses the ancient custom reigns of removing from children, eight days after birth, the extremity of the prepuce, and that in certain parts of the country, the mother swallows that portion of the organ ; that, in other parts, the father loads a firearm with this piece, and fires it into the air.

In the interior of Africa all the Mussulman tribes, naturally, are circumcised. But, besides this, circumcision exists also among the fetish-worshipping tribes. It is in this way that the Malinkis of Nita are circumcised.

In " *Untrodden Fields of Anthropology* " we have given the description of the festival of the circumcision. It is enough for us to reproduce here the part relating to the operation itself. The youths who are to be circumcised are operated on publicly in the village market-place. The blacksmith-surgeon is provided with a small plate of yellow leather, 2 or 3 millimètres thick, pierced with a hole a little more than a centimètre in diameter. He passes the child's prepuce through the hole, and with the left hand draws it forwards in such a way as to cause to project the necessary quantity (this varies according to the length of the prepuce and the size of the penis) while the left hand stops the point of the gland on the other side of the plate. He takes care then to draw back a little of the skin of the gland towards the base of the penis, while the preputial pad is kept in its place. When this is done, he seizes his knife, which he was

holding between his teeth, and with a single stroke he severs entirely, the portion of the prepuce which is in front of the plate. Withdrawing the latter, the surgeon-blacksmith stanches with his lips the blood which issues from the wound, draws the skin of the penis gently backwards so as to uncover the gland, and washes the wound with a water containing a resinous essence which has styptic properties. When the prepuce is removed, it is placed as a wad, with a bit of rag impregnated in blood, in an old gun loaded with powder which is then fired. The operation is completed by the application of a cataplasm, the basis of which is formed of a ferruginous mud, diluted with water containing a little alum.

**Circumcision amongst the Arabs of Algeria.** This style of circumcising is derived evidently from the Algerian Arabs and Maroccans, by whom the Islamic faith and ritual was imparted to the diverse races of Senegal. Following is a description at first hand, supplied by Dr Bertherand who enjoyed from his large practice among them, excellent opportunities of studying the natives closely : " In order to circumcise, the operator (1) (*thrahar*), after having prepared a big wooden bowl (*jefna*) full of sand to catch the blood, places himself beneath a *haïk* (a large sheet of linen) with one or two assistants, one of whom holds the child's thighs well apart. The *thahar* draws the foreskin as far forward as possible and ties it close to the gland with a common thread. He then takes a wooden disc (*wergha*) rather thicker and larger than a half-crown piece in the centre of which there is a circular hole hardly large enough to admit the little finger. It is

(1) *Médecine et Hygiène des Arabes*, by Dr E.-L. Bertherand. *Paris, 1855.*

through this opening that the *thahar* first of all passes the thread, and then the foreskin strongly ligatured together : in an instant, he strongly presses the disc against the gland, pulls slightly on the thread so as to stretch the foreskin, and cleverly drawing off the child's attention by pointing out to him some object on the ceiling or elsewhere, he seizes advantage of the momentary inattention to cut the *jelda* (prepuce) by means of sharp scissors, sometimes with a razor, but more generally with a curved and keen Arab knife. One of the assistants then presents a perfectly fresh hen's egg, opened just before the operation, into which the entire member of the child just operated upon is plunged. After two or three minutes the *thahar* covers the wound with a fine powder made of the leaves of the *Aghar* (Thuya articulata), employed as a hemostatic, and then surrounds the member with a thin band of linen. The little boy is laid on his back and must remain several days as much as possible in that position. The operator visits him daily during seven days : on the first day, he spreads upon the wound a mixture of hot butter and of the pounded seed of the *serwal* (Cypress) ; the following days he applies a dressing consisting of a poultice made of onions, of *chiah* (Absinthium Judaicum) and of butter, the whole pounded together, destined to prevent or diminish suppuration. If, on the seventh day, the wound is not quite cicatrized, the patient must be made to bathe his member in very hot sand. Hemorrhages are very rare, and in general the patient is quite healed by the seventh day. Accidents may however supervene : as was the case at Batna, in 1847, when a young Arab, clumsily circumcised no doubt, showed obliteration of the urinary meatus : a simple incision sufficed to restore the normal orifice.

When the *jelda* has been cut off by the *thahar*, one of the assistants immediately wraps it up in a rag. After the ope-

ration, this bit of foreskin is deposited and left on some object or other, on a tree, a palm; anywhere in fact, in a garden, or perhaps on the back of some animal, an ox for instance, and the father of the circumcised makes a present to him of the object, or of the animal, upon which the *jelda* had been placed. — Such, in a few words, is this operation, which I have described precisely as I have seen it practised in the South. It is not necessary to speak of the shouts, or of the noise made by the surrounding crowd of natives to drown the cries of the child undergoing the circumcision".

Dr Noguès described another method as follows : — he witnessed it among the Arabs : " The apparatus consists in two bits of common string and a common knife, but with a keen edge... The operator seizes (with the thumb and forefinger of each hand) the outer edge of the foreskin, and forcibly draws it forward, taking care that the mucous membrane does not lag behind the skin. An assistant, then, with one of the bits of string, fastens a knot which shaves the summit of the gland. A second knot is then made in the same way somewhat further back, and the operator with a single stroke of his knife cuts between the two. The first knot numbs the flesh to such a degree as to render the operation almost painless; both knots oppose the sliding back of the mucous membrane, which is very cleanly sectioned at the same level as the skin itself. The operator has ready at hand in an egg-shell, a mixture made of the pounded ashes of oleander and lentisk trees mixed with honey. This he spreads over the wound, after throwing backwards what still remains of the mucous membrane, and then trusts to nature for the ultimate cicatrization (1) ".

(1) *Thèse inaugurale*. Paris, 1851, p. 39.

**Methods employed by the Egyptians.** The lamented Dr Ernest Godard, who died a victim to medical science, describes as follows the methods employed by the Egyptians.

" The patient seats himself on the edge of the bed ; he leans a little backwards, but only very slightly so, in order that the blood may not stain the purses. Two assistants (I am speaking here of the case of adults) hold the thighs half-bent and apart from one another. The surgeon then completely uncovers the gland, by drawing the prepuce backwards. With the two individuals whom I saw operated on, this stage of the operation was easy, but with a child it must sometimes be very difficult, the preputial orifice being very narrow. When this is done, he takes a small probe of ivory on which he deposits a small quantity of saliva, and applies the point of this small probe to the middle and upper part of the groove of the base of the gland. The saliva is intended to facilitate the slipping of the prepuce upon the instrument; he gently applies the point of the probe to the middle and upper part of the base of the gland, then he draws the prepuce forward again, leaving the probe in the same place. For this stage of the operation he proceeds thus.

He applies the probe to the middle and upper part of the base of the gland. He holds the instrument in his right hand and is very careful to place it at the middle and upper part of the base of the gland. Then he bears somewhat heavily on the probe so as to keep it in its place; after which he draws the prepuce forwards again upon the gland, and upon the probe constantly maintained in its place. When this is done he takes a small steel compass and places it obliquely from behind forwards and from above downwards, so that when it is forcibly pressed it serves to guide the razor, and causes the cut to be made at

the same level of the skin and mucous membrane, and protects the gland against the edge of the razor. With the left hand, he holds the probe while stretching the prepuce and with the right hand he cuts off with a razor all that portion of the prepuce continued in front of the steel compass. He removes the compass, the skin shrinks backwards; the skin of the sheath of the penis and the mucous membrane are cut at the same level.

The circular wound is then allowed to bleed for a short time. If the hemorrhage is too great, cold water is applied: a quarter of an hour afterwards, Mehemet-Ali Bey brings it together with a small spring forceps; he leaves this duty to his assistants.

He says that forty-eight hours are required for the reunion; now he follows my advice and alters the position of the small spring forceps.

During the operation it is necessary to be certain that the gland is not compressed by the steel compass, and that it is perfectly free behind.

When the operation has been completed, and it has been allowed to bleed, it is found that the blood has infiltrated into the cellular tissue, which is gorged with blood and the reunion is thereby impeded.

Mahomet-Ali Bey rightly asserts that if the reunion is effected immediately, extensive infiltrations of blood take place. As regards that, I again repeat that he is right; but these infiltrations may be avoided by sponging and wringing the small vessels, or by compressing them with a special small spring forceps. If the cellular tissue infiltrated with blood is allowed to bleed, it interposes itself when thus infiltrated, and renders the reunion in the first instance very difficult.

I have seen the small spring forceps applied, but I have remarked that they are put on without the skin and the

mucous membrane being brought together with the ordinary forceps,and this presents great disadvantages ; in this case, instead of joining together the deep parts of the skin and mucous membrane, the epidermic surface of the skin is applied to the epithelial surface of the mucous membrane; this is very troublesome, as the reunion is not thus able to be effected. The operation, as performed by Mehemet-Aly Bey in my presence, is rapid and skilfully performed.

The inclination of the compass, placed in an oblique direction, is an excellent thing. Only the skin of the sheath is drawn too far forwards on the probe; the result of this is that, after the operation is completed, there is absolutely no prepuce. This is exactly the result which was intended it will be said; but this result is wrong, for the elongation of the penis during erection may be hindered. No doubt it may be advantageous for the gland to be uncovered, its anatomical constitution becomes modified, and it becomes less liable to contract diseases; but at the same time it loses its sensibility, which is a serious disadvantage.

Regarded from the point of view of cleanliness,the operation is advantageous, for it avoids the accumulation of matter in the groove of the base of the gland.

If too much of the skin is removed, the inconvenience which thence results is not so serious for the Arabs as for us. I believe I have remarked that with them the penis is voluminous when in a state of flaccidity, and that it does not acquire a relatively large size when in erection; thus, with them, the evil would be less than it would be with us.

If the preputial orifice is too narrow to allow the gland to be uncovered, the probe is introduced into the preputial cavity without laying bare the gland; the probe always being placed at the middle and upper part of the base of the gland.

We observe that it frequently occurs that the operation is performed slowly.

Mehemed-Ali Bey has operated in a very proper manner, but he has told me himself that the barbers proceed in a still more rapid way; they cut off the prepuce with incredible rapidity.

On March 7th I saw at the Hospital under Mehemed-Ali Bey's care, the two individuals on whom the operation was performed on March 4th. The reunion was perfectly complete, but the one on whom I placed the small spring forceps has a considerable œdema of the penis. Fresh water will be applied to it.

I asked Mehemed-Ali-Bey how it is that the barbers are so successful? He informed me that when the operation is finished, they bring the skin and the mucous as close as they can together with their fingers, and they place linen bandages all round them for the space of three days. On the fourth day they remove all this, and replace it with linen bandages covered with ointment. About fifteen days are required for it to be completely healed.

In the case of an adult, it is not completely healed till the expiration of a month.

I asked Mehemed-Ali Bey why the Arabs do not have recourse to the surgeons, since the latter operate in a more skilful manner and the wound is healed more quickly?

He told me that the barbers pay a fee to the government, and that if the surgeons were to perform this operation the barbers would cry out that they were depriving them of what belonged to them. The physicians and surgeons do not pay any special tax on their profession.

Monsieur Coulomb's barber explained to me how they perform the operation.

An assistant sits himself down and the child on whom the operation is to be performed is placed upon his knees.

The little boy's hands are passed under his knees and held there by the assistant. The patient's position is similar to that of one who is about to be cut for the stone. The genital organs are perfectly free. Sometimes the child's eyes are covered, probably in order that he may not be frightened and hinder the operation.

Where the child is too small, the operator, in order to separate the prepuce from the gland, applies his mouth to the orifice of the prepuce and blows forcibly. Where the prepuce and the gland are quite separated, he rubs the gland between his hands so as to stretch it, then he uncovers it by drawing the prepuce back behind the gland, and after this introduces a small round blunt piece of wood between the prepuce and the gland, seizes the prepuce with an instrument shaped like a compass and finally cuts off the prepuce in front of the forceps.

The compass-shaped instrument is called Naltein.

The small stick, I believe, is called El Marouet.

Ashes are applied to the wound to arrest the effusion of blood. The barber who performs this operation told me that the wound generally takes seven days to heal.

**Physical advantages of Circumcision.** The physical advantages of circumcision are undeniable, since it protects man from the numerous host of maladies which proceed from phimosis. It is not uninteresting to recapitulate them.

Circumcision, when well performed in youth, offers the following advantages:

(1) It will remedy the complete occlusion of the prepuce, and all the disorders which result from it.

(2) It will give to the preputial orifice, where too narrow

and too long, an easy opening for the free passage of the urine.

(3) It will put a stop to the want of parallelism between the opening of the prepuce and that of the urethra.

(4) It destroys the possibility of pruritis and of the excitements which instigate the child, before puberty, to shameful habits.

(5) It will set aside to a great degree the troublesome effects of the insertion of the prepuce in its lower part, in the interior of the urethra, and will prevent the necessity of cutting the frænum at a more advanced period if life.

(6) It will remove the circumcised from the chances of an inflammation, either acute or chronic, of the prepuce, and from the close adherences of the prepuce to the gland, resulting from repeated balano-posthites.

(7) It will destroy congenital phimosis, and radically prevent the formation of bastard gonorrhæa, by hindering the continuance between the prepuce and the gland, either of the sebaceous matter, or of the virulent pus of gonorrhœa, which may, by their prolonged action, produce ulcerations, one of the serious inconveniences of which will be to facilitate the absorption of these same matters, and to give rise to infections in the internal economy to which the circumcised man is not exposed.

(8) The contact of the gland deprived of the prepuce with the vaginal mucous membrane of a woman affected with whites, will not in any way be continued by this matter remaining between the prepuce and the gland, as it would in one not circumcised.

(9) It will render calcareous and gouty deposits impossible between the prepuce and the gland.

(10) At the period of puberty, when a more energetic vitality animates the organs of reproduction, it will prevent

the sad and painful symptoms of phimosis and paraphimosis.

(11) By rendering these two maladies impossible, it will render impossible the inflammation and compression which inevitably result from them, and thus diminish the chances of gangrene and cancer of the penis, of which compression may be regarded as one of the proximate causes.

(12) Syphilis is infinitely more rare among the circumcised than among the uncircumcised. Suppose the existence of a chancre on the surface of the gland in the case of two men, one circumcised and the other not; in the former, the chancre, entirely uncovered, and situated on the surface of a mucous membrane less absorbent, would yield to a course of treatment and dressing more readily than in the second.

(13) The prepuce keeps up a heat in the latter which is favourable to the work of ulceration. The prepuce itself becomes inflamed and ulcerated. The ulceration has been seen to affect in a manner the whole prepuce, and thus to produce circumcision by the wasting action of the virus.

The ulceration of the prepuce, in turn results in the obstruction of the inguinal lymphatic ganglia.

(14) The injection of the mucous membrane of the gland penetrates into the superficial lymphatic vessels which accompany the arteries and the dorsal veins of the penis. We may conclude from this that probably the disorders of the gland will not so often result, as in those of the prepuce, in obstruction of the inguinal lymphatic ganglions, especially where the prepuce being removed, the mucous membrane of the gland, under the the influence of external friction, has acquired a density which renders it less permeable, and protects it from a great number of disorders.

(15) There are affections of the prepuce, not unfrequent in men who have repeatedly had venereal chancres, such as hypertrophy and callousness of that organ, which cannot exist in these who have been circumcised.

(16) Syphilis, that great bodily complaint, which in modern times has invaded humanity, ought to attract our attention here. We have already mentioned the hurtful influence which the prepuce has on the development of that disorder, now the excision of the prepuce which would be a means of preventing numerous syphilitic symptoms, has often been practised as a means of curing it in patients affected with syphilis. The accumulation of the sebaceous matter round the chancre is thus prevented, and the irritation which is the consequence of it. The healthy portions are thus not in contact with the irritant pus of the ulcer, which in cases of phimosis is a fresh infection and the inevitable, incessant cause of the reproduction of the disorder. By removing the prepuce, all these symptoms disappear.

(17) After having sheltered the child from the enervating action of onanism, after having protected the adult from the ravages of syphilis, from seminal losses and also from defective conformations which may be an obstacle to the accomplishment of nature's design, by rendering the function of coition painful and impossible, circumcision in the old man will prevent a great number of infirmities and disorders.

When we consider the numerous advantages of circumcision, and all the disorders from which it may be the preservative, it is impossible not to wish for its rehabilitation. When we see on the other hand the ravages of the depravity of morals of which it may be the preventive remedy, we are rightly astonished that modern times do not demand again this institution of ancient days. The Catho-

lic Church has been very wrong in replacing circumcision, the baptism of blood, with baptism by water. Jesus Christ and the Apostles being circumcised. the first Christians, and even St Paul were so also, but later on only baptism by water was retained, and circumcision, one of the few good things of the Jewish religion, was rejected.

**Causes of the rejection of Circumcision by the Christians.** Theologians assert that circumcision was only the type of baptism, for the Apostle said " Circumcisi estis circumcisione non manufacto, in expoliatione corporis carnis, sed circumcisione Christi, consepulti et in baptismo ". St Augustin went so far as to uphold that circumcision remitted the original sin of children. It is true that later on St Thomas was of a contrary opinion, but circumcision had disappeared. And yet there was but little wanting for circumcision to become the distinctive mark of Christians, as it has continued to be that of the Jews, and as it has become that of the Mussulmans. " What in fact was required for that? " says our friend the erudite Paul de Regla in *El Ktab (ou les Secrets de l'Amour....*, Paris, Georges Carré). It was requisite that primitive Christianity, represented by the Church of Jerusalem, having at its head one of the direct Apostles of Jesus, the Apostle Peter, should have triumphed over the Christianity preached by Paul and his adepts. Paul or *Paulinism*, overcome by the Church of Jerusalem, which continued to preach fidelity to the national institution, that is to say baptism by circumcision, this practice would have become universal, and Christians, Jews and Mussulmans would have the same symbolic mark.

The triumphs of Paul, preaching Christianity particularly among the Gentiles and Greeks, resulted, with the establishment of his doctrine, in the rejection of the

carnal circumcision, which he had understood how to place far below faith in his letters to the Romans, to the Corinthians, to the Galatians, and to the Thessalonians.

But while rejecting circumcision and replacing it by baptism, as Paul and the mystics of his time had intended, the Western and the Greek Church preserved under the name of the "*Circumcision of Our Lord*" the Festival which in the beginning was only the *Octave of the Nativit.*

By separating at its commencement into two branches, the Greek branch, or Paulinism, and the Hebrew, or Christianity of Peter and the Church of Jerusalem, the new religion divided also into two acts of faith or two baptisms; the one, that of Paul, allied more closely with the practice of John the Baptist and the Essenes, the spiritual baptism by water; the other, that of Peter, holding stronger allegiance to its national and Jewish origin, the material baptism of blood, and the oblation of the prepuce.

If in spite of every effort of propagation made in its favour by the Church of Jerusalem, circumcision was driven back into its natural limits, the reason was that the instinct of the other races, more probably than Paulinism, refused to accept and submit to it. If it had not been so, circumcision, like Christian baptism, would have invaded Europe and extended at the present day into the New World".

We will add to this interesting dissertation only these few words. We may regret the triumph of Paulinism from the medical and hygienic point of view.

**Inconveniencies of Circumcision.** Nearly every physician at the present day agrees as to the hygienic value of circumcision, and the considerable advantages it

displays from every point of view. A compatriot of the much-attacked Zola, the Italian physiologist Mantegazza, alone displays hostility to this practice. This is his argument, as given in one of his numerous volumes (*l'Amour dans l'Humanité*) a work already quoted.

**Erroneous opinion of Mantegazza.** " The historians of Judaism have exaggerated the hygienic value of circumcision. It is true that the circumcised are slightly less predisposed to masturbation and to venereal affections, but circumcision is above all a distinctive mark, and a cruel mutilation of the protective organ of the gland, and of an instrument of pleasure. It is a blood-stained protest against universal fraternity, and if Christ was circumcised, he protested on the cross against all the signs which separate men.

Dimerbroeck says that the prepuce increases the pleasure of the woman in copulation. That is why in the East they prefer the non-circumcised. " Praeputium voluptatem in coitu auget, unde feminae praeputatis concubitum malunt agere quam cum Turcis ac Judaeis ".

I shall not venture to affirm this, because when the member is in erection, the circumcised penis and the uncircumcised penis are alike. In any case it would be for the woman to solve this delicate problem, and no one has ever uttered her opinion on that subject. I only know that among civilised people circumcision is an absurdity, and I, who am no antisemite, who have much esteem for the Israelites, who demand from no one a profession of religious faith, I cry and always shall cry to the Jews : " Do not mutilate yourselves ; do not imprint on your bodies an odious mark which distinguishes you from other men. As long as you bear it you cannot assert that you are our equals. For it is yourselves who, from the first day of your

life, proclaim yourselves by the knife a distinct race, which will not and cannot mingle with ours ".

It is unnecessary to show up the emptiness and inanity of this rant. It is not with such arguments as these that we shall solve a medical question of the importance of circumcision.

How in the world has Dimerbroeck seen that the prepuce increases the pleasure for the woman in copulation? I have remarked exactly the contrary in the East and also in Senegal. All physiologists are aware that the cynic spasm is slower in coming in the woman than in the man. Now when the latter has a more or less accentuated phimosis, behind which is a gland with a more or less unhealthy sensibility, the ejaculation takes place quickly. The man has finished when the woman is beginning her pleasure. On the contrary, in the circumcised, the mucous membrane of the gland is tanned, and less sensible. It needs a rougher friction, a more prolonged rubbing, and the coition is prolonged, to the great pleasure of the woman. As for the man, he does not lose, for he gains in duration what he loses in sensibility. I will give the proofs of it further on.

Egotism must not exist in love any more than elsewhere. And if the circumcised man augments the pleasure of the woman, without injuring his own; if besides, he is almost completely protected from maladies which assail the uncircumcised, the allegation of Dimerbroeck falls by itself.

And regarding the effects of circumcision on the penis, if phimosis is in nine cases out of ten the cause of the smallness and exiguity of volume of the penis, circumcision on the contrary is a notable cause of augmentation of the volume of the penis, especially when it is performed at puberty. I believe that I am the first writer who has

pointed it out, and I copy literally what I have written in *Untrodden Fields of Anthropology*.

**Effects of Circumcision on the size of circumcised Penes.** " ... remove a sufficiently extended pad of flesh and skin, and the retraction brings back the skin of the penis behind the crown of the gland, for one or two centimètres or less. It is known that at the period of puberty, considerable changes are produced in the genital organ in the course of a few months. The testicles quickly increase in size, and the penis rapidly develops. Consequently, when circumcision is performed at this period, when the penis develops, the gland being, in no way impeded, will assume its normal size. The cicatrisation aided by the reparation of the loss of the skin and mucous membrane which has been removed, causes the largest portion of the penis to correspond with the circular cicatrice which results from the operation. Although the gland may be much developed, far more than in a penis with phimosis, when it is always more or less strangulated, it still remains slightly inferior in diameter to that part of the penis which, in its totality resembles, in the case of the circumcised negro and Arab, a fish with a round muzzle and a short tail. It can be understood now why the negroes of Guiana call their penis a fish ".

Since these lines were written, I have found in the work of Dr A. Kocher (*la Criminalité chez les Arabes*, Paris, 1884) full confirmation of my opinion. In a report on a medico-legal enquiry, Dr Dujardin Beaumetz, commissioned to examine on a prisoner, a circumcized Arab, whether material lesions found on the penis might have been caused by a rape which he had committed, expresses himself as follows : " As a matter of fact the prisoner had been circumcized long ago. The external pressure to

which the mucous membrane of the gland and foreskin are continually exposed, has the necessary effect of pressing down the former; this is a normal physiological effect upon circumcized persons, and it is easy to understand that it must be so in this case ".

**Moral advantages of Circumcision.** We cannot terminate our references to circumcision without bringing forward the statement of Dr Vanier of Havre, who has been previously quoted, that this operation constitutes the surest and the only preservative against genital pollution in childhood and adolescence; therefore, according to him, it ought to be performed, since being so unimportant in itself, it is so useful in its results. Vanier enumerates the moral advantages of circumcision in terms of real eloquence.

"There is one fact", writes this author (*De la Circumcision*, p. 147) "which has been observed, that tends to support our opinion, which is that according to our observations, Jewish children are not inclined to onanism, like uncircumcised children, particularly in early infancy.

Our idea has been confirmed by the evidence of several physicians; it will be enough for us to instance the celebrated member of the Academy of Science, M. Lallemand. Another fact which is a counter-proof of this, is that the Arab children who are not circumcised until the age of 13, do not enjoy the same immunity as Jewish children, but are, on the contrary, generally inclined to the habit of onanism.

Circumcision would be for onanism in the child what castration is for sexual pleasures in the adult. The ablation of the prepuce protects the child from the irritating action of that organ, as castration cools in the man the ardours of the flesh...

Circumcision realises among the Jews if not an infallible preventive remedy, at least the most efficacious preventive remedy: vaccination itself is not an absolute preventive.

The greater rarity of onanism among circumcised than among uncircumcised children would not speak for it, were it not already presumable; it is impossible not to believe that young children especially are not preserved from this malady when the prepuce is no longer in existence, since in young children, onanism only proceeds from the habit which they contract of seizing the loose extremity of the penis.

The gland being deprived of the prepuce, the extremity of the penis forms merely a compact mass which is less sensitive.

By curtailing the prepuce, we diminish the chances of excitement in the child, since lascivious ideas are only awakened at the period of puberty.

This institution, which belongs to a past so remote from us, we will not despair to see one day revived through the dread of fathers and mothers for the scourge of onanism, which will induce them to submit their children to a regular and safe operation. In the name of humanity we demand the return of an institution which appears only to have been kept up until our days among the Jews in order to prove to us its benefits; we know with what a sentiment of aversion those who are not Israelites always view this institution; they do so because tbey have not reflected about it, because they are ignorant of its value. What the future holds in store for society, this preservative institution or the ravages of that great disorder, God knows... But we implore Him, we who see, on one side, a terrible evil with its hideous train, and on the other, the pain of an operation followed by so many benefits that this pain ceases to be an evil, we implore Him to arouse in all classes

of society that spirit of foresight which will make them submit children to a light, regular, clean and open wound, made, in a word, according to the rules of good surgery, in order to prevent the ravages of that shameful plague, which is hidden, which saps the foundations of society, which gains in proportion as it is of long-standing. The wound of circumcision bleeds and heals, the wound of humanity, gangrened at its source in young organisms by the gnawing worm of onanism, grows inveterate and leaves behind it in the depths of society, elements of death which do not only gnaw the flesh and bones of the body, but which blast and corrupt the souls. If at the sight of so many evils caused by this normal poison which runs in all the arteries of the social body, our book may have the force of a cry, of an immense cry of alarm! but, alas! perhaps it will be received with indifference like so many others; it will be read and laid aside, and will be no more spoken of. Let no more be said about the book; be it so: our self-respect as author will willingly consent thereto, if the remedy it proposes be adopted. May we be able to see established by this means, if not absolute chastity, at least that aversion for those vilenesses, which would have such happy results for individuals, for families, for society. In pity for the Israelitish mothers, the social reason for circumcision ought long ago to have been recognized. The fear of a greater evil is the only motive which can sustain them in the cruel trial which they have to undergo at the moment when they have just become mothers. Barely released from the pains of childbirth, their heart is torn by the cries of their child. If henceforward the mothers see in circumcision the preservative from a devouring evil, the pain which is caused them by the sufferings of their son will be for them one of those great necessities against which their mother's heart steel itself whilst it bleeds. By

this title they will accept for themselves and for their children the trial of circumcision.

The Christian mothers, to whom I cannot plead with the same force, not having a religious precept behind me, will reproach me with the brutality of the remedy. I may urge in reply the brutality of the evil, and say to them; for great evils great remedies are needed; but there are arrangements to be made with Science, which in our days has realised, thanks to the discovery of Dr Simpson, the impossible ideal of exempting patients from the pains of surgical operations. "

**Total circumcision of the skin of the penis.** Let us finish with circumcision, by pointing out a mode of operation, unique in the world, employed in Arabia. " Near Djezan (Arabia) circumcision is something atrocious; it is performed on the adult, and his betrothed is present. If he betray by a groan, by a gesture, by the least contraction of the muscles of the face, the horrible pain which he feels, his betrothed immediately declares that she will not have a girl for a husband. It is the case with the young man of being skinned alive, the hairy skin is torn away, and the penis is stripped in its whole length. A notable proportion of the male population dies from results of this operation. " (Fulgence Fresnel, *Revue des Deux-Mondes*, 1838.)

This curious practice is confirmed by Paul de Regla who has seen at Constantinople, in the hands of a Polish doctor in the Turkish Army service, an anatomical portion consisting of one of these penes, taken by the doctor from the corpse of a man sprung from a tribe near Aden.

**Infibulation.** Infibulation is an operation which is practised on both sexes. In the case of boys, it consists

in holding the prepuce forward and flat, and passing through it a threaded needle, the ends of the thread are joined loosely by a knot. As soon as the edges of the prepuce are no longer inflamed, the vegetable thread is replaced by another of flexible metal, which will not oxydise, such as gold or silver. The two ends are soldered together, and the operation is completed, for the thread cannot then be removed except with a file. The complete erection of the penis is prevented by the pain which ensues.

**Antiquity of Infibulation.** This barbarous operation is known from the earliest antiquity. Its object was to prevent either natural coition or masturbation. It originated from the use which the Egyptians and Arabs made of it, like the priests of Persia, to preserve chastity.

The Romans were accustomed to infibulate children whom they intended to be singers, in order to preserve the freshness and purity of the voice by depriving them of sexual pleasures; the singers of the theatre were submitted to this obligation. Martial also reveals to us the use which certain Roman ladies made of it in order to assure themselves of the fidelity of their lovers.

Celsus, after describing the manner of performing infibulation, says : " Infibulare quoque adolescentulos interdum vocis interdum valetudinis causa quidam censuerunt ". In obstructing the *adolescentuli*, it was masturbation in particular which they wished to prohibit to them.

Moreover, the Roman matrons who felt a repugnance at having this operation performed on their children, whom they suspected of vicious tendencies, made them enclose the penis in a wooden case, pierced with a hole for the passage of the urine.

**The Ring of Chastity.** According to Dr Hayer (*Anatomie des organes génitaux*) already quoted.

"Certain oriental monks who make a vow of chastity, carried a very large ring in order to make it impossible for them to break it, and the more considerable the weight of the ring, the higher were they held in veneration; some of them could be opened with a key, but the key was deposited with the judge of the place. From whoever we borrow these details, says de Lignac, we must not regard infibulation any the less as a superstitious practice among the Orientals: it cannot prevent the desire, or the first sign which announces it; it cannot even prevent, since it must be said, the *ringed* men from satisfying their flesh, since the ring which encircles only the extremity of the penis, cannot prevent a kind of erection, and even the emission of the prolific liquid; it can only prevent the intromission of the penis into the conduit of the woman; in fact, it renders men chaste, if that virtue consist merely in their being deprived of the sexual act."

**A masturbator infibulating himself.** It is certain that infibulation completely prohibits the employment of the hand in masturbation. Dr Pouillet, in his work on *Onanism*, relates the story of a masturbator who had the courage to infibulate himself in order to cure himself of that baneful habit.

"Dismayed at the baneful results of onanism by reading Tissot, and fearing that he would not be able to resist on every occasion the temptations which he experienced, he conceived the project of totally cutting off his penis in order to render it absolutely impossible for him to indulge in masturbation: but he soon altered his idea, and invented another means, less cruel and quite as efficacious. After drawing the prepuce outwards, he pierced it with a nail

against a table, and fell down in a faint. When he recovered, he then passed through the still bleeding holes a thread steeped in camphorated brandy (as is the practice when the ears are pierced). When the holes were healed, he drew out the cotton thread, and passed through them a brass wire, the ends of which he bent with a pair of pincers into the shape of a horse-shoe so that the gland should not be compressed, in such a manner that they encircled the small portion of the prepuce beyond each opening, and thus rendered the wire solid. The young man wore this ring during fifteen years without experiencing the slightest inconvenience ".

The results of infibulation are not always so mild as in this case. Demarquay has pointed out that the constant irritation of the infibulated prepuce favours the development of cancer of the penis. Mars reports a curious case : a patient had been infibulated by a woman; during four or five years he wore two little gold padlocks passed through the prepuce, and when he came to consult Dupuytren he had the prepuce considerably swollen, hard, and *cancerous*.

Here is the observation in extenso, taken from Demarquay (*Maladies chirurgicales du Pénis*).

**Cancer of the prepuce, caused by very prolonged irritation**. Some years ago, Dupuytren was summoned by Dr Petron to M. N... head of one of the most important manufacturies in France. The latter, then aged about fifty, of a good and strong constitution, had had for a long time an abundant fetid discharge from the extremity of the penis; he urinated only with difficulty and pain; the prepuce, considerably swollen, was firm, hard and ulcerated in different places. The stricture situated at the entrance, the swelling and induration, were the obstacles to the passage of the urine.

So far the case displayed nothing but what is frequently seen; but that which attracted attention and surprise at once, was to find the prepuce pierced and even traversed here and there by openings and channels covered at their mouth and in their interior with a perfectly organised cutaneous tissue.

Before proceeding further, and particularly before attempting anything, Dupuytren wished to know the cause of the mischief and the nature of the perforations which he saw before him. He then learnt that the patient, while still young, had made a journey and a stay of several years in Portugal; that there he had formed a connection with a young woman, lively, passionate and jealous; that this young woman with whom he was desperately smitten, had soon acquired absolute empire over him, and that in the midst of the transports of a reciprocal love, he had felt one day a slight prick on the prepuce; but that re-assured and diverted by the caresses of his mistress, he had not even looked to see whence the disagreeable sensation which he had just felt, had arisen. It was only on leaving her arms that he had found his prepuce enclosed with a little golden padlock, of artistic workmanship, the key of which she retained.

However disagreeable, inconvenient and even humiliating, this precaution must have appeared to a man, the young woman turned to so much account her reasons, her caresses, her protestations of love and devotion, that she not only contrived that he was not angry, but that he did not remove the padlock, and she succeeded in almost inducing him to regard it as an ornament. She did more; she obtained his consent that the padlock should be renewed each time that the skin through which it passed became altered. M. M... passed four or five years in this state, and during that time he wore one or two padlocks

hung to his prepuce, while his mistress carefully kept the key of them.

Was the degeneration of the prepuce to be ascribed to this singular, this extraordinary practice. Petroz and Dupuytren had no hesitation in thinking so. In fact, the number of infibulations, which were not less than twenty, the drawing of the prepuce by the weight of the padlocks, and the efforts to stretch it caused by erections, appeared to be causes more than sufficient to bring about this degeneration; and what concluded the proof that this had been the cause of the disorder was that M. M... from the date of his return from Portugal, had not ceased to have the prepuce irritated, swollen, and painful.

There was no room to hesitate; the obstruction of the penis was cancerous or ready to become so. It was necessary to remove that portion of the penis under penalty of seeing M. M... 's indisposition continue, or of seeing him perish one day of cancer of the penis. The prepuce was entirely removed by a kind of circumcision. The patient's wound was dressed, and he was placed under the care of Sanson who, in less than three weeks, brought the wound to a perfect cicatrisation ".

**Mutilation of the Cahiraguis of India.** Dr Callas in his unpublished translation of the *Jurisprudence Médicale Indienne* of Dr Chevers, gives some curious details regarding the seet of *Cahiraguis* (men who have no passions) of India, whose extreme intemperance and shameless morals have been described by the Abbé Dubois. They carry filthiness to the most inconceivable depth (like St Labre), eating all manner of foods, drinking all manner of drinks. In order to destroy in them the sexual passion, they take the precaution, a long time before they appear in public, of attaching to the virile organ a pretty heavy

weight, descending to the ground and gradually increased; they drag this weight overy day with effort, and pretend that they thus weaken the muscles and render them incapable of performing their function.

**Artificial hypospadia of the Australians.** Mantegazza (*l'Amour dans l'Humanité*) relates that according to the different accounts of travellers, the Australians have succeeded in producing an artificial hypospadia in order to prevent fecundation.

" Edward J. Tyre (*Journal of Exp. of Discov. into Central Australia*) learned in 1845 that the natives of the Fort Lincoln peninsula or of the western coast, not only were not circumcised, but that they underwent a more serious operation, which he describes thus : " Fenditur usque ad urethram a parte infera penis ". He says further on that this operation is performed when they are between 13 and 14 years of age, and that all the men whom he examined displayed the marks of it. He adds that perhaps it is a wise disposition of Providence to limit the population in such an arid and barren country. In a work (*The Native Tribes of South Australia*) written by several authors on Australia, we find this Malthusian urethrotomy described : " Operationem hoc modo perficiunt : os Walabii (Halmaturus) attenuatum per urethram immittunt illudque ad scrotum protrudunt ita ut permeat carnem. Scindunt dein lapide acuto usque ad glandem penis... "

At page 251 of the same work, we read the description of this operation given by the missionary Schurmann : " It is an opening of the urethra from the top of the penis to the scrotum, made with a sharp point of quartz; I have not been able to learn the cause of this strange mutilation. When they are questioned, they answer : " Thus our ancestors used to do, and thus must we do. "

S. Garon describes on page 272 the customs of the Australians of the Dieyrie tribe, and says that they practice the operation called *Kulpi*. It is performed when the beard is long enough to be tied. The member is placed on a piece of bark; the urethra is cut with a sharp piece of flint, and a bit of bark is placed on the wound so that it may not close. The men who are thus operated on may go entirely naked before the women, while the others must cover themselves.

Miklucho-Maclay says that this operation is called *mika* in Central Australia, and he describes it thus, according to the notes collected by a squatter who was long established in that country.

These mutilated men may also marry. In order to urinate they squat down like women, slightly lifting up the penis. It appears that, on the contrary, the Australian women urinate standing up.

In erection, the member thus operated on becomes wide and flat, and, during coition, the sperm is ejaculated outside the vagina, as a number of Europeans have been able to assure themselves. Miklucho believes that coition must last for a shorter time (?).

The squatter told Miklucho that for 300 men who are operated on, only 3 or 4 men are found with the member intact, and that they are entrusted with the preservation of the species.

When sending these first notes to the Anthropological Society at Berlin, Miklucho added that Malthusian hypospadia was a custom not only in Southern and Central Australia, but also among the Australians of Port-Darwin. He had been told however that some of those operated on had legitimate children (?) Some natives of the North-West coast made partial holes in the urethra in order to dilate its orifice and increase the pleasure in accoupling Later on

Miklucho made other communications confirming and elucidating his previous ones. He learnt from M. Kotsch that the *mika* is only performed in order that they may not have too many children, and that the weak men in particular are submitted to the operation. It is not then merely a simple restriction of vitality, but it is also an attempt to improve the race. From time to time, the wives of the men who have been operated on yield themselves to others in order that they may have children. What Kotsch says, applies to the natives of the river Herbert near Lake Parapitshuri.

The operating knife is of quartz, and the handle of the thickened juice of the grass-tree.

Miklucho learnt later from P. Joloche that the Australian Nasim, who live between the rivers Riper and Nicholson, on the west coast of the Gulf of Carpentaria, circumcise their children at the age of fourteen, and at eighteen, split their urethra with a splinter of quartz or a sharp shell. As we have already said, they prevent the wound from closing. When the member is healed, it resembles a large button. The men who are thus mutilated are able to have connection, and the women prefer them for that reason. Tobsche adds that they mutilate the robust men in particular.

**Instance of a mutilation of this kind observed by the Author.** I have met with a native of Santo (New Hebrides) who had a hypospadia of this kind, performed at puberty by the Takata (the sorcerer-doctor). With a splinter of quartz he had split the urethra from the gland to the root of the purse. On the wound had been placed a strip of bark enveloping the penis, round the chewed herbs which covered the wound.

The native who displayed this curious mutilation, in-

formed me that he was not the only one, and that it happened frequently enough, and it was performed by the Takata on those subjects who were pointed out by the chief. The Neo-Hebridean race is originally Australian. They are nearly pure black Melanesians.

# CHAPTER X

## MUTILATIONS AND AMPUTATIONS OF THE GENITAL APPARATUS WHOLLY OR IN PART

Mutilation of the penis for a criminal object. — Curious observation : mutilation of the penis by a convict's teeth, followed by the murder of the victim.
Mutilation for a religious object.
Surgical amputation of the penis.
*A.* Partial amputation : — two interesting observations.
*B.* Total amputation of the penis.
Means employed. 1st the cutting instrument, 2nd the ligature, 3rd linear crusher, 4th galvano-cautery, 5th the actual cautery.
Method and different processes employed by surgeons. Cases of operations performed.
Physical results of the amputation of the penis. Deep despondency of the unfortunate persons who have lost their penis. Deaths and suicides.
Ablation of the testicles, or castration. How eunuchs are made in the Soudan. Complete mutilation of prisoners in Abyssinia. Voluntary castration for a religious object.
Complete mutilation of the genital parts in the case of a soldier. Penis found in the stomach of a dog.
Surgical castration. Mode of operation.
Sacrifice to Venus too well performed. The priest castrated in spite of himself.

**Mutilations and amputations performed on the genital apparatus wholly or in part.** From time immemorial, man has mutilated himself, or has mutilated his fellow-man, in obedience to the most opposite motives : vengeance, pleasure, lust, or religious sentiment carried to an extreme through fear of transgressing the divine laws. We must therefore distinguish between the

two chief motives, 1st the criminal motive, 2nd the religious motive, to which it may be proper to add, 3rd the necessity of surgical intervention to save the life of the patient by the excision of a degenerate organ.

These mutilations or operations may affect the penis wholly or in part, or one of the testicles or both at the same time, or finally the whole of the genital apparatus completely removed level with the pubis.

**Amputation of the penis.** Demarquay, in his *Maladies chirurgicales du pénis*, after describing cancer at length, devotes 82 pages to describe with abundance of details the different methods employed to perform this operation, and gives in support some very curious observations.

Here we shall be much shorter and sum up the questions in a few pages; satisfying ourselves with borrowing from Demarquay some of the most typical of his observations.

Let us begin first with the mutilations performed by a criminal hand.

**Mutilation of the penis for a criminal object.** When the penis has been totally divided for a criminal object, there is naturally nothing more to be done, but division injures a large portion of the cavernous bodies only, surgical science is in a position to-day to preserve the organ, and is able even to render it qualified for copulation. A wise and prudent rule imposes the duty of preserving the fragment in front of the division, provided that fragment is not cold and purple. The following fact, observed by Artaud and communicated to the Surgical Society, constitutes a fair example of recovery in such a case.

" P. R... aged 39, was in the company of a woman who nursed a project of vengeance against him; she armed herself with a very sharp instrument with which she dealt him a rapid and violent blow on the penis which was then in a state of erection. A large wound was the result, injuring at least two thirds of the sheath of the penis, the right cavernous body and nearly half of the left cavernous body, and the whole depth of the urethra. The dorsal vessels of the organ, and the left cavernous artery were divided; the division took effect at a centimètre before the pubis and the root of the purses. The anterior part of the penis was only held by a neck composed of the skin which had escaped and by the half of the right cavernous body, the artery of which probably remained intact.

The wounded man dragged himself with difficulty to his home, which was close at hand. Dr Dobeski, who was summoned immediately, ascertained that there was considerable hemorrhage which did not yield to the styptics which were employed, and did not cease until after a syncope which lasted more than two hours; under the influence of some cordials the unfortunate man slowly came to himself.

Dr Jossand (of Rochefort) saw the wounded man the next day : the penis was ecchymosed, cold, much swollen, without feeling when touched, almost completely detached from the pubis. The hemorrhage was arrested by large lumps of clotted blood which filled the spaces between the lips and the retracted edges of the wound. They tried to reunite them : the largest clot of blood was removed from the wound, and an attempt was made to find the vessels, but without success. They were not fortunate in seeking for the orifice of posterior division of the urethra, by a probe introduced through the urinary meatus or directly into the wound. They were satisfied by making a

suture at separate points, which brought the teguments together and fitted together more or less exactly the two ends of the cavernous bodies and the urethra.

This first operation had singular results; the parts did not fit together exactly. Although the similar parts were not placed in contact, the reunion of the two parts of the penis was effected, but in such a manner that the penis was contorted on itself, and that the gland faced the abdomen on its lower surface, that which bears the fraenum of the prepuce. Undoubtedly the remaining portion of the cavernous bodies was twisted on its axis; at least the mesial raphe described a spiral line, successively downwards, to the left and upwards.

The separate cicatrisation of the skin entailed a separate cicatrisation of the ends of the cavernous bodies and the separation of the two ends of the urethra. The orifice of the anterior division disappeared at the level of the solution of continuity. This defective reunion, and these changes of direction, took several days to accomplish; they recognized the cause of it in their being unable at the first to place a probe in the canal of the urethra.

However it may be, the patient lived for two months with such an intense dysury that he was never able to completely empty his bladder through the narrowed opening of the posterior division of the canal. Since the accident, the urinary meatus had not allowed passage to a single drop of urine; micturition became more and more difficult,and the retention threatening to become complete, the patient came to Rochefort on May 29th , to claim the attention of M. Artaud, who observed the following particulars; a cicatrice situated before the penis and the scrotum occupies more than half the circumference of the penis; at its centre, on the raphe, a fungous elevation, from the top of which oozes a clear urine, drop by drop.

The hypogastrium is raised by the distended bladder. When the need to urinate becomes pressing, the abdominal muscles violently contract; the face becomes anxious, and a filiform jet of urine, directed downwards and to the left, escapes from the elevation, and during this time, the portion of the canal situated behind swells through the accumulation of the urine in a supplementary pocket formed at the cost of the scrotum.

On exploring the penis with a pointed instrument, it was observed that sensitiveness had disappeared in all the left half of the canal, the gland included, and increased on the contrary in the right half and behind the cicatrice. The testicles are voluminous, and as resistant as in any other man's in the flower of his age, and yet, since the accident, there has been neither erection or ejaculation.

The patient, fatigued by the journey, is emaciated and in great pain, and has decided to undergo anything to relieve himself of an ill, which, according to his own expression, " is bringing him to despair and death ".

After a very clever operation, the retention of urine was cured, and the urethra was restored by an ingenious autoplasm. The operation was performed at the end of May, and on Dec. 15th the day of the last examination, the urethral fistula was completely obliterated, and the urine flowed in a continuous stream. A prick made with a pin was felt the whole length of the gland and the penis. The patient had had two pollutions; he relates with marked satisfaction that he had had the most complete sexual relations with his wife.

**Mutilation of the penis by the teeth of a convict, followed by the murder of the victim.** This was a case of erotic vengeance of one pederast upon another. The case occurred at Cayenne in 187...

I did not see it, but I read the proceedings of the Council of war summoned to condemn the guilty party.

Betwen two convicts, L... and B... there existed one of those depraved connections of which the hulks afford so many instances. L... was a stout youth of 23, well equipped, as it appeared, on the genital side, and the man. B... aged 40, formerly a cashier, was employed in the Office of the Administration and devoted the few pence which he earned to paying for tobacco and drinks for L... But the latter was an inconstant lover, deserted his friend, and took another. B... was furious, and wishing to avenge himself, obtained from L... a promise to meet him at night in a thicket situated a few hundred yards from the transportation camp.

What passed between these two abject beings? L... was found the next day, half naked, with his throat gaping, and his body riddled with the stabs of a knife. According to the medico-legal report the genital organs presented the following appearance.

" The teguments of the penis are exactly divided in front of the pubis at the place where these teguments quit the penis to be continued with those of the abdomen and scrotum. This division is fairly regular and, nearly circular. The penis, stripped of all its cutaneous covering, is cut behind the gland. This is not a clean cut like that made by a sharp instrument. It is *unequal, as though it had been bitten*, and could not have given passage to a large quantity of blood. The stump, formed by the remaining portion of the cavernous bodies and the urethra, has a length of about 3 centimètres. It shows traces of bites and tearings absolutely similar to those found in cases proved by science when the penis has been cut and torn by the tooth of a vicious horse.

What confirms us in our opinion is that at the beginning of the purses, there is found a wide and deep circular excoriation, almost entirely cutting the skin of the swollen purses, which display in places the mark of nails or of teeth. There is an effusion of blood in the left portion of the scrotum. The two testicles, notably the left, are much contused, and appear to have been the object of violent pressure with the hands, and of bites with the teeth. It has been impossible to find the amputated portion of the penis, in spite of minute researches ".

Before the Council of War the accused maintained that after a violent scene, L... struck him, and that he had made use of his knife to defend himself, that after he had delivered the first blow, he "saw red", and had struck his adversary mechanically all over the body.

After this he had taken to flight, and he maintained that the wounds on the genital parts had been inflicted by a large dog, which had been attracted by the sound of the struggle, and had tried to bite him, and that the corpse of his unfortunate friend (*sic*) had probably been mutilated in this way.

But the murderer's comrades, to whom he had declared before this, "that he would like to eat L...'s p...", put the military justice on the right track, and the Government Commissioner in the address for the prosecution supported the theory that B..., having proposed a labial pollution to L... which was agreed to by the latter, suddenly bit off L...'s penis behind the gland, while with his two hands he violently squeezed his scrotum and testicles. L... fell down fainting from the pain, and B... took advantage of this opportunity to cut his throat, and complete the mutilation of the genital parts. According to the prosecution he must have proceeded to the last outrages on L...'s still palpitating body. It appeared that on the anus and on the

thighs of the victim were found traces of sperm. B... was guillotined. The autopsy showed that he displayed every characteristic of a passive pederast, but that he was nevertheless provided with a well-developed genital apparatus. The penis, which was injected before being dissected, was 19 centimètres long by 4 or 5 wide.

**Mutilation for a religious object.** It is very uncommon for the penis to be removed for this object without the testicles. We will examine this question further on.

**Surgical amputation of the penis.** This may be partial (*A*), or complete (*B*).

*A*. **Partial amputation of the penis.** This is performed in order to limit the progress of a cancerous affection. Whenever this affection has made its first appearance in the teguments surgical science has been averse from proceeding at the first to total amputation; and it is necessary, in such a case, to keep in mind what Lisfranc says regarding *Superficial cancers which are believed to be deep;* on the dorsal surface of the penis and following its axis the carcinomatous growth is incised from the front backwards, and from one extremity to the other; the incision is made by small cuts as far as the covering of the cavernous bodies: if they are degenerate, the amputation of the penis is proceeded to, but if they are healthy, they are preserved: the two sides of the tumour are retroverted, and it is dissected so as to remove it completely.

After this operation an *anaplastic* can be performed it required, and, as Marchinette did, a sheath may be again supplied to the penis at the expense of the skin of the purses. If the gland only is affected, only that would be remov-

ed; although it affects the erectile tissue, this ablation does not abolish the genital functions. We give an instance of partial amputation of the penis, due to Soulé (of Bordeaux).

" A man, aged 30, had a tumour the size of a fist at the extremity of the penis, it was unequal, convex, and displayed grayish ulcerations at different points, showing an abundant ichorous suppuration and some hemorrhage; besides there were several intermescent ganglia in the two groins, and very severe pains; the patient requested that it should be amputated. M. Soule being assured that it was composed of several tumours closely pressed one against the other, in the middle of which he was able to detect the canal of the urethra, excised the different lobes of the tumour; the gland underneath was healthy. Cauterisation with acetic acid, made at several points where degeneration seemed ready to develop anew, completed the " cure ".

" In the following case, Boisson performed amputation with curved scissors and retained the prepuce, which was healthy, Obs. CXXX. *Central balanic cancer. Gland cut and prepuce retained. Speedy cure.*

X... born at Avignon, retired mechanic, aged 50, was admitted into the Saint-Eloi hospital, at Montpellier, in the month of May 1845. He stated that he was affected with a stricture situated at the extremity of the canal and resulting from cauterisations of the urinary meatus. He had had several blenorrhagias, and different herpetic affections, after which a running from the urethra, confined apparently to the navicular fosse, had troubled him, and for this he had exhausted the ordinary means of science, including numerous cauterizations with nitrate of silver; a swelling, with induration, appeared at the anterior extremity of the gland and contracted the urinary meatus, where the introduction of a metallic probe, which caused pain,

revealed the existence of very evident, but limited, unevennesses. The probe, pushed a little further, remained free, and its point touched only a smooth and natural membrane. The intra-urethral vegetation and the swelling of the walls of the meatus, necessarily occasioned a considerable difficulty in the emission of urine, which was only ejected with pain, and by numerous and divergent jets. The swelling, limited at first to the end of the gland, had gradually seized the rest of that part of the gland, and the induration had become general. Bruises, painful twinges, an increase of size not resulting from the erection of the penis, a change of colouration, a scirrhous resistance, all agreed to prove a cancerous invasion, the approaching spread of which to the prepuce and cavernous bodies it was easy to foresee. Specific and resolvent medicaments being of no efficacy to check the progress of the disorder, an operation evidently became the only resource; it was proposed to the patient, who refused and appeared despondent. The fear of being deprived of virile functions and signs prejudiced him to the highest degree, and caused him to persist in his refusal to be operated on. He only agreed to it when M. Bouisson gave him the assurance that the generative functions could still be exercised, and besides that the preservation of the prepuce would hide the seat of the operation, and leave to the organ its natural appearance.

Buisson, having drawn the prepuce backwards, so that the crown of the gland was entirely free, seized the extremity of the penis with Museux's forceps; then, standing on the left of the patient, who was in bed, in a position of dorsal decubitus, he excised the gland with strong curved scissors, the concavity of which was directed forwards. As a very small extent of the walls of the canal of the urethra, 1 or 2 millimètres at the most, still displayed a slight in-

duration, this portion was fixed with the forceps, and then taken away with a second cut of the scissors, without the sheath of the penis being injured. Only a very moderate hemorrhage on the whole resulted from this cutting, which the contact with cold water was sufficient to stop. A probe of india-rubber was inverted in the canal, and the prepuce was brought forward so as to cover the wound. No accident impeded the results of this operation, which ended in a complete cure, at the expiration of fifteen days. Erection took place without difficulty, the emission of urine encountered no obstacle; the shape of the penis was almost preserved, and the patient felicitated himself on having kept his virility".

**Total Amputation of the Penis.** This is the transversal section of the penis on a level with some point of its axis. It may be performed by means of, 1st the cutting instrument, 2nd by the ligature, 3rd by the linear crusher, 4th by the galvano-cautery, 5th by the actual cautery.

1. *Amputation by the cutting instrument.* We shall describe here the ordinary method employed by surgeons.

Before proceeding to the operation, the skin of the pubis is shaved, and all the genital parts are carefully washed with water containing bi-chloride of mercury. The bistoury and the other instruments are rendered aseptic, and also all the dressings and linen. This is mentioned once for all.

It is an important matter to preserve exactly the necessary quantity of skin. If the sheath of the penis is pushed too far backwards, a roll of skin will remain projecting beyond the surface of the section of the cavernous bodies; if, on the other hand, the teguments are drawn too far forwards, the inconvenience is more serious, for there does not remain enough of the skin to cover the cavernous bo-

dies, the extremity of which is then uncovered, and projects beyond the cutaneous section.

In order to avoid these two inconveniences, the operator grasps with the left hand the penis, the sheath of which he draws slightly forwards, while an assistant draws this envelope towards the pubis. The skin being suitably arranged, the penis is cut transversely with a single stroke from above downwards. The two dorsal and the two cavernous arteries are immediately tied. As to the hemorrhage proceeding from the erectile tissue, it is stopped by compression or by astringent powders, and in case of need by perchloride of iron. In exceptional cases, recourse is had to cauterisation, which is however an untrustworthy styptic. To prevent the obliteration of the urethra which has been preserved, a probe is introduced within, and is fixed to the bandage-fenestrated linen cut in the shape of a Maltese cross and steeped in glycerine, long and narrow compresses, the whole kept together by a T shaped bandage. Treat the wound with the new antiseptic treatment.

**Modifications proposed to the ordinary process.** A great number of modifications to the ordinary process have been proposed in order to obviate certain inconveniences. We are acquainted with the processes of Boyer, Delpeche, Bouisson, Roux, Schroeger, Langenback, Barthélemy, Rizzoli, Smyly, Ricord, Erichsen, Earle, Ghérini, Thomas Teale, and lastly of Demarquay.

We will not enter into the details of these processes. We shall be satisfied with quoting two observations of operations performed; one with Bouisson's process borrowed from that of Delpeche, which is the most curious, and the other from Demarquay himself.

**Delpeche's process modified by Bouisson.** In this process, when the penis is cut at its insertion in the pubis, the scrotum is opened from the front backwards, and the two halves of this envelope are joined together in such a way as to enclose each testicle in a separate pocket. These two organs thus remain separated by a slit, at the bottom of which the urethra opens. Lallemand performed it in 1844 at the Saint-Eloi Hospital with great success.

From the year 1855, Bouisson (of Montpellier), performed this operation anew with several modifications.

**Cancer of the whole of the penis. Amputation of that organ. — Mesial incision of the scrotum. Formation of a distinct bag for each testicle.** X..., aged 50, a skin merchant at Toulon, born at Abrie (Hautes-Alpes) entered the Saint-Eloi Hospital at Montpellier, on Feb. 2nd, 1855. The disorder which necessitated his journey to Montpellier consisted in an enormous mass of ulcerated vegetation situated on the prepuce, the gland, and the sheath of the penis.

A fetid ichor, tinged with blood, oozed from the surface of this mammilated tumour, hollowed with unequal and deep anfractures. The colour of the tissues was grayish in certain points and reddish at the periphery. Shooting pains traversed the tumour, the considerable resistance of which displayed, at certain points, an almost cartilaginous hardness.

The penis, reduced to a kind of neck, formed by a weak portion of the cavernous bodies, was capped, as it were, by this morbid, efflorescent growth, and preserved its flexibility only in the neighbourhood of the pubian symphysis.

The patient had had several syphilitic complaints which

had been met with a suitable treatment. No syphilitic symptom co-existed with this alteration of the penis, in which, on the contrary, all the characteristics of cancer were collected, both as regards the appearance itself of the lesion and with reference to the evidence gathered by microscopical examination. The cellules reckoned to be characteristic, were in fact found in a special exploration.

The disorder, developed while the patient was residing at Toulon, had lasted for more than a year; it had displayed obtinacy to several local and general treatments, even to iodide of potassium. The operation, which seemed to offer the only chance of safety, was performed on March 15th, 1855, in the following manner:

The patient, placed on the bed as for the operation of cystotomy, was put under chloroform. A mesial incision parallel to the raphe of the scrotum, divided it in its whole length, from the base of the penis to the perineum. This incision was prolonged as far as the canal of the urethra, which was found to be thickened and indurated as far as the bulb; the two halves of the scrotum and the testicles having been held apart by the assistants, the better to isolate the base of the penis, a stroke of the bistoury, shaving the pubis, inclining downwards and backwards, removed that organ and the cancerous tumour, so that the surface of the incision of the cavernous bodies and especially of the canal of the urethra were placed deeply in the groove, resulting from the mesial section of the scrotum.

The divisions of the internal pudic artery were tied, as was also one artery of the dartos; then each half of the scrotal pocket was brought together by the anterior and posterior edges, so as to form a separate covering for each testicle; numerous suture stitches served to hold together the special re-covering given to each seminal gland,

so that the contraction of this new scrotum should take effect towards the inguinal canal.

Lastly, a probe was introduced into the canal of the urethra, and fastened by strips of cotton, which were attached themselves to a band of the same material passing by the anterior portion of the thighs, and brought over circularly above the pelvis.

The general appearance of the new arrangement assimilated the shape of the scrotum to that of the vulva, at the bottom of which was the orifice of the canal of the urethra.

The patient was placed in bed, with the thighs bent, the knees raised, and the double scrotum supported with lint, a portion of which was introduced into the fissure of the scrotum. The next day, by means of suture stitches, the urethral mucous membrane was fastened to the surrounding skin, and brought by slipping to the circumference of the urethra; but as suppuration was shown it was impossible to obtain a union of the cutaneo-mucous membrane. However, when the patient recovered, he urinated easily by slightly parting the two halves of the cutaneous pouch. He could remain standing up, or crouch down like a woman, to emit his urine.

2ndly *Amputation by ligature.* A silver probe is introduced into the urethra, and the gradual section performed by means of a string passed round the organ behind the tumour. In the published observations the section has been completed, according to circumstances, at the end of one, two, three, or four days. This method has been adopted in order to avoid hemorrhage, and to diminish the pain of the operation. At the present day the fear of this no longer exists, through the employment of general or local anæsthetic agents.

Graefe, of Berlin, performed amputation by ligature in the following case:

"A man, aged 29, affected with a venereal ulcer of the gland, first had recourse to a mercurial treatment which caused the complaint to quickly disappear; but it appeared again a few months after, and resisted all the means employed to subdue it. The ulceration extended from the side of the urethra and from the prepuce, successively invading the third of the gland, and penetrating to the middle of the navicular fosse. The patient was a prey to a mercurial fever, but the ulcer continued no less its progress. At length, at the end of a year, he came to undergo ablation of the affected part. M. Graefe performed it by means of the ligature. He introduced a silver probe into the urethra, then he compressed the penis immediately behind the crown of the gland with a tightly drawn ligature. The patient endured this operation with the greatest composure. No accident occurred; the same evening the part situated in front of the ligature was void of feeling, and the band could be drawn tighter without causing pain. On the second day, the diseased portion was removed, and the probe withdrawn. Recovery was so rapid that the patient was able to leave Berlin at the end of a month".

3rdly *Amputation by the linear crusher*. This apparatus, invented by Chassagnac, consists of a metallic chain, which cuts through the tissues, without opening the sanguine vessels, as the bistoury does.

An indiarubber probe with thin walls is introduced into the urethra. With a lancet-shaped needle, solid and sharp, the penis is tied closely below the point where the section is to be made. The chain of the crusher is applied, and the section made on a level with this neek. The end of the probe is seized with the forceps, the needle is withdrawn, and the probe is fastened. This method displays se-

veral advantages according to Chassagnac; prevents hemorrhage, and the retraction of the teguments; lessens the chances of phlebitis and prolonged suppuration; secures the permeability of the urethra through the previous introduction of the probe.

Demarquay's opinion of this mode of operation is as follows: " Regarded in its performance, this process appears to us to be far from meriting the praise due to its asserted simplicity, and if crushing is an advance upon ligature, it is inferior on all grounds to amputation by the cutting instrument; besides, on several occasions recourse has had to be made to the bistoury to complete the operation. I give the following fact as an instance ".

**Epethelial carcinoma of the Penis.** The subject of this observation, affected with epethelial cancer of the prepuce and gland, is a very aged man. The affection dates from eleven years back. According to M. Paget, the patient underwent an operation for phimosis four years ago, and this disease appeared since then, without the patient being able to say if it was in existence for a longer period. M. Paget decided to perform the ablation of the penis by means of the crusher, by passing the chain between the urethra and the spongious body, so that the latter might be left longer than the stump of the penis. It was almost completely divided by the instrument; but, as is sometimes observed, it was necessary to have recourse to the bistoury in order to complete the operation. The time taken to perform the ablation of the penis, in this case, by means of the crusher, was nearly half-an-hour.

4$^{thly}$ *Amputation by Galvano-cautery.* Latterly this mode of operation has been applied to amputation of the penis (Lulewier, Bryant, Amussat). The principal advantage which it seems to afford, is the suppression of hemorrhage.

A case of epithelioma of the penis in which Amussat performed amputation by galvano-cautery is here given.

A baker, aged 46, tall and very muscular, observed, in May, 1891, a swelling with induration of the right side of the gland. The patient's usual doctor successively employed emollients, applications of tincture of iodine, and later on when the affection was making progress, cauterisations with carbolic acid and monohydrate nitric acid. Towards the middle of 1892, the gland having considerably increased in volume, the subject was obliged to renounce sexual relations.

At the beginning of August, 1893, Amussat ascertained the existence of an epithelioma completely invading the gland, and partly the border of the prepuce. The penis was not affected behind the gland nor, did any neighbouring ganglionar obstruction exist. The amputation of the penis being agreed to by the patient, was performed in the following manner: the patient lying on a bed and placed under chloroform, a probe of moderate calibre was introduced as far as the bladder. Amussat grasped the penis below the gland, together with the diseased part of the prepuce, in the handle of the galvanic cutter, which was moderately tightened. The apparatus was placed in connection with a Prouve's battery, and the amputation took place without any flowing of blood. The operation completed, the probe was fixed and closed with a peg.

The results were very simple; eschars produced by the handle of the galvanic cutter fell off at the end of twelve days; the cicatrisation was complete at the end of six weeks.

5$^{thly}$ *Amputation by actual cautery*. This method is not practised so to say. It has nevertheless sometimes been performed, especially by Bonnet of Lyons.

**Partial amputation by means of the cautery.** B... aged 35, entered the hospital on the 10th Nov., 1848, to be treated for an affection of the penis which had lasted for three years. At his entrance to the hospital, the penis was in the following condition. A large ulceration, 4 centimètres wide each way, occupied the upper portion of the penis, on a level with the union of the prepuce and the gland. The canal of the urethra was intact. The surface of this ulceration, unequal in shape, displays a reddish grey colour and scirrous granulations which invade the anterior third of the penis; the edges of ulceration are turned back, its base shows a remarkable hardness; if it is pressed, a whitish liquid oozes out, which has not the appearance of pus or mucus. The pains are violent and shooting.

On Nov. 21st, Bonnet decided to perform the partial amputation of the penis. After preparing a chafing-dish full of cuticular irons, the patient was placed under chloroform; Bonnet, grasping the penis in one hand with a pair of Museux's forceps, held in the other a cuticular cautery, which he drove perpendicularly to the axis of the penis, into the healthy part, 3 centimètres from the pubis. The cutting of the skin and fibrous body necessitated the application of three red-hot irons; a fourth completed the amputation, which was finished without hemorrhage. Application of cold compresses on the wound.

The tumour, when removed, was of the size of a large nut; if it was incised, it sounded under the scalpel like scirrhus, and displayed a cancerous oozing when pressure was applied at two opposite points. The gland appeared to be healthy, but the cavernous bodies, which were intact at the edges nearest to the skin, were infiltrated with cancerous matter in their middle and central parts.

On the 22nd, no fever, easy slumber, difficulty in urinating.

On the 24th, third day, the patient urinates better.

On the 25th, cold compresses tire him. Lint coated with cerate.

On the 8th of Dec. all the eschars fall off.

On the 16th, cicatrisation nearly complete. Retraction of the cavernous bodies. Projection of the urethra in front. Easy emission of urine. The patient departs fully satisfied with the result obtained.

**Consequences of amputation of the penis.** Demarquay also sums up the complications which may result after the amputation of the penis.

"Of our 134 cases of cancer of the penis, we have found 30 in which the results of the operation have been shown. Some have been observed during the course of treatment, the others at a period more or less distant from recovery from the operation.

*A*. During the course of treatment there has been noticed.

| | |
|---|---|
| 1. Hemorrhage | twice |
| 2. Tetanus | once |
| 3. Erysipelas of the penis | three times |
| 4. — — with gangrene of the scrotum | twice |
| 5. Gangrenous erysipelas of the penis and scrotum | twice |
| 6. Urinous infiltration and gangrene | twice |
| 7. Momentary stricture of the urethra | five times |
| 8. Phlebitis and purulent infection | none |
| 9. Disappearance of the inguinal obstruction | twice |

*B*. After recovery from the operation.

| | |
|---|---|
| 1. Retraction of the stump..... | once |
| 2. Retraction of the orifice with fistular abscess of the stump..... | once |
| 3. Obstruction of the inguinal ganglions. | six times |
| 4. Return of the disease..... | eight times |
| 5. Generalisation of the affection..... | once |
| 6. Aggravation of the general state..... | twice. |

**Profound despondency of the unfortunate persons who have lost their penis. Deaths and suicides.** The physical results of the amputation of the penis are not then very dangerous. The same cannot be said of the moral results. Those writers who have treated of the amputation of the penis, say that it is not uncommon to see those who have been operated on seized with a profound melancholy, and even succumb to it. Dupuytren instances a patient who implored him to *leave half at least of his penis*, and who died four days after recovery. Cheliens has seen a young man die of grief, in whose case the amputation had been perfectly successful.

Richerand had amputated the penis of a certain individual; the operation had been a perfect success, and the cicatrisation was completed; he was on the point of leaving the hospital, when his wife, who had been acquainted with his recovery without being told at what a sacrifice it had been obtained, came to see him. When she learnt about the operation, she fell into a violent passion, abused him roundly and made him feel so bitterly the full extent of his loss, that he fell into profound grief, and the same night displayed the symptoms of a continuous ataxic fever, to which he succumbed the third day.

Richerand says he has observed that all the men who have lost their penis nourish, during the time of their treatment and after the healing of the wound, a feeling of

melancholy, which renders them eminently disposed to fevers of a bad character. He say that these men never recover their joyous disposition, retaining the melancholy feeling of their loss, and that nothing can soften the bitterness of their regret; he has observed the same thing in old men, to whom the part which they had lost had long been useless. Several have been led to suicide; a patient at the Charité Hospital having kept the small quantities of opium which were given him to soothe his pains, and having thus collected about a gramme he took it all at once, which caused his death.

But all patients (luckily for them) are not so unhappy. The instance is given of the brother of the celebrated Buffon. Demarquay, in his 134 observations, does not mention one case of suicide. It does not prevent the unhappy persons who have lost the organ of love by amputation, being given to whoring, as the saying is.

**Ablation of the testicles or castration.** Castration, emasculation, eunuchism, is the suppression of the virile parts, that is to say the testicles; but this castration is not sufficient to completely deprive the eunuch of the pleasures of an imperfect love, and in complete castration, the *whole genital apparatus* is removed nearly level with the pubis. *Castration by friction of the testicles.* This kind of eunuch called *thlibioi* by the Greeks is made by plunging the purses of young children into hot water to soften them, and then rubbing the testicles violently with the hand, at the same time twisting the spermatic canal. An orchitis is consequently produced, which brings on a *sclerosis*, resulting in atrophy of the organ. The merit of this operation consists in the patient's life being less in danger than when a sharp instrument is used.

To such miserable creatures is entrusted the guardian-

ship of the Seraglio in the East. In Italy they are made singers in the Sixtine Chapel, and are called *castrati*. To the honour of our race such mutilations have never been practised in France, except in particular cases of hatred or ferocious jealousy. Besides our Penal Code has never been tender towards castrators. The Code of 1791 gave the penalty of death only. In the actual Penal Code the penalty is hard labour for life, and death if the victim dies before the fortieth day (Article 315).

Nevertheless the crime of castration, if it is brought about and provoked by a violent outrage against modesty may be considered as justifiable wounding or homicide (Art. 325).

**How eunuchs are made in the Soudan.** In the second part of this volume I shall give a history of castration and describe the moral and physical condition of the unhappy creatures who have been deprived of the delights of paternity and the pleasures of love. For the present I shall be satisfied with saying a few words as to the manner in which this barbarous operation is performed.

The Italian traveller, Panceri, relates how the monks of Gisgeh and Lawy-el-Dyr, near Synt in Upper Egypt, castrate the little black slaves imported from Sennaar and Darfour in order to make guardians of Harems of them. The amputation is complete. It is made nearly level with the pubis with a knife; the place is cauterised immediately by pouring boiling oil upon it, and the victims are then plunged into warm sand. It appears that about 60 to 70 o/o of the little blacks thus operated on die.

**Complete mutilation of prisoners in Abyssinia.** It is only a few years ago that it was the sad cus-

tom in Abyssinia to deprive the unfortunate men who were conquered of their genital parts: the conqueror deprived his adversary of the proofs of his virile courage in the following way. Each soldier, after having been first undressed, was laid on his back and held on the ground by five Abyssinians (one at the head and the other four at the arms and legs). The operator, armed with a kind of yataghan, or at a pinch with an ordinary sabre, makes a fold of the skin on a level with the navel, incises it, cuts it out in the shape of a thong in the direction of the genital parts, widens the strip in proportion as he approaches more closely to them, and shaves them completely off in their turn with two strokes of the weapon, on to the right and the other to the left. In order to stop the rapid and abundant hemorrhage boiling butter is poured immediately on the large gaping wound, and this apparently has a wonderful effect, for not more than six out of every ten operated on die. Assuredly, if the *Negus of Negus*, the magnanimous Menelik, had not abolished this atrocious custom, the Italian prisoners at the battle of Adowa would have passed, as the saying is, *a bad quarter of an hour*, and few of them would have returned to the country where the orange tree grows.

**Voluntary castration for a religious object.** There is a Russian sect, the Skopzis, who mutilate themselves or have themselves mutilated, with the object of not sinning any more. We refer the reader to the second part of this volume, where we give complete details regarding this sect, which continues, as it appears, to make proselytes in Russia. I believe that it would not have much success in France.

**Voluntary castration for a patriotic ob-**

**ject.** This mode of castration has been pointed out for the first time by Dr A. Corre, Fleet-surgeon, in his magisterial work (*Ethnographie criminelle* — Reinwald, Paris, 1894) after the work of our old comrade Luro (Annam).

" A patriotic old man, Cranly-Nguyen Cao, suspected by our Resident, arrested and taken before the king-luoc (Vice-roy) tore out his navel with his huge nails. Conducted to the Citatel prison, he cut off half of his tongue with his teeth and spat it out. The next day he was found to be blind; he had torn out his eyes with his nails. He was compelled to push his martyrdom further. He wanted by a new and more horrible mutilation to disclose the fact that the cause for which he was suffering was outside himself. When an Annamite wishes to point out that he is suffering the consequences of a fault which is not personal to himself, which concerns his country, or his family, or his chiefs, or his king, he adopts a strange proceeding, — he makes an attempt on the organs of his virility. Cranly-Nguyen-Cao tied to a stake one of the ends of the rope which hung to him, and propping up his legs, he attemped *mutilation by tearing out;* it was not complete, but a terrible wound was a testimony to his desire to accomplish it. What a heroism in despair did this series of acts attest, displayed in the course of a week, and which the prisoner tried to terminate by letting himself die of hunger! "

**Complete mutilation of the genital parts in a soldier. Penis found in the stomach of a dog.** Demarquay classes this observation under, " Wounds through bites and tearings ", while expressing his doubts, for the wound by its cleanness appeared to have been made with a sharp instruments.

" P. L. R. a private in the 1st Regiment of Zouaves, aged 30, powerfully built, of slight intelligence, brutalised

by drink, was brought to the military Hospital at Dey, on Jan. 2nd 1860, at half-past seven in the evening. Two hours previously, some Zouaves of the same regiment, attracted by a rumour, had picked him up dead drunk and bathed in blood, against a railway embankment, 8 kilomètres from Algiers. They were unable to give any account of the outrage of which R... had been the victim; they had heard it said, at the spot, that a large dog had devoured their comrade's genital parts. They added however that his trowsers, stained with blood and faeces, were fastened with one button, above the wound, so as to conceal it at first sight.

The penis was completely divided at 1 centimètre and a half from its root; the mesial portion of the scrotum, as well as the two testicles were completely cut off. The wounds were of a remarkable regularity. The two lips of the scrotal division appeared to face in a straight line. There was no hemorrhage. (*Ammoniated and etherated draught; cold compresses continually on the wound, sinapisms to the legs*).

Jan. 3rd. The intoxication has disappeared. R... is perfectly aware of his condition; he replies clearly to questions, but he declares with an air of doubtful sincerity, that he remembers nothing. The whole time there is no hemorrhage; a thin clot of blood covers the stump of the penis; no bruise, ecchymosis, excoriation, scratch or mark of teeth or claws; no trace or mark of any contusion or violence round the wounds, on the lower part of the belly, or on the upper part of the thighs. (Nothing is said of the state of the buttock or the anus). — *Cold lotions continued; acidulated drinks, repose, a probe permanently introduced into the bladder.*

Jan. 4th. Apart from the swelling of the stump of the penis and the inflammatory œdema of the cutaneous sheath,

the patient is tolerably well. In the evening a little fever; pulse full, face injected and turgescent. R... is agitated and restless, complains of frequent painful erections; the parts are in fact much congested and strained; the urine flows between the urethra and the probe, as much as through the probe itself. Its incessant presence in the wounds has changed their appearance unfavourably.

Jan. 5th and 6th. Small gangrenous fragments are detached from the grayish pultaceous surface of the stump. The probe, thought to be an irritant, is removed. Dressing ceased in order to avoid any compression. (*Frequently repeated embrocations of camphorated cerate on thick linen to the wounds, in order to keep them as far as possible from contact with the urine*). By this means, assisted by diet, by emollient and antiseptic fomentations, by antispasmodics to the interior, the cicatrice gradually recovers its normal condition.

Jan. 20th. The two lips of the scrotal division are perfectly joined at the urethral orifice; a small spongious tongue is tumefied, and forms a stopper which obstructs the emission of the urine; it is checked by cauterisation. R... is discharged ".

Remark (The stomach of the dog when opened contained a considerable quantity of undigested couch-grass, some remains of raw flesh, and portion of the unfortunate R...'s penis. The gland and its crown, 3 centimètres of the penis and the prepuce, formed one single fragment, the skin of which was regularly divided.

Demarquay thus comments on this fact: " Regarding this observation, although the penis was found in the stomach of the incriminated dog, a medico-legal question occurs which I cannot help raising. However, if we consider on the one hand the absence of contusions and traces of bites round the wound; on the other hand the

regularity of the surface of the division : lastly the integrity of the portion found *whole*, and not gnawed and in fragments in the stomach of the dog, it may be asked if the latter was really the delinquent. If this is answered in the negative, the existence of a homicidal hand must be admitted, and it must consequently be concluded that the wound on the penis was made with a sharp instrument; the symptomatology would seem to be in harmony with the etiology. But we must proceed ".

For our own part, there is no doubt about the matter. The soldier R.... was mutilated by some one unknown. The proof lies in the two testicles which were cut off and were not found again. As for the penis, it must have been thrown to a dog which was prowling about in the neighbourhood of the tragedy, and which swallowed it greedily without masticating it. This is the only way of explainding the cleanness of the cuts. The mutilator must have thrown away, or carried off, the testicles. What is surprising, is the healing of such a horrible wound occurring in about three weeks.

**Surgical Castration.** We give the account of this operation according to the *Manuel des maladies des voies urinaires et des organes génitaux* (chap. XIV), by G. Delfan. Paris, 1889. Octave Doin.

**Definition.** The ablation of the testicle, performed by the surgeon for a therapeutic purpose, will be our only consideration.

**Indications.** These are very limited, and the surgeon may only propose castration in certain well-defined cases; when the testicles are invaded by a cancer, an encondroma, advanced cystic disease, or advanced tuberculisation. In

these cases, the disease demands ablation on the one hand, and on the other no injury is done to the generative functions of the patient, for it is but the removal of an organ which has been already destroyed by degeneration; we may add that one testicle is left for the functions of reproduction.

**Contra-indications**. If the prostate is included in the tuberculous affection; if the iliac and lumbar ganglions are invaded, in the case of cancer, the operation does not attain the object proposed, and it must therefore be relinquished. It must be rejected as being at the same time powerless and harmful if the testicular tuberculisation is complicated with pulmonary phthisis, or if the cancer has already involved cachexy.

**Preliminary attentions**. The part must be shaved previously.

**Instruments**. The followings instruments will be laid on a table in an order which allows the assistants to pass them to the surgeon without hesitation according as he requires them: straight and convex bistouries, scissors, forceps, forceps for ligatures, tentaculum, needles and thread for suture, sponges, lint, compresses, bandages, carbolised water, chloroform, etc.

**Anesthesia**. The operation being very painful, anesthesia by chloroform must always be practised, provided that no contra-indications exist which usually compel the surgeon to relinquish it.

**Assistants**. — Three assistants are necessary: one to administer the chloroform, another to hand the instru-

ments and different articles; the third holds himself at the disposal of the surgeon to sponge up the blood, to keep the string apart, etc.

**Position.** The patient is placed in the dorsal decubitus position on a table, the height of which must be convenient for the operator.

**Position of the Operator.** He stands on the patient's right, whichever may be the testicle to be removed. In some cases it may be an advantage for the operator to place himself between the thighs of the person operated on.

**Operation.** It comprises three periods: 1st the isolation of the tumour, 2nd the cutting of the cord, 3rd the dressing.

1st *Isolation of the tumour.* Stretching the teguments with the left thumb and index finger, the surgeon, with a convex bistoury held in the right hand, makes an incision extending from the upper edge of the inguinal ring to the most dependent part of the scrotum.

Having made this incision, he proceeds to the dissection and extraction of the tumour.

An assistant stretches the edges of the wound, and draws the teguments in proportion. When the tumour is not adherent to the purses, the separation is very easily performed; in the contrary case, the dissection is more minute, and the surgeon will be careful on the one hand not to leave any fragments of suspected tissues at the deep surface of the teguments, and on the other hand not to make them too thin, in which case they might become gangrened. If the tumour is voluminous, care will be taken besides not to injure the cavernous bodies of the penis. When

the tumour is detached, the surrounding tissues are only held by a neck, that is, the cord.

2nd *Division of the cord.* It is made transversely with the same bistoury.

The *ligature* is drawn to various heights according to the condition of the cord in the particular case. If it is formed *in a mass*, including the deferent canal, it will precede the division of the cord, which may escape the surgeon's reach by its retraction. This process has inconveniences; it is better not to include the deferent canal in the restriction: then this conduit is isolated, it is cut with one stroke of the bistoury, the upper end retracts, the neck which includes only the vessels is tied.

3rd *Dressing.* It is the immediate union which gives the most rapid success, and which ought to be preferred. Bouisson, with the idea of favouring it, formulated the following rules. "During the operation, preserve only the necessary quantity of skin, and prolong the incision very low; tie all the vessels with great care, and, directly after their division, form the ligature in a mass of the vascular portion of the cord, so as to have but a single string at the stump of the latter; bring all the ligature threads outside the wound by drawing a needle straight through the skin, and bringing the hand in such a manner that the knot remains alone in the wound; bring together directly the edges of the wound by intersecting suture stitches, make the joining deep by a second suture placed beyond the first; suppress any other dressing, and prescribe cold applications on the scrotum. Immediately on the joining the recovery is completed, generally in a few days.

**Sacrifice too well performed to Venus.** The English journal, *The Lancet*, relates under this heading the story of an Englishman, aged 45, a widower, who took

a young girl for his second wife, and not being able to perform his duties as husband on the first night of his marriage, completely removed his genital organs in his despair. The unhappy man, a prey to melancholy, wished in this way, it is said, to terminate his life.

**The priest castrated in spite of himself.** Beroalde de Verville relates two short stories about castration. The Chaplain of an English lady had himself castrated because people thought that he had " worked " her. Macrobe..... In our times there was a Breton priest who had a πρυχ so offensively long that at length, plagued with so much evil, he revealed his story to a young man who advised him to go and see the doctor of the Garden. The unhappy ecclesiastic went there. The patient being before the surgeon, he told of his malady. Then the master examined him, and found that he was greatly gangrened, so much so that it was necessary to cut it : to which he had great trouble to persuade the afflicted man, who at length fearing that he would die, abandoned his poor thing to the razor. When he was ready for the execution, the surgeon asked him what was his condition. And when he answered that he was a priest, then the master made the cut *quite close*, and spared naught. And when Master Priest cried, he said : There, there, it's all the same; it is just as well as you have no use to make of them ! ".

" And, when our friend Gerard cut it off a singer of Saint-Gratien's, who afterwards regretted it : " Go, he said, it will come again ". (*Moyen de parvenir*).

Beroalde de Verville also tells an anecdote of that big devil whose b.....s they cut off; but that big devil was made of wood.

# CHAPTER XII

## APPARATUS OF GENERATION IN THE WOMAN

It comprises a double apparatus as in man.
*A*. The emittive, transportive, receptive apparatus.
*B*. The apparatus of copulation which receives the sperm of the male and serves to place it in contact with the feminine germ.
Parallelism between the male and female genital apparatus.
Anatomical division of the apparatus of the woman into external and internal genital organs.

*A*. **External genital organs or Vulva.** Mons Veneris. Labia Majora. Nymphae. Clitoris, Vestibule of the vulva. — Urinary meatus. — Orifice of the vagina and hymen membrane. Navicular fosse.

*B*. **Internal Genital organs.** Vagina. Bulb of the vagina. Urethra. Vessels and nerves of the vagina. Hymen. Examination after Tardieu of the different forms of the hymen.
Fringed hymen.
Uterus or womb. Means by which it is fixed. Its shape and structure. The long ligaments. Round and utero-sacral ligaments.
Ovaries. Yellow body. Shape of the ovaries.
Ovisacs or vesicules of Graaf.
Ovule. Rupture of the ovisacs and fall of the ovule. Fallopian tubes.

**Double Apparatus of Generation in Woman.** The appararus of generation in woman comprises, as in man, a double apparatus.

*A*. The emissive, transportive, receptive apparatus of the feminine germ. — *B*. The the apparatus of copulation which receives the sperm of the male, and serves to place it in contact with the feminine germ.

The first includes, 1st the ovaries, the organs which pro-

duce the ovules, and the uterine tubes which serve to conduct the latter to the interior of the womb.

2nd the womb (uterus) devoted to gestation, and on the walls of which the egg fecundates, takes root, develops and resides till the moment when the new being is in a condition to exist of its own power.

The second includes, 1st the vagina (*cunnus* of the Latins) intended on the one hand for copulation, and on the other for the expulsion of the product of fecundation, 2nd the vulva, or vestibule of the vagina, an organ of sensibility, intended to afford passage to the penis of the male at the moment of accoupling, and to the fœtus during child-birth.

**Parallelism of the male and female genital apparatus.** The apparatus of the woman which, at first sight, is so different from that of the man, has been, nevertheless, marvellously furnished to answer its object, the procreation of a being similar to those who have engendered it, and each of its organs corresponds to an organ of the male apparatus. In fact.

**The Genital Apparatus**

| Of the Woman | | Of the Man |
|---|---|---|
| Ovaries | correspond to | Testicles. |
| Pavilion of the oviduct | — | Seminiferous canal. |
| Womb or uterus | — | Seminal vesicules. |
| Oviduct or pubis | — | Spermiduct canal. |
| Excretory conduits, Vaginal glands | —, — | Ejaculatory canal. |
| Clitoris | — | Penis. |
| Labia majora and Nymphae. | — | Scrotum. |

**Anatomical division of the Genital Apparatus of the Woman.** For facility of description, ana-

tomists have divided the genital organs of the woman into : *A*, the external genital organs, and *B*, the internal genital organs.

We will first describe the former.

*A.* **External genital organs, or vulva.** The whole of the external genital parts of the woman are designated under this name, and include the following organs.

1st The mons Veneris, and the Labia majora.

2nd The clitoris, and the nymphae.

3rd The vestibule, the urinary meatus, the vaginal orifice, the hymen membrane and the navicular fosse. The vulva, door, or vestibule of the vagina, presents the appearance of a funnel-shaped and elongated ring, surrounded with a border of hair. The ancients, according to Hayer, delighted in attributing a value to the general appearance of this orifice as a sign of virginity; thus, they said, in virgins that the hair was curly, while it was turned from each side in those who had sacrificed to Venus.

**Mount of Venus, and labia majora.** The mount of Venus is the most exterior part of this region, commonly called *cunt*, because of the little prominence on a level with the pubis. The mount of Venus is formed by a kind of small adipose cushion and the skin which hides it is covered with hairs at the commencement of puberty.

**The labia majora** extend from the mount of Venus to the perineum. They are formed by a fold of the skin; covered with hairs externally they are rosy-coloured in their internal part; they fit exactly to one another in

children, virgins, and young women who are rather stout : on the contrary they become flaccid, wrinkled, and loose, in thin or aged women, or in those who have had many children. The extremities of the labia majora constitute the *commissures;* the posterior commissure forms the *fork*, which is often torn at the moment of the passage of the fœtus' head. The labia majora possess an elastic and muscular tissue.

**Nymphae**. If the labia majora are drawn apart, two fresh smaller folds are found; the nymphae, situated at the internal surface of the labia majora, on each side of the organs which occupy the mesial line. These folds are very thin, and usually are from 3 to 4 millimètres in height. This height may extend to 2 to 4 centimètres in women who are addicted to masturbation. The nymphae are directed from in front backwards. Their posterior extremity is imperceptibly lost on the walls of the vulva; their anterior extremity divides into two portions, of which one, the superior, unites with that on the other side in passing over the clitoris, to which it forms a prepuce (in the shape of a small hood); while the other, the inferior, unites at the inferior surface of the clitoris and blends with it. Their surface is spread with papillae, to which they owe an exquisite sensibility; they are also very rich in sebaceous glands, of which there are as many as 150 per centimètre on their internal surface.

The nymphae are organs of sensuality in woman; they are connected with accoupling and child-birth.

**Clitoris**. The clitoris is a small erectile organ, situated at the superior part of the vestibule of the vulva, at the extremity of the nymphae, and concealed by the labia majora, which it is necessary to part asunder in order to ob-

serve it. It resembles a cone with a loose top. The other extremity blends with the lower branch of the bifurcation of the nymphae.

Its inferior surface displays a mesial groove extending to the base.

Its length varies from 8 to 10 millimètres when it is in repose, and from 2 to 3 centimètres when it is in erection. Clitores are found of very variable dimensions, just like penes.

Its direction is vertical. The point during erection is directed downward and backwards, as if to come forward to the dorsal surface of the penis and to expose itself more directly to the friction of that organ. Its prepuce, as has been seen, is found by a fold of the nymphae.

In the state of erection, the clitoris projects forward, and exposes itself, leaving the prepuce at its base.

Its structure is identical with that of the cavernous bodies in man. It is composed like them of two parts placed back to back, which are separated at their posterior extremity, and becoming thinner, unite at the interior surface of the pubic arch. On a level with their point of separation, a suspensory ligament, fastened above at the symphysis of the pubis, makes an attachment to each.

The clitoris is the most sensitive organ of the female genital apparatus. It is the seat of the most voluptuous sensations. The ancients called it, "the goad of Venus". The slightest voluptuous titillation makes it swell; from this point of view it is similar to the penis.

In the thickness of the prepuce exist some small sebaceous glands, which secrete an odorous matter, similar to that produced by Pyson's glands in man.

**Vulvo-vaginal glands, or Bartholon's glands.** Are two glandular masses analogous to Cooper's

glands in man. They reach within to the bulb of the vagina, and without to the constrictor muscle. Their shape is oval, their length in the principal axis is from 15 to 20 millimètres. Their excretory canal, about 2 centimètres long, opens in front of the hymen, towards the middle of the height of the vulvary orifice.

**Vestibule of the vulva.** This is the name of a level triangular surface, about 2 centimètres in extent, bounded above by the clitoris, below by the urinary meatus, and on each side by the nymphæ.

**Urinary meatus.** The urinary meatus is a rounded orifice from 3 to 4 millimètres wide, situated above the orifice of the vagina.

**Orifice of the vagina and hymen membrane.** Will be studied further on at the same time as the vagina.

**Navicular fosse.** This name is given to a depression which occurs between the vaginal orifice and the fork of the vulva.

*B.* **Internal genital organs.** We are about to describe them, proceeding from the exterior to the interior, and taking for our guide Dr Bienaimé (1).

These organs include :

1st the vagina, and the urethra;

2nd the uterus and its ligaments;

3rd the ovary and tube.

(1) *Les Maladies intimes dans les deux sexes.* Chez l'auteur, 29, rue Rodier.

**The vagina**. The vagina is a muscular membranous conduit, which extends from the vulva to the neck of the uterus. Intended to receive the penis in copulation, it is directed obliquely from above downwards and from behind to the front, and describes a curve with anterior concavity, analogous to that of the penis in erection.

Its internal surface displays numerous transversal projectures which contribute by their rubbing on the mucous membrane of the gland to produce the pleasure which characterises the venereal spasm. Its length is from 9 to 12 centimètres. It lengthens easily, and in particular enlarges considerably.

The opening is the narrowest and least dilatable point. A membrane called the hymen obstructs it in virgins to a greater or less extent. (The hymen merits the honour of a special description). The posterior extremity or bottom is the most dilatable part. At this level the vagina is inserted on the neck of the uterus, much higher behind than in front, forming a circular *cul-de-sac*, which has been divided into the anterior, lateral, and posterior *cul-de-saç*.

The vagina has two walls of 3 to 4 millimètres in thickness, one superior, the other inferior, laid one against the other, except towards the posterior extremity, where they are separated by the neck of the uterus. Their surface is rosy, lined with a great number of folds, very marked, particularly in front, directed transversely, uniting at a level with the mesial line at antero-posterior projectures more marked above than below. These two projectures are the more marked as they approach the opening, and terminate in a tubercle much developed at the superior wall. They constitute the *anterior column* and the *posterior column* of the vagina.

The superior wall adheres strongly to the base of the

bladder, and still more so to the urethra. The inferior wall is connected behind with the peritoneum to the extent of about 1 centimètre and a half, and in front with the rectum and the perineum.

The vagina is formed of three tunics laid one upon another, the external, the middle, and the internal. The first is thin, the second is 2 millimètres in thickness, and the third is about 1 to 1 1/2 millimètre. The middle tunic includes a considerable number of longitudinal muscular fibres, which are connected with those of the uterus.

**Bulb of the vagina.** Beneath the internal or mucous tunic, at the entrance of the vagina, is found an erectile organ, the structure of which is identical with that of the cavernous bodies and of the spongious portion of the urethra in man. This organ, called the bulb, has the shape of a wallet. Its middle portion, which is smaller, is situated between the clitoris and the urinary meatus, on which it lies. Its two extremities, which are slightly voluminous, correspond with the extremities of the transversal diameter of the vaginal orifice. In association with the constrictor muscle of the vagina, it combines to form the *vulvary ring*, which contracts under the influence of the will, and compresses the penis more or less during coition.

**Urethra.** The urethra is sunk, so to say, in the superior wall of the vagina, the mesial line of which it occupies. Its length is 3 centimètres on an average, its width 7 millimètres, but it allows instruments 10 millimètres in width to pass easily. Just as in man, the meatus is the least dilatable portion. The canal is composed of two layers, one, the external one, is muscular, the internal one is mucous, grooved with longitudinal folds. The muscular layer is 2 to 3 millimètres in thickness. The fibres which

compose it are circular at the surface, and longitudinal at the bottom.

**Vessels and nerves of the vagina.** The *arteries* come from the vaginal arteries and from branches of the uterine vesicule, and pubic, arteries. The veins form a thick plexus at the exterior portion of the vagina, without however constituting a veritable cavernous tissue; they communicate with those of the bulb and the uterus. The lymphatics, which are very copious, proceed to the pelvic and lumbar ganglia.

The nerves come from the large sympathetic and from the sacral plexus; the sphincter of the vagina receives a frænum from the internal pubic nerve.

**Hymen.** We borrow in its entirety the description of this membrane, which determines *the sign of virginity*, from the lamented master Ambroise Tardieu (*Attentats aux Mœurs*) already quoted several times.

" It is hard to enumerate the singular divergencies of opinion which exist among the anatomists of the two last centuries regarding the very existence of this part of the sexual organs of the woman. We enquire how it could have been contested, and even absolutely denied; when we consider the unvarying results of modern observation. I consider it superfluous to recall here the names, so frequently quoted, of writers who have ventured to deny the existence of the hymen; suffice it to say that Buffon was of the number. I prefer to place against the error of the greatest names the reality of facts, which are sanctioned at the present day by the unanimous voice of writers. M. le docteur Devilliers in his successful special investiga-

tions (1) which extend over 150 cases, Orfila in 200 observations (2), myself in more than 600, have never failed to find the Hymen membrane or its remains. The exceptions which have been reported are too few and incertain to modify the rule which confirms the existence of the Hymen membrane.

It is not without surprise that I have seen M. Toulmouche quote a case of the absence of this membrane, a case in which, moreover, the absence of precise details permits the retention of doubt. It is a case of a young girl aged 14 not having menses: "The orifice of the vagina permitted the introduction of the finger with facility, the hymen membrane did not exist, and no recent tear was evident". The fact given by M. Toulmouche as an instance of the absence of the hymen, is reduced to this vague indication. What can we say too of a case reported by M. le docteur Félix Roze (3), and in which he instances "as not possessing any hymen", a girl aged 24, "who for some time had had intercourse with men", and who had not "felt, at the time of the first coition, either pain, or running of blood". These are not proofs sufficient to cause us to admit the existence of an anomaly, the excessive rarity of which is daily more manifest to me.

This membrane, which is in reality, according to its mode of formation, only the prolongation and termination of the vagina in the vulvary vestibule, has a visible existence at the very moment of birth. But its situation varies according to age. It is placed very deep in little girls, and it is only by forcibly parting the thighs and the labia that it can be discovered, 6 or 8 centimètres from the en-

(1) Devilliers. *Nouvelles recherches sur la membrane hymen et les caroncules hyménales* (*Rev. Méd.*, 1840).
(2) Orfila, *Traité de médecine légale*. Paris, 1848.
(3) J. Roze. *De l'hymen*. Thèse de Strasbourg, 1865.

trance of the vulva. Later on it becomes more superficial and more distinct.

As to its shape, it displays numerous individual differences which may nevertheless be reduced to five fundamental types, which I will show in the order of their greatest frequency. There is nothing arbitrary about this, but it results, as is known, from my very large number of observations.

(1) The first shape of the hymen, almost invariable in infancy, and which is sometimes prolonged beyond puberty, consists in a labial arrangement of the membrane, the edges of which, separated by a vertical opening and facing one another, make a projecture at the entrance of the vagina, which it closes, if I may say so, like a fowl's anus.

(2) In the second type, the hymen is seen to form an irregular circular diaphragm, interrupted by an opening towards the superior third, more or less wide and placed more or less high; in an exhibit found by M. J. Roze at the Museum of Anatomy at Strasbourg, the opening was situated at the superior and right lateral portion. This type is very common, and I consider it to be more frequent than the following.

(3) The third consists of an opening exactly and regularly circular, pierced with a central orifice.

(4) In the fourth type, which MM. Devilliers and Devergie appear to have met with most frequently, the hymen resembles a semi-lunar diaphragm in the shape of a crescent, with a concave superior edge more or less hollowed out, the extremities of which are lost in the nymphae.

(5) Lastly the hymen membrane sometimes consists, at the entrance of the vagina, of a simple circular or semi-

lunar fillet, joined to a kind of fold or fringe which doubles the nymphæ, and the height of which varies from 2 millimètres in little girls, to 6 or 8 in adults.

I have seen it form a simple border or annular cushion, making an slight projecture round the entrance of the vagina, and this arrangement might very easily have been mistaken for the absence of the hymen membrane. M. Toulmouche has made the same remark, and he lays stress on the not unfrequent arrangement by which the hymen is formed by the folding of the interior circumference of the vaginal ring. " A medico-legist ", he correctly observes, " who had only a slight experience, and was unaware of this peculiarity, would very probably have declared that the hymen membrane was wanting ".

It is proper to mention certain anomalies which the hymen may present, besides the five normal types which have just been described. Morgagni and Professor J. Cloquet, for instance, have seen it form a sort of curtain placed in the middle of the vagina, and raised so as to leave a lateral opening on either side. M. J. Roze has represented a somewhat similar hymen, which he designates by the name of bi-perforated, and which he has borrowed from the collections of the faculty at Strasbourg. But some cases of rents of the hymen, which I will quote further on, raise a doubt whether this arrangement ought to be considered, even under the heading of an exception, as natural. Fabrice de Hilden has described a diaphragm riddled with holes, which may be compared to those cases where the hymen is reduced to separate membranous filaments, stretched from one side to the other of the entrance of the vagina. Lastly, it may continue as a complete partition without opening, or again be composed of a double superposed diaphragm.

Dr Delens, Fellow of the Faculty of Medicine of Paris,

in a very interesting study (1) which reveals a rare acuteness of observation, has described and represented different defective shapes of the hymen which ought to find a place here.

In the first place, it is a case of biperforated hymen, similar to that described by M. F. Roze. In a second case, in a young girl aged 15, the thick and unyielding hymen had an orifice at its centre which was not more than 1 millimètre in diameter. Let us consider first the case where the hymen displaying a considerable thickness, has only one opening hardly visible and somewhat punctiform. It is evident that in this case defloration under ordinary conditions is rendered almost impossible; that this hardly perforated hymen must oppose a considerable resistance equal to that of a hymen of the same thickness completely imperforated, and that it will not be permissible, in the absence of any rent, to assume that violence and repeated efforts have not been employed.

As to the fact of the bi-perforated hymen which was presented on two occasions to the observation of M. Delens, in a little girl aged 11, and in another older girl whose menses had occurred for a year. In the first the membrane was smooth, regular, rather thick, and instead of a single orifice, displayed two small narrow openings not more than 2 millimètres in diameter. They were separated from one another by a small tongue, 2 to 4 millimètres in width, which had none of the appearance of a cicatricial fraenum, and everywhere similar in appearance and consistency to the rest of the membrane. This small tongue extended above to the suburethral tubercle. The two small narrow openings were much closer to the super-

(1) I. Delens. *Quelques vices de conformations de l'hymen dans leurs rapports avec la médecine légale.*

ior and anterior semi-circumference of the hymen than to the inferior. I make the same reservations regarding this arrangement as in the case of Roze.

In the second the genital organs were completely developed. The pubes and the labia majora were covered with black, fine hairs, rather long, but not very thick. The vulva was long, and slightly enlarged at its posterior part. The dimensions of the clitoris were slightly above the average, and on each side of the hood there was a certain quantity of sebaceous matter, accumulated through want of cleanliness. But, in reality, there was actually no redness, nor inflammation, nor abnormal secretion. The labia majora and the nymphae were without redness, as was the vestibule and the urinary meatus; but the hymen displayed a special conformation; it was bi-perforated.

Its two orifices, oval, with the principal diameter in the direction of the slit of the vulva, were situated on either side of the mesial line, and separated from one another by a small tongue 4 to 5 millimètres wide, which extended above to the sub-urethral tubercle. It had none of the appearance of a cicatricial fraenum, and showed the flexibility and rosy colouration of the rest of the hymen.

The principal diameter of each of these orifices was about 7 to 8 millimètres, and the small dimension 3 to 4 millimètres. These two orifices were perfectly symmetrical, and their edges were slightly scalloped, but without rents. The anterior wall of the vagina formed a rather marked projecture behind the hymen; a stylet however passed easily behind the mesial tongue, which did not adhere to the vaginal wall.

Finally, quite recently, M. Delens has again met with two congenital defects of conformation.

Such are the principal shapes which the hymen membrane may display. As age advances, it undergoes some

essential modifications. In proportion as the parts are developed, the membrane widens in the transversal direction. Composed of two fibrous leaves, between which are stretched several muscular fibres, and branching out into numerous vessels, it may undergo a more or less marked thickening. I have not however seen this increase take place here and there, so as to give the hymen the appearance of a face, and to form regular enlargements at this free edge, as M. Devergie says. The most remarkable change consists in the relaxing of the membranous veil, which in proportion as it develops and yields to the menstrual exertion, displays less resistance. It is untrue that, in the case where it endures till old age, it acquires more resistance and hardness. M. Devilliers has met with it in women of advanced age, flexible and easy to tear. Those cases must be considered as pathological cases in which it has become fibrous, cartilaginous and nearly osseous, according to the evidence of A. Pare, and in which it has been unyielding enough for Diemerbrœch, quoted by M. F. Roze, to have been able to say : " Adeoque firmam invenimus, ut cujuslibet arietantis viri impetum sine disruptione sustinere potuisset ".

**Myrtiform caruncles.** When the hymen has been torn by coition, its fragments retract, and assume the appearance of small projectures, designated by the title of myrtiform caruncles.

**Fringed Hymen.** Finally there exists a last form of hymen, excessively rare, but which has a very great importance in legal medicine, because it may be confounded with a rent of the hymen. This is the fringed hymen, so named by Beaunis and Bouchard (*Nouveaux Eléments d'Anatomie descriptive et d'Embryologie*, Paris. J.-B. Baillière

et fils, 1868). The membrane displays, on its free edge, fringes, which give it a torn appearance.

**Uterus or Matrix.** The uterus or matrix is the organ of gestation. According to Beaunis and Bouchard, it is " isolated from its attachments, it has the shape of a gourd much flattened from the front backwards. It has two parts, the *body* and the *neck*. The body is triangular and displays two surfaces and three edges. The two superior angles receive the tubes; the inferior angle unites with the neck by a circular strangulation. The neck is fusiform, slightly flattened from the front backwards; its inferior extremity (*vaginal portion of the neck*, os uteri) is free at the bottom of the vagina, and pierced by an opening in the shape of a transversal slit $0^m.001$ to $0^m.002$ in width, by $0^m.006$ to $0^m.008$ in length; the anterior lip of this orifice is thicker and more prominent. The uterus is $0^m.070$ in length and $0^m.032$ in width at a level with the tubes. The lenght of the body is less than that of the neck in virgins; in the case of women who have not had children, the length of the two is nearly equal (Guyon).

In the case of women who have had children, the shape of the uterus changes. The body becomes longer (three-fifths of the total length): the vaginal portion of the neck diminishes and may even almost disappear; the vaginal orifice becomes enlarged. The modifications to which it is subject in size will be described further on.

The *volume* of the uterus increases a little at each menstruation. Its *vveight* is 42 grammes.

**Situation and relations.** The uterus is placed in the small basin between the rectum and the bladder, and inclines downwards and backwards so, that its longitudinal axis forms an obtuse angle in front with the axis of the

vagina and intersects, if it is prolonged, the plane of the upper opening, following an angle more or less near to a right angle.

This inclination is however subject to variation, owing to the laxity of its attachments, and in consequence of the pressure exercised on this part by the rectum, bladder, etc. To this antero-posterior inclination is generally added a slight lateral inclination, by which its axis is directed downwards and to the left.

The uterus is maintained in the position which it occupies, 1st by the broad ligaments, 2nd by the round ligaments, 3rd by the uterosacral ligaments, 4th by its adherence to the bladder, 5th by its insertion at the posterior extremity of the vagina.

**Cavity of the Uterus.** The cavity of the uterus, of a capacity of about 3 cubic centimètres, is very narrow: in its normal state its walls lie side by side, and on a transversal section it exhibits a simple slit.

It is divided, like the uterus itself, into the cavity of the body and the cavity of the neck. The *cavity of the body* is triangular, with convex edges; at the two superior angles are seen the uterine orifices of the tubes, displaying sometimes a slight strangulation and longitudinal folds; at the inferior angle is found the communication with the cavity of the neck, *the internal orifice of the neck*, which can admit a crow's feather, and which is sometimes lengthened into an absolute opening. The bottom of the uterus (ceratine portion) is enlarged in a characteristic fashion into the multiparous uterus. The internal surface of the uterine cavity is smooth, rose-gray, slightly jutting out in front and behind, and usually lined with a thin layer of alkaline mucus.

The *cavity of the neck* is fusiform; on its two surfaces, anterior and posterior, are seen the *palmated folds;* these

are two vertical crests from which start oblique lateral folds upwards and outwards; the vertical crests are not completely mesial, the anterior one is slightly to the right, the posterior to the left, so that they fit into one another, and exactly close the neck. Between these folds there are small projectures of the size of a lentil, formed by a transparent vesicle (Naboth's eggs) and due to a glandular alteration. This cavity is filled with a viscous, transparent liquid.

The cavity of the uterus is $0^{m}.054$ in length on an average in a woman who has not had children ($0^{m}.028$ for the body and $0^{m}.026$ for the neck). In a woman who has had children these dimensions are increased, in the case of the cavity of the body to $0^{m}.032$; they remain stationary or grow less on the other hand, in the case of the cavity of the neck.

**Structure of the Uterus**. The surface of the uterus is smooth in the places where it is covered with the serous matter; the adherence between the serous matter and the sub-ajacent tissue is very close, except at a level with the neck, where a loose cellular tissue is found. The walls of the uterus which are very thick, attain their maximum thickness at the posterior portion ($0^{m}.012$ to $0^{m}.016$); their thinnest part corresponds to the anterior wall of the neck ($0^{m}.004$ to $0^{m}.009$) and at the insertion of the tubes. Its own tissue, formed of smooth fibres, is reddish-grey, very compact, and of an almost fibro-cartilaginous hardness, and it is impossible to observe in it the direction of the muscular fibres. This tissue is continued to the level of the interior surface of the uterine cavity, without its being possible to discover with the naked eye a line of demarcation between the muscular and the mucous layer, the existence of which consequently was not thoroughly established until the microscope was employed.

The separation of the vagina from the uterus is very difficult, and it is only possible to isolate them artificially; in fact the muscular layer of the neck is carried on without interruption to the tissue itself of the vagina.

The tissue which constitutes the urethra is composed of three superposed layers, intermingled with vessels and nerves.

The external layer belongs to the peritoneum. It covers the bottom of the uterus, the two superior thirds of the anterior surface of the body, and the whole of its posterior surface as far as the vagina.

The middle layer is formed of muscular fibres, directed in different directions: transversal, oblique, and longitudinal.

The internal or mucous layer is connected below with that of the vagina; above, with that of the Fallopian tubes. It is 4 to 6 millimètres in thickness; and is spread with small glands, called follicules, which secrete a gelatinous liquid.

In the walls of the uterus are found numerous arterial branches, rolled up like cork-screws. They are named uterine veins.

Their external wall adheres very closely to the tissue of the organ, in such a way that they remain wide open when one divides the latter.

**The wide ligaments.** The matrix, the tubes and the ovaries (of which we speak further on) are sustained and fastened to the walls of the pelvis by the *wide ligaments*, which start from the lateral portions of the uterus. They display a flattened shape at their principal transversal diameter and are constituted by the folds of the peritoneum, and fasten to one another the internal parts of the genital apparatus of the woman. They extend from

each side of the uterus, like the wings of a bat. Each one is divided into three secondary folds, or pinions: the posterior pinion, the anterior, and the middle. The posterior pinion contains the ovary, the middle pinion, situated higher than the others, is occupied by the uterine tube: the anterior pinion serves as a sheath for the round ligament. The wide ligaments constitute a partition which divides the lesser pelvis into two compartments, one of which contains the bladder, and the other the rectum. In order to have a perfect comprehension of its arrangement, it is necessary to follow the course of the *peritoneum*, of which it constitutes a fold. The peritoneum, a large serous body enveloping the intestines and the abdominal viscera, but, like all serous bodies not including in its cavity all the organs which it surrounds, in the manner of a linen cap, after coming down to the posterior surface of the bladder, rises again and forms a *cul-de-sac* on the uterus, and then comes down again behind that organ, forming a fresh *cul-de-sac*, and finally rises again in front of the rectum. The uterus is therefore confined in a fold of the peritoneum: the two laminæ of the latter on each side of the uterus are joined to one another, and from this union result the wide ligaments.

**Round ligaments, and utero-sacral ligaments.** They are constituted by a prolongation of the muscular fibres of the uterus. The first start from its lateral superior, and slightly anterior part, and after traversing the whole extent of the inguinal canal, unite with the pubis. They occupy the anterior pinion of the wide ligament. The second start from the lateral, superior, and slightly posterior part. The point where they fasten is behind, on the sacrum.

**The Ovaries.** The *ovaries* produce the *ovules*, that is to say one of the two essential elements of reproduction; these organs are therefore analogous to the testicles in man. They are, like the latter, two in number, situated in the posterior pinion of the wide ligament, one to the right, the other to the left.

They have the shape of an almond, directed horizontally. From their internal extremity starts a muscular cord, 3 to 3 1/2 centimètres in length, by 3 to 4 millimètres wide, called the ligament of the ovary, which is fastened to the posterior surface of the uterus, and contributes to maintain them in the position which they occupy. Their external extremity affords an insertion to one of the fringes of the fimbriated extremity of the Fallopian tubes. The anterior edge, or *hilum*, receives the vessels and the nerves. The ovaries are about 40 millimètres in length, 15 in width and 8 in thickness. Their weight varies from 5 to 8 grammes.

The ovaries display an ovoid shape, and a white colouration. When an ovule reaches maturity, the ovary doubles in size. After puberty they begin to be covered with brown or yellowish cicatrices, which gives them a gaping appearance. Until 1862 the real structure of the ovary was unknown. It was brought to light by the French anatomist, Sappey.

When a section of the ovary is made, it is seen that it is composed of two very distinct portions, 1st a thin, white, superficial layer, called the *ovigen layer*, which gives birth to the ovules; 2nd a reddish, spongious, central portion, called the bulb of the ovary.

The bulb contains numerous sanguine vessels, the arteries displaying there the shape of a cork-screw; the veins there are voluminous, and form a very developed plexus.

The ovigen layer constitutes the most essential part of the ovary; it was formerly taken to be a simple fibrous

envelope. It has a thickness of a millimètre and a half; it is covered on its surface with an epithelium with prismatic cellules, and is composed of a fibrous framework in which vesicles occur. The vesicles, called *ovarian vesicles* or ovisacs, give birth to the ovules, for which, so to say, they play the part of a protective shell, like the rind of a dry fruit. Pointed out by the ancient anatomists, the ovisacs were discovered in 1692 by de Graaf, whence comes their name of Graaf's vesicles.

The ovisacs grow gradually, and successively reach maturity every month, as will be seen further on; generally there exist a dozen ovules more advanced than the rest and visible to the naked eye; but if the ovigen layer is examined with the microscope, a prodigious number of ovules are discovered in course of development. Saffey, who succeeded in making a calculation, estimates their number at three hundred thousand to each ovary.

**Yellow bodies.** Besides the ovisacs, the ovary often displays some peculiar, yellow bodies, which are nothing but a peculiar evolution of the ovisacs, after the latter are broken in order to allow the ovules to escape. The yellow bodies have but a short evolution when the ovule has not been fecundated, longer where it has been fecundated, and modifications result thence in their external appearance.

**Shape of the Ovaries.** The ovaries are spherical, from three to four centimètres in diameter. They are composed of a double envelope containing the ovule; between the latter and the walls of the ovisac are found epithelial cellules, which fill up the empty space left betwen these, two parts. It is the *ovule which, fertilised by the spermatozoides*, gives birth to a new being.

The human race then is oviparous, as well as all animals. The great English anatomist, Halley, was the first to formulate this proposition. But not till 1827 did Baër discover the egg of mammifers, and in 1834, the French naturalist Coste demonstrated the identity in composition of the egg of mammiferous with that of oviparous animals.

**The Ovule.** The ovule occupies the centre of Graaf's vesicles. It is spherical, with a diameter of 1 to 2 hundredths of a millimètre. It is composed of three parts.

1st an envelope called vitelline membrane.

2nd a granulous liquid, the vitellus.

3nd a transparent vesicle, the germinative vesicle.

**Rupture of Graaf's follicles and fall of the ovule.** From puberty (15 years) up to the age of 45 to 50 years, at the surface of the ovary a rupture of Graaf's follicles is observed, which allows the ovules to escape. The ruptures succeed one another at regular intervals, every 27 days on an average; this constitutes *menstruation*. At each menstruation an ovule is detached from the ovary and is received by the uterine tube. This rupture of Graaf's vesicles, which generally occurs at the end of the menses, Sappey says, may be either spontaneous or induced (by coition, etc.).

The vitelline membrane, which is of a fibrous nature, after the arrival of the fecundated egg in the matrix, becomes covered with villosities, by the aid of which it takes root on the walls of the gestatory organ. The vitellus, which is analogous to the yellow of a bird's egg, is a slightly yellowish liquid, transparent, and composed of innumerable greasy granulations, agglutinated by a viscous liquid. In the interior of the germinative vesicle is found a corpuscle, called the *germinative spot*, and discovered by

Wagner. The ovule represents a typical cellule, having all the constituent membranes in full : enveloping membrane, protoplasm, nucleus, and..... It is from this single cell that the innumerable cellules of our organism originate.

**Fallopian tubes.** The Fallopian or uterine tubes are two conduits situated in the superior pinion of the wide ligament stretching from the uterus to the ovary. They are inserted, on the internal side, in the superior extremity of the edges of the first of these organs; on the external side, they terminate in a distended orifice called the fimbriated extremity. Their direction is transversal. At first straight, they then become sinuous. They are 12 centimètres in length, 4 millimètres in width near the uterus, 7 to 8 millimètres near the ovary. Their calibre increases in proportion as they are withdrawn from the point of departure. By the orifice communicating with the uterine cavity, they give admittance with difficulty to a pig's bristle, while, by the fimbriated extremity, they allow a probe of ordinary dimensions to pass.

The fimbriated extremity is placed above the ovary. It displays indented fringes on its edges, similar to those of the petals of certain flowers. One of them forms a groove, which is inserted on the external portion of the ovary by its inferior extremity, and leads into the cavity of the tube.

The Fallopian tubes are composed of three tunics, the external, the middle, and the internal. The first is formed by the peritoneum. The second encloses some muscular fibres. The third is mucous, folded longitudinally, and forms a continuation within with the mucous membrane of the uterus, and without with the peritoneum, so that the uterine cavity and the cavity of the peritoneum intercommunicate.

The Fallopian tubes serve to conduct the ovules into the matrix, and to convey the spermatozoides from the latter towards the ovary, at the moment of fecundation.

By what mechanism is the adaptation of the fimbriated extremity of the tube to the ovary effected? That is a question on which medical authorities do not agree, and of which a solution has not yet been found.

# CHAPTER XII

## DEFECTS OF CONFORMATION IN THE GENITAL APPARATUS OF THE WOMAN

*A.* Defects of conformation of the vulva.

The Mount of Venus and its fleece.— The woman with dog's hairs. — Variable size of the clitoris. — Different instances of the size of the clitoris. — Monstrous clitores.

The Flower of Mary or the chaste whore.

Absence of the clitoris. — Anomalies of the Labia majora — Absence or exuberance

Instances. Labia majora perforated by M. de Randan. The c...s of the great ladies of the court of France.

Occlusion of the vulva. Operations to remedy the occlusion of the vulva.

Anomalies of the hymen. — Instances of imperforation of the hymen.

Observations of Tardieu on the hymen of young girls who have been violated. Defective insertion of the hymen.

*B.* Defects of conformation of the internal genital apparatus.

Narrowness of the vagina. Observation of Tardieu.— Exaggerated amplitude of the vagina. — The lewd bottle. — The large C.....s of women, and the small engines of men.

Opinion of Beroalde de Verville. — The large c.....alibre of queen Catherine de Médicis.

La dame Pan de Χων.

Real remedy for narrow maids.

The case of the woman without a vagina.

Operations which have been tried to create an artificial vagina.

Absence of the matrix and another anomalies. — Anomalies of the ovaries. — Complete absence of the uterus and ovaries.

Anomalies of the urinary meatus.

**Defects of conformation of the genital apparatus of the woman**. The defects of conforma-

tion of the genital apparatus in the woman may apply indifferently to every portion of the apparatus. We shall examine them, A, in reference to the external genital organs, the vulva, the vagina, the clitoris, that is to say the copulative apparatus; B, in reference to the internal genital organs, or procreative apparatus.

**Defects of conformation of the Vulva.** The same defects are met with in the female copulative apparatus, as in the male apparatus. In the same way as certain men have ridiculously small genital organs, and others display enormous ones, so we often see tall and strong women showing a small vulva, and a mount of Venus without hairs, while little dwarfs display a largely developed vulva, followed by a vagina capable of satisfying an enormous penis.

The dimensions which we have given are the average ones.

It is enough to have examined some thousands of women in one's life, to be aware that the most absolute diversities prevail, and that the modern physiologist is able to give only general indications.

**The Mount of Venus and its fleece.** The first thing which strikes one on examining a woman, is the mount of Venus, and the fleece which covers it. The woman has hardly any hair but in this place. And yet there is often so little that it is hardly worth speaking about. That is the lot of fair women, whose fine and soft fleece, like threads of sillk, scarcely shades the coynte. Others again, although they have a fine and curly fleece, yet have it much more developed, and it completely covers the whole of the mount of Venus. Lastly there are some who have what is called a " bonnet of hair ", that is to say a

triangular pubis, much developed, covered with an abundance of long hairs, which are often planted as far as the navel, with a mesial line.

This conformation always coïncides with an abundance of hairs under the arm-pits, and with a slight moustache on the lips. Most frequently brunettes alone have this advantage. After them come the red-haired women, whose mount of Venus is generally well furnished. As to the fair women, they who have light blond hair the colour of wheat, and eyebrows scarcely indicated, they have but a few hairs scarcely shading a slightly developed mount of Venus.

Generally, the more the genital organs are developed, the more numerous are the hairs, and it seems that their abundance is in proportion to the perfect development of the organs. In fact, it has been remarked, in different cases, that hairs cannot exist when the uterus and the ovary appear to be wanting.

If we enquire what is the use of the mount of Venus, we shall discover that nature has created it in order that the hardness of the bones may not hurt the man during coition. Many thin women would do well to employ a protective cushion in order to make up for the thinness of their mount of Venus. They would be imitating in this that " great and noble lady ", spoken of by Brantôme, who was obliged to make use of this contrivance. O. Lignae gives some facts which are difficult to verify, and which we only relate because they are curious. A woman of Munster had so large a quantity of hairs on her natural parts, that they came down to her knees.

The author of this observation says that he was acquainted with a woman who, from her earliest youth, had only white hairs on the same parts, and was always barren.

**The woman with dog's hairs.** I will add that I met a woman at Toulon, whose family came originally from Genoa, and who was extraordinarily hairy. She was small, thin, but well made, and with a very dark skin. Her breasts were but little developed, slightly pear-shaped. The vulva and the clitoris were of normal dimensions. But this woman had not only her pubis, but all the lower part of her belly covered with a veritable forest of long, thick hairs, which did not curl, and were of a fine black colour. Between her breasts there was a large cluster of hairs; and finally along her spine and her thighs there were hairs as well. They were rather soft to touch, and gave the hand the sensation of the skin of a spaniel dog.

**Variable size of the Clitoris.** Without concerning ourselves with the changes which the vicious habits of masturbation and sapphism occasion to this organ, let us state that it is even more variable as to size than the penis in men. Apart from erection, the clitoris is hardly any larger than the end of a pen-holder. Under the stimulus of pleasure it stiffens and becomes as large as a *pea*. This is the average. There are some unfortunate women who have no clitoris, and who do not feel any pleasurable sensation. Others on the contrary, much more favoured by Venus, have clitores developed enough to simulate the size of a child's penis.

**Different instances of the size of the Clitoris.** Martineau (*Leçons sur les déformations vulvaires et anales*. — Paris, Adrien Delahaye) gives the following dimensions for the clitoris "The dimensions of the clitoris are variable. Its length is ordinarily from three centimètres. In some cases its length is more considerable. In a patient, aged 24, placed under my care for a uterine affection I ascertained that its length was four centimètres

and a half. This dimension was normal and physiological. In fact the sheath of the clitoris was smooth, regular, and rosy, the hood exceeded the gland of the clitoris by about a centimètre. The latter was small, its colour pale rose. These charasteristics are in harmony with the normal state of the organ and differ essentially from the morbid development which it assumes under the influence of masturbation or sapphism.

In one case, Bousquet, formerly head of obstetrical clinical surgery at the School of Medicine at Marseilles, found one of still more considerable dimensions. The clitoris was five centimètres long, and directed forwards. In the case of a young girl, aged 16, the gland was red, and voluminous owing to the continual rubbing of the organ against the garments, and not through vicious habits. We shall see later on if this abnormal length of the clitoris ought not to be remedied.

The clitoris is covered by a cutaneous fold, analogous to the sheath of the penis. This sheath is ordinarily fitted close on the clitoris; it is adherent to a certain extent and terminates in a kind of prepuce, the hood of the clitoris, which does not form any adhérence with the gland, and so may easily be laid bare.

In one case which I have observed, and which appears to be unique, the gland was completely adherent to the gland of the clitoris. Was this a congenital disposition, as I believe, or was this symphysis simply due to an inflammation subsequent to birth.

What induces me to reject the latter opinion, is the fact that, neither in the patient's antecedents, nor in the examination of the vulva, was I able to find the traces of an inflammation. If the gland was slightly voluminous, that condition was due to avowed practices of masturbation.

In the case of a woman about 20, the observation of

whom has been collected in the ephemerides of the curiosities of nature and published by my friend Dr Moreau (of Tours) in his study of the aberrations of the genesic sense (p. 205) the clitoris was the size of a penis. This woman, since the age of three, had indulged in masturbation.

This exaggerated development of the clitoris may however be physiological; it is important to know this. I have quoted a case of this, pointed out by Dr Bousquet (of Marseilles). You will find several in the work of Parent-Duchâtel. This author reports several observations in which the clitoris was normally the size of the index finger, and 7 to 8 centimètres in length.

**Monstrous clitores**. Veritable monstrosities have been remarked at all times. Columbus speaks of a clitoris the length of which was equal to that of the little finger: Haller admits one of seven inches, the volume of which was nearly equal to that of the penis. Platerne says he was acquainted with a woman who had one as big and as long as a goose's neck. Venette has seen one in a little girl aged 8, as long as half the little finger. The size has reached 12 inches, or one foot in length. I confess that I have seen penes of that calibre, but that I have never been lucky enough to see such a clitoris as that. It appears that a prostitute at Venice had an osseous clitoris which frightened away the men. I am very doubtful of this, for the amateurs of the "back-door" being numerous in Italy, she might have been able to gain her living by commiting sodomy on the old Venetian senators. That would have saved her an artificial phallus.

But all this has been observed only as an exceptional condition. However, according to Garnier (*Anomalies Sexuelles*) this deformity appears to exist hereditarily among the negresses of Arada, who all possess very long clitores,

according to Descourtils. In one of them it was six inches and a half in length, and had a masculine erection. This deformity, while being an obstacle to normal coition, did not seem to be the sole cause of the onanism of women among themselves, for it had been extraordinarily developed for some years. It is it would seem very rare in our climates. Parent-Duchâtel has only met with three cases in his examination of the prostitutes of Paris; and in no case did this exaggeration of the clitoris coincide with unnatural habits. The most voluminous of them resembled in size the penis of a youth at the dawn of puberty; this was owned by a girl who had never had menses, and was absolutely without breasts. She felt as much indifference to men as to women, and she had only become a prostitute owing to poverty. The most remarkable clitoris observed, and described by the celebrated accoucheur Moreau half a century ago, was only an inch in length, and it is to this small dimension that the greater number of these monstrosities must be reduced.

According to Garnier, this defect of conformation is so much the less the cause of clitoridism as it is frequently accompanied by other defects of conformation which leave a woman in doubt as to her real sex.

"(95). Louise B..., aged 20, had a clitoris as large as the little finger, from 4 to 5 centimètres in length, and having a large uncovered gland, when she entered the Beaujon hospital in 1859. This organ even entered on erection, and stood up at the slightest lascivious idea. But she had no vagina, and her menses flowed away with her urine. M. Le Fort, by a simple incision, created an artificial womb for her, which made her then fit to perform all her genital functions.

" (96). A woman aged 30, who entered the hospital at Lourcine in 1898 for a venereal affection, had a vulva no

larger than that of a child, and without any hairs. But her clitoris, which was much developed, explained this anomaly, without attributing it to manualisation. She had no matrix, or ovaries, or menses. These deformities were original, like the contrary instances of women with a beard.

" (97). This organ was very voluminous in a woman, aged 24, who resembled a youth in her external appearance, in her virile features, her deep voice, in the absence of hair on her head, in her skin abundantly covered with hairs, and particularly in her vulva, which, when examined, revealed only a penis as in an adult man. The latter however was an enormous clitoris which by its extraordinary size completely covered the labia majora. It even covered the orifice of the vagina, which was reduced to a simple fissure or slit, the edges of which were formed by the fraenum of the prepuce of this monstrous clitoris. When it entered on erection, it bent forwards, and in this way would have absolutely prevented her from making any use of it with another woman. She was incapable of performing her apparent part of a man by this curvature of the clitoris downwards, which was always the more pronounced in proportion as the clitoris was more voluminous.

" This woman in addition had rudimentary breasts, a narrow pelvis and hips but slightly developed. The neck of the matrix was regular, but as small as in a girl of fourteen ".

Nevertheless an observation of Dr Vanier of Havre, who has been already quoted, serves to contradict the too confident assertions of Garnier.

### The Flower of Mary or the chaste whore.

" When I was attached to the service of inspection at

Rouen, I saw in a ward of the General Hospital, intended for prostitutes, a girl aged 25, with whom I had the following conversation.

— Why do you carry on your breast that medal consecrated with the Virgin's image ?

— Because I love the Virgin.

— On account of her chastity?

— Yes. Does it surprise you ?

— No. The Virgin Mother and Immaculate is a mystery; you are another.

— You can easily understand it, if you wish to, since you have examined me.

I remembered having observed in this young woman an *extraordinary development of the clitoris*. I asked what connection there was between this fact and her devotion to the Virgin. She entered into some details regarding this, and gave me to understand that while in the bosom of her family, she had been the victim of an *insurmountable lubricity*, which had driven her from her father's roof, where they had wished to keep her by changing her physical organization by a simple operation. She had never loved : her body belonged to men, her heart to the Virgin. She was a Flower of Mary in the mysteries of nature ".

Be it so, good Dr Vanier, but if she had never loved, she had enjoyed herself carnally, and so we have not the right to say that she was a chaste whore.

**Absence of the clitoris**. There are cases of extreme exiguity and even of total absence of the clitoris. A young peasant came with his wife, to whom he had been married for six weeks, to consult a physician and enquire of him the reason why she experienced no pleasure in their

relations, which were normal. He believed that his wife was not shaped like other women.

The medical examination showed in fact that the mount of Venus came down lower than is usual,and that the clitoris was absent. Its ordinary situation was covered with hairs. The vulva opened above the urethra, and the clitoris was absolutely wanting. This was the reason of her frigidity.

We give another instance of frigidity due to the exiguity of the clitoris.

A young magistrate came to consult Dr Garnier to ask him the cause of his wife's frigidity. He had been struck with it at the beginning of their marriage, after his previous experiences. Being much disturbed and mortified by this absolute want of sensation during coition, he had satisfied himself by sight and by touch that this organ was only marked out by a rudimentary button, which, when titillated, was absolutely devoid of feeling.

Convinced of the satisfactory conditions of his marriage, and finding nothing in the education, character, or constitution of his wife to explain her frigidity, the doctor told him to bring her to him in order that he might see if he could not excite in a suitable manner his wife's sexual feelings; to which the client replied that the latter had been *enceinte* for four months.

**Anomalies of the Labia majora.** The labia in women display anomalies corresponding to those of the scrotum, the parallel organ in men. While the purses in certain hypospades are separated into two, the labia majora are sometimes joined together previous to birth, and by accident afterwards. By entailing the retention of the blood of the menses, this anomaly occasions paintul

colics, unless the blood makes for itself an abnormal issue.

**Absence or exuberance.** The exuberance, or the absence, or else the defect of these windows of the vulva, intended to hide it and protect it from contact with the air or with the garments, like the prepuce in man, are anomalies still more troublesome and disagreeable than in the latter for those medical men who are called in to see them. Deformities produced by age, childbirth, illnesses, or by masturbation and sapphism are not now in question. An instance given by Garnier is quoted here (*Anomalies sexuelles*).

" A marriage contracted between two young people, aged respectively 20 and 24, having remained absolutely barren for ten or twelve years afterwards, without any appreciable reason, I examined the wife on this account. She was manifestly strumuous, and very cold, as the husband informed me. The labia majora, excessively voluminous, were flaccid, withered, pendent, folded and unequal. The right in particular surpassed the left, and although the thighs were stretched apart, it had to be removed with the hand to permit the introduction of the speculum. Never had a woman displayed to me such a flaccid exuberance. The opening of the neck was punctiform.

A few months after, a hard swelling like a hen's egg occurred on the right labium, with exulceration of the mucous membrane. " The reason? " I asked " Absolutely none on my part " answered the husband. But the wife was silent. The swelling disappeared by resolution with simple topics. Thence my enquiry ".

**The labia majora perforated by M. de**

**Randan.** " Other (ladies) have the lips (labia majora) longer and more hanging than an Indian cock's comb when it is angry : as I have heard tell of many ladies having, and not they only but maids also.

I have heard this tale told of the late M. de Randan, who once being with some jolly companions at the Court, and not knowing what to do, they went one day to see the maids piss, they being hid below and the maids being above. There was one of them who pissed against the ground, but I will not give her name; and seeing that this was the floor of the seat, her lips were so large that they passed beyond the hole of the seat, so as to show the length of a finger beyond. And M. de Randan by chance having a stick which he had taken from a lacquey, with it he pierced so cleverly her lips and nailed them against the seat, that the maid feeling the prick, and jumping up suddenly, she tore them all, and thus of the two parts which she had there were made four; and the said lips remained thus cut in the shape of a crayfish's beard, and by this she found herself in much pain, and her mistress was very angry.

M. de Randan and his company told this tale to king Henri, who was a jolly companion, and he did not keep it to himself, but told it all to the Court, hiding naught of it.

These large lips caused me once to ask the reason of them from an excellent doctor, who told me that when the women and the maids are in rut, they touch and handle, and turn and twist, and lengthen and draw them so often, that they may give themselves more pleasure when they are together " (Brantôme, *Vies des Dames galantes*).

Since we have begun to quote from that merry anecdotist and good soldier, Pierre de Bourdeille, whom posterity knows under the name of Brantôme, let us also give his

opinion on the C...s of the great ladies of the Court of France in the days of Henri II and Charles IX, fair and noble dames whom he knew so well, and with whom, let us add, he had had so much to do.

**The C...s of the great ladies of the Court of France.** As there is no need to be an expert physician in order to have a practical knowledge of the conformation of a woman's vulva, we find in the *Vies des Dames Galantes* the description of the C... s of the great and noble dames whom he knew.

" There are many others whose plump and pretty faces make us desire their bodies, but when we come to them we find them so fleshless that the pleasure and the temptation soon " pass away ". In others we find the barred bone (1) with so little flesh upon it that it galls and hurts more than being on the bare back of a mule.

Therefore, to supply its place, such dames are accustomed to make use of little cushions, very soft and delicate, te receive the blow and prevent its hurting.

I have heard tell of a great lady, and I knew her and I know her still, who is hairy and shaggy on the chest, the stomach, and along her spine and below, like a savage. I leave you to think, who have just read that, if the proverb is true " that no one who is so hairy is rich or lustful "; but she is both, I assure you, and she gives much to behold and to desire.

Others there are who have their little things hideous and disagreable. Some have not curly, but long and hanging hair, so that you would say it was a Saracen's moustaches, and yet they never remove this fleece, but are pleased to wear it; as it is said. " A grassy road and a hairy

(1) Pubis.

c..... are both pleasant to ride over". I have heard tell of a very great lady who had it so.

I have heard tell of another fair and noble dame who had them so long that she twisted them with cords and ribbon of crimson silk or some other colour, and curled them as they curl a wig, and then tied them to her thighs, and sometimes in this condition she would show herself to her husband and to her lover, or else she untied her cords and ribbons and they appeared curly afterwards, and more seemly than they would have otherwise.

And some too, on the other hand, like to keep them shaved, like a priest's beard.

Other women there are who have no hair at all, or very little, as I have heard tell of a very great and fair lady, whom I knew; but this is by no means well, and causes evil suspicion : just as there are men who have only little tufts of beard on the chin, and are not thought to be of good blood, but like lepers.

"Other women there are who have the mouth of that part so pale, that one would say that they had a fever; and they resemble some drunkards, who while they drink more wine than they do milk, are yet as pale as the dead; and thus they call them traitors to wine, not those who are rubicund; and so we may call these women in the same way traitresses to Venus, if it were not that they say "a pale whore and a red whoremonger". Such as have that part so pale and chilled are not pleasant to see, and in that way do not resemble one of the greatest ladies that one could see, and was of high rank too, whom I have seen, and who said that she carried the three fair colours usually together, which were crimson and white and black; for the mouth of it was coloured and ruddy, as it should be, and that is one of its beauties, while the skin was as white as alabaster, and that was shaded by black

hair like ebony. This appearance of it is fair to see, and not like the others of which I have just spoken.

" Others there are who have it naturally so low and so split to the rump, although they are little women, that we must be careful about touching them for many nasty reasons which I would not dare to mention; for they say that the two rivers are so close and nearly touch together, so that there is a risk of leaving the one and navigating the other, which is quite too scandalous.

Other dames there are who have many hidden faults; as I have heard tell of one who did her fecal business by the front; and when I asked the reason of this from a worthy doctor, he told me that it was because she had been pierced too young, and by a man who was too well furnished and too robust.

I have heard tell of a gallant gentleman who had one of the fairest wives of the Court, and had nothing to do with her. Another who was not so scrupulous, being in her company found that she stunk so much that he could not endure the smell, and thus he knew why her husband avoided her.

I have heard tell of another who farted from her front; the doctors have told me that this may happen by reason of the wind and flatulency being able to come out from there in proportion as they do the " fricarelle ".

Others there are who cannot hold their urine, and so they always have a small sponge between their legs, as I have known two great ladies do.

I have heard tell of another great lady who, when she copulated, pissed so much, either at the moment or directly afterwards, just like a mare when she has been covered, that they had to throw a bucket of water over her, as they do over a mare.

" I will relate too this little story, which is amusing, of a

gentleman who told me that when he was in bed with a very fair lady, and doing his duty by her, he found in this part some hairs so prickly and so sharp that it was with much inconvenience that he could accomplish it, so much did they prick and harass him. At length, when he had done, he wanted to try with his hand; he found that round her coynte there were half a dozen of certain threads, furnished with these hairs so sharp, long, stiff, and prickly, that they would have suited a cobbler to sew with like those of hogs, and he wished to see these, which the lady with great difficulty allowed him, and he found that these threads surrounded her thing just like a medal surrounded with diamonds and rubies to serve as an ornament for a cap or a bonnet ".

**Anomalies of the Hymen.** The hymen is capable of displaying many other anomalies owing to its extreme fragility. A simple mucous membrane, inserted round the opening of the vagina and stretching in front like a veil to protect its entrance, this vaginal barrier may become so thickened, hardened and resistant, especially through age, as to present an insurmountable obstacle to coition. This is a danger for old maids who have kept their virginity too long. This obstacle is also met with in young girls as an original defect of conformation. Its small opening in the centre is sometimes wanting, and this imperforation involves the retention of the menses, just like the union of the labia majora, but showing different signs.

We give a curious instance of this, taken from Garnier.

**Imperforated hymen.** A girl aged fifteen, without menses, felt a weight and pain in her belly at regular periods; she was pale, and became breathless at the least fatigue, and did not eat. If, on these signs, a woman (mother,

sister, aunt, or mid-wife) had examined the state of her genital parts, she would have been satisfied that an anomaly existed in their conformation. Dr Merici did not even look at them, and confined himself to prescribing a dietary and iron, without touching her.

The local symptoms, instead of diminishing, increased daily. The patient was unable to urinate, and the colics were so painful that defecation became difficult. The belly was swollen, and painful when touched, and the doctor then ascertained the existence of a hard resistant membrane, which completely closed the vagina. This was the imperforated hymen retaining the blood and menses in the matrix and the vagina, and forming by its coagulation a large elastic tumour projecting into the anus.

The puncture of this membrane having yielded blood, the opening was enlarged, and a *litre* of thick chocolate-coloured matter escaped. The symptoms diminished immediately, showing that this was evidently the cause of the illness; but peritonitis supervened towards the fifteenth day, as a consequence of the operation rather than of a chill, and placed the life of the patient in danger ".

**Hymen shaped like collarettes.** " Besides these different types, I have called your attention to a shape which I have met with in one of my patients, aged 15 who lay in No. 10 of the Cullerier ward. In this young girl, who was suffering from syphilis and blenorrhagia, and who since the age of 12, had almost daily sexual intercourse, I ascertained the perfect integrity of the hymen membrane, which displayed a special conformation. Instead of being formed by a single tongue, the hymen was composed of a series of concentric lamellæ, laid one upon another as in a compound corolla. The external lamella was nearly entire, but within occurred one, and at certain points two, smal-

ler lamellae, independent of the first and incomplete. It might be said that three hymens existed, the external one nearly entire, the two others situated within and incomplete, leaving off abruptly, but not torn. This appearance of the hymen exactly resembled the collarettes of the mignons of Henri III, called ruffs.

These three types of lamellae are the continuation of the vaginal walls. On their internal surface are seen the prolongations of the columns of the vagina. It may be said with Budin, that these lamellæ are the external expansion of the vagina.

This arrangement of the hymenal membrane, as well as the preceding annular arrangement, it is important to know, especially in legal medicine, for you will observe that defloration and violation may take place without any tearing of the membrane. The woman may be *enceinte*, and the hymen remain intact. Besides, this may occur in the same way with the types assumed by the hymenal membrane. Numerous observations exist on this subject in medical science. I shall refer again, however, to all these facts in the study of defloration.

In the cases which I have hitherto had in view, the hymenal ring is sufficiently loose to stretch without tearing at the moment of sexual intercourse. It follows that violation may be effected with no palpable material lesion of the hymen membrane.

These facts are not without affording great difficulties in medico-legal surveys. I will say the same of cases in which despite repeated criminal attempts, the hymen preserves its complete integrity.

Dr Delens, in his work (1), points out the following

(1) *Certains défauts de la conformation de l'Hymen dans leurs rapports avec la médecine légale*. Paris, 1877.

facts. In the first, it was the case of a young person aged fifteen and a half, the victim for several years of repeated criminal attempts, affected too with vulvitis and vaginitis and yet *not deflowered*. This integrity of the Hymen, in spite of the criminal attempts detailed by the young girl, and confirmed by the existence of lesions previously indicated, was explained by the conformation of that membrane, which was at least 1 millimètre thick, pierced with a narrow opening only 1 millimètre in diameter, and accordingly as resistant as an imperforated hymen. In this case the expert cannot make use of the rules which usually guide him, and conclude, from the absence of any tearing, that external violence has not been applied.

In the two other cases, it was a question of biperforated hymen. In one, the two openings were not more than 2 millimètres in diameter; in the other, they were from 7 to 8 millimètres by 3 to 4. In these cases, the mesial and solid fraenum which separates the two orifices is a more serious obstacle to defloration in proportion as the openings are smaller, and consequently the expert ought to attach great weight to this circumstance in order to formulate his conclusions.

**Defective insertion of the Hymen**. The insertion above and below of this membrane being wanting at the sides, may occasion a double vaginal opening, absolutely corresponding to bifidity of the penis. The same result occurs when the insertion exists only on the sides. It may even be inserted spirally, as Dr Demange met with it in a girl aged 16, who had suffered an attempted rape. The medico-legal examination showed that the two extremities of the pad of the opening overlapped one another, to an extent of about 4 millimètres, the left passing over the right, and being separated from it by a distance

of 3 millimètres (*Société de médecine de Nancy*, 11 Avril, 1888).

**Adherence of the Nymphae.** It may happen that the vulva is partly closed by an adherence of the nymphae. An instance of this is given by Martineau, in the case of a young girl aged 16, who exhibited an adhesion of the nymphae, resulting either from an operation which she had undergone when one year old, or from a congenital malformation. This adhesion, complete above and below, where it perfectly covered the clitoris, was incomplete on the mesial line, an orifice about 2 centimètres wide, corresponding to the entrance of the vagina, was the result. It was possible to insert the finger, and ascertain the presence of the uterus. It was necessary to penetrate further, by means of which the uterine neck, which was perfectly normal, could be discovered.

Owing to this defect, this young girl was unable to endure vaginal coition, and her lover therefore performed it upon her anus.

**Occlusion of the vulva.** — The vulva may be entirely wanting, and the nymphae being completely joined together, the vaginal orifice is completely closed. This anomaly may be congenital, or the result of a burn, or of an operation called infibulation, which will be discussed further on.

The only remedy to be applied is the bistoury, to reopen the vaginal orifice. Many operations have been successfully undertaken.

An observation of Dr Mallian, of Lyons, who operated in a similar case, is not without interest. The subject was a woman aged 20, who had been married for two years, and whom her husband in spite of every effort had been

unable to devirginate. But, by the irony of fate, when, three months after the operation, she left the hospital completely restored, it was only to be present at her husband's last moments, who died on the eve of placing his feet within the promised land.

We may say with Gavroche : " Oh wretched luck ! "

### *B.* Defects of Conformation of the internal genital apparatus.

**Narrowness of the vagina.** The vagina may be stopped by the vulva, or by an imperforated hymen, as we have seen above. But this organ may also be singularly contracted, and thus constitute a serious obstacle to copulation. But, if the normal length is in existence, the conduit may be considerably widened by gradual dilatation, and rendered suitable for coition. Besides, " it is only the first step which hurts " and the woman, by dint of using her vagina will always be able to *improve* its narrow shape, and with a little willingness and the assistance of some grease, she will admit the passage of a moderate-sized penis. An observation borrowed from Tardieu is now given.

" **Authentication of virginity. — Defect of conformation of the Vagina.— Deformation of the Vulva.** — Examined the woman C. D. aged 40. She asserted that she had never had intercourse with a man, contrary to the allegations of the accused X... who declared that the articles said to have been stolen by him, were given him by her.

The woman was strong, dark complexioned, and well made. The pelvis was much developed. The external genital parts were perfectly normal. The labia majora and the nym-

phae showed slightly exaggerated dimensions. They opened widely, and allowed a kind of deep funnel-shaped vestibule to be seen, at the extremity of which was a kind of prominent pad, formed by the hymen membrane, pierced in the centre with an opening with fringed edges, which only admitted with difficulty the little finger. A perfectly normal narrowness of the vagina was observable, the walls of which were contracted and rigid, and incapable in any case of admitting a virile member of the least size. The mucous membrane which lines the interior of the vulva was slightly fretted, and did not display the appearance and colouration which it ordinarily does in virgins. The woman D... states, moreover, that her health is regular, that she has never experienced any troubles in menstruation, and that she has never had any particular complaint of the genital organs.

From the preceding examination our conclusion is, 1st, that the woman C. D... displays a defect of conformation of the genital organs, which does not permit the regular accomplishment of the sexual act, but which is not an obstacle to the incomplete intromission of the virile member; 2nd, that the hymen membrane has not been destroyed, but that it is deeply compressed, and this circumstance, together with the characteristic deformation of the external genital parts, indicates that the woman C.D... may, without having been deflowered, have had intercourse with a man".

This observation of Tardieu shows us that if there are compositions with Heaven, so there are with narrowness of the vagina. Unfortunately, the reverse case is less propitious.

**Exaggerated amplitude of the vagina.** In certain women, the vagina may acquire a considerable

amplitude. If it is congenital, and the woman is salacious, and indulges beyond measure in the pleasure of love with men who have a large member, her vagina may become a veritable gulf, in which a penis of ordinary dimensions finds itself quite lost. There is no remedy for this deformity, except to endeavour to palliate it with tonics and astringents within the limits of possibility.

**The lewd bottle.** We quote some instances. The first is taken from Bronaudel. " I was informed confidentially, that in a street adjoining the rue des Anglais, there is a tavern, where you can get blind drundk, that is to say, where you are tied up under the cask by a strap which goes round the middle, and holds you up when you are full. There is also a woman there who makes a speciality of inserting *a bottle* in her vagina, and the visitors indulge in the peculiar pleasure of drinking out of it. I see under this form a peculiar generic deviation ".

If the reader will reflect that the largest penis which can be seen, unless in a case of elephantiasis, reaches a maximum of 6 1/3 centimetres in diameter, and that an ordinary claret bottle has a calibre of 8 centimètres, it will be seen that the unfortunate woman who owns such a cavern as this, has little chance of finding a foot large enough to fit her boot.

These large vaginæ have already been pointed out by Brantôme (*Vies des Dames galantes*).

**" The large C....s of women, and the small engines of men.** Regarding this, I remember a story of a gallant and handsome nobleman, now dead, who was complaining one day of the capacity of the nature of the girls and women with whom he had had to do, and said that henceforth he would be obliged to seek for children

just coming out of the cradle, in order that he might not feel so many waves in mid-ocean, as he had with the others, but that he might have more pleasure by swimming in a strait.

If he had addressed these words to a great and noble lady whom I knew, she would have given him the same answer which she made to a fashionable gentleman, who was making the same complaint to her; she replied: " I do not know who ought to complain the most, you men of our capacities and amplitudes, or we women of your inferiorities and microscopics ; for we have as much to complain of in you, as you have in us, and if you carried your measures equal to our calibres, we should have nothing to complain of one another ". " She spoke very truly, and that is why a great lady at Court, looking at and contemplating one day a large bronze Hercules which is on the fountain at Fontainebleau, she, leaning on the arm of a gentleman of her acquaintance, said to him that the Hercules, although he was very well made and modelled, was not so well proportioned in all his members, as he ought to be, more especially with regard to his virile member, which was too small and too unequal, and not corresponding to his great colossus of a body. The gentleman replied that he found nothing to contradict in what she said, and that we must suppose that at that time the ladies did not have so large a one as they have now ".

Besides the opinion of the seigneur de Brantôme, we give that of the Canon Beroalde de Verville, whose works however, we certainly should not recommend young students to peruse.

" It is a strange thing, " says this witty but profound writer, " the difference between men and women : if a woman has a small one, she makes no difficulty in showing it, and displaying the neatness of her receptacle. But

if she has a large one, she never permits it to be seen, for fear of revealing her disgrace. Look at men when they are bathing, those who cannot make much masculine display, that is to say those who are ill-shaped, they take infinite pains to hide it; they hold their hands in front of it, or their shirt, or hat, or stockings, in fact if they could get hold of the moon, they would hang it in front of their weapon, so fearful are they of showing what a small tool they have for the labour of love, so ashamed are they of their insignificant property, On the contrary, they who have one of size, commend it and leave it to nature, either to display it or to hide it; so liberal minded are they " (1).

**Nature of the things of women and girls.** The same author further developes this subject in his own quaint way, in the following dialogue.

*Statius*. " Of what is it made? " (a woman's little thing)

*Licopron*. A girl's is made of worm's flesh, it is always tickling ; a woman's is made of the earth of a swamp, one is buried in it up to the belly; or of the water of the ocean, because a man's tool, which is made of cork, cannot get to the bottom ".

**Curious pleas of a husband and wife regarding the dimensions of their parts.** "Our official interpreted it to the man and woman who were arguing before the judge. The man was speaking of his wife's article. " If it was like that ", showing his thumb and first finger joined, then he said. " Or even like that, " with his two thumbs and two fore-fingers joined at the ends. " But it is ", and he shewed his hat. And the

(1) *Moyen de parvenir*.

wife speaking of her husband's tool, said. " If it was like that ", taking hold of her thigh; " Or like that " taking hold of her arm ; " But it is ", and she showed her little finger " (1).

**The large C...alibre of Queen Catherine de Medicis.**" A very great princess (Queen Catherine de Medicis) having learnt that a large culverin (2) had been named after her, enquired the reason. The answer was. " Because, Madame, it has a larger calibre than the others ".

If, however, they have found and find every day a sufficient remedy to make their parts more narrow, close, and difficult of entrance, some of them make use of it and others do not : but, nevertheless, when the road is well trodden and opened out by continual residence and traffic, or by the passage of children, the openings of many women are larger and wider. I find myself a little lost there and out of my road, but since it is to the purpose, there is no harm and I return to my road.

**La dame Pan de** χων. " Other women have the entrance so large, loose and wide, that it might be taken for the Sibyl's cave.

I have heard tell of some ladies of high rank, who have such a big one that it is a spacious as a mare's, and who use all the artifices they can in order to make the door narrow ; but after two or three interviews, the opening returns the same : and, what is more, I have heard tell that however well their thing is watched, it opens

(1) Beroalde de Verville. *Le Moyen de parvenir*. Paris, édit. 1874.

(2) A culverin was a large piece of ordnance made of bronze, used in the attack and defence of fortifications.

out like that of a mare on heat. I have been told of three who showed such things when they were looked at.

"I have heard tell of a great lady, fair and of noble rank, to whom one of our kings gave the name of " Pan de χων ", it was so large and wide; and not wrongly for she often measured it, but as she contrived during the day to narrow it, it was enlarged again in two hours during the night, so that what she did one hour was undone the next, like Penelope's web. At length she gave up all the contrivances, and was quit of them; to make choice of the largest pegs that she could find " (1).

**The true remedy for narrow maids.** This remedy was very good, as I have heard tell, for a very fair and noble lady of the Court, who, on the contrary, had one so small and narrow, that they despaired of ever having her maidenhead; but, by the advice of a midwife, she began to pass through it, first small and slender pegs, and then middle-sized ones, and from these she came to the largest; and by such endeavours, one after the other, she accustomed herself to them so well, that the largest caused her no more alarm than the little ones did before.

A great foreign Princess, whom I knew, had one so small and narrow, that she preferred never to taste of it, than to have it cut as the doctors advised her ".

**The law-suit of the woman without any vagina.** We give, according to Gallard (*Maladies des Femmes*. Baillière et fils, *éditeurs*. Paris) the details of an action brought by a husband against his wife, who was unable to give him any satisfaction, owing to the total absence of her vagina. The modest husband had been

(1) Brantôme, *op cit*.

less wary than the lover who entered his mistress by the rear.

" A woman whose name was registered as Justine J... was married on Dec. 20th, 1866, being then 25 years old. The conformation of her organs is such that the consommation of marriage is rendered impossible, but the man who married her waited for a long time before making any complaint, and it was only at the expiration of two years that he presented a petition for nullity of marriage, on the grounds that the person he had married was not a woman, " that she possesses none of the distinctive natural organs of a woman, she has no breasts, or ovaries, or matrix, or vagina; that her pelvis is shaped rather like that of a man than that of a woman, and although she is 27 years of age, she has never yet had menses, or periodical lumbar and abdominal pains. " The Court gave orders that the condition of Justine J.... should be ascertained by examination; she refused, however, to agree to this, but presented a certificate in which her sexual parts are described in the following terms by a highly respected and skilful physician, Dr Carcassone :

" Madame Justine J.... has all the appearances of the feminine sex. The external parts of generation, the Mount of Venus, the labia majora, and nymphae, the clitoris, and the opening of the urinary meatus, are all shaped as in the woman, but *there is no vagina*, or at all events the channel, if it exists, is imperforated. It results from this that the act of copulation, and consequently fecundation is impossible. The breasts are but slightly developed, the pelvis is small, but nothing else recalls the attributes of the male sex ".

The matter was laid before the Society of Legal Medicine, which, after a very clever and sensible report by M. Dolbeau, declined to pronounce upon the serious

question which had been referred to it, as it did not find in the documents which had been communicated the elements sufficient for formulating a reply as clear and categorical as was required. Nevertheless, while associating myself with the decision which was taken, I think I should express the opinion that in such a case, considering on the one hand the above certificate, and on the other the proofs supplied by the fact which I have just mentioned, there are grounds for supposing that Madame Justine J.... is an ill-shaped woman, and not an ill-shaped man, as has been asserted by the man who had an interest in having the marriage which he had contracted with her nullified.

Such was not the opinion of the Court as, after lengthy discussions, judgment was given declaring the nullity of the marriage, and consequently authorizing the former husband of Justine J.... to contract a new one more in conformity with his tastes, which has accordingly been done.

It is of slight importance to us whether the Court gave a right decision or not : nor does the development of the breasts, the size of the pelvis, or the possibility of fecundation interest us much more. But what we must remember is that in the case of Justine J.... copulation was impossible. Why ? Because the vagina did not exist, or was imperforated. That the vagina is indispensable for coition, we are all aware; but that it may be wanting is what many persons are ignorant of. The fact, however, is not very rare: medical works contain a good number of observations similar to the preceding, and where in the place of the vagina a solid cord exists, having no appearance of the channel intended to receive the virile member.

**Operations undertaken to create an arti-**

**ficial vagina**. We have just seen by the trial reported above, that the vagina may be completely wanting, just as the penis in man. But this deformity though exceedingly serious is not so terrible in the woman as in the man. A man without a penis is an unhappy creature who can never know the pleasures of love. In the woman, since the matrix exists, an abnormal supplementary opening usually replaces the absent vagina. This is met with in the anus and the bladder through the expulsion of the blood of the menses. These openings have been made use of by lovers, provided that they have not been repulsed by this deformity. The celebrated surgeon, Louis, of the 18th century, has even delivered a woman without a vagina, through the anus, whose matrix opened into the rectum. She had copulated, or rather committed sodomy, with a lover operating like the Mussulman of Cairo, who finding the front door of his house closed, went in by the back-door. Louis even composed a thesis, demanding that there should be a legal right to commit sodomy with women thus organized.

However this may be, modern surgery has striven to create an artificial vagina for those women who are without one. But this operation is always a delicate one, and is far from being a constant success. Professor Courty gives the following chances of a successful operation. In 28 cases of imperforation at birth, 2 operations remained incomplete, and 2 were repeated on account of relapse. There were 6 deaths.

In 33 operations for accidental obliteration, 6 deaths resulted, 8 remained incomplete, and 2 were repeated on account of relapse. These results indicate the dangers of this operation.

**Anomalies of the Uterus**. The total absence of

the uterus, without there being the least vestige of that organ, is altogether exceptional. Less rare are the cases of *arrested development*, in which the uterus has remained at its rudimentary fœtal or infantile condition. Side by side with the rudimentary fœtal or infantile uterus must be placed the variety known as the *pubescent uterus*. This is the designation of a peculiar condition, intermediate between the infantile uterus and that of the young virgin at the commencement of the period of sexual activity, in which the gestatory organ displays the same characteristics in the adult as at the epoch preceding puberty.

Fecundation is impossible with an absent or rudimentary uterus. But it may take place with a pubescent uterus.

**Non-permeability of the neck of the uterus** is congenital or acquired, complete (obliteration) or incomplete (stricture).

Congenital obliteration of the neck of the uterus is much more rare than that which is produced during the course of life. The latter is most frequently met with at the external orifice.

Stricture, the same as obliteration, may be either congenital or acquired. In the second case, it admits like obliteration the same causes; — rents, inflammations, ulcerations, and, in particular, cauterisation badly performed. Congenital stricture generally affects the whole length of the cavity of the neck. The os uteri is pointed, conical, indurated. The external orifice is small, often scarcely recognizable but by a small drop of mucus which escapes from it.

Among the other malformations of the neck of the uterus the only important one is elongation with augmentation of size, which gives it the appearance of the clapper of

a bell. Not only is fecundation impeded, but coition is rendered almost impossible.

**Double uterus, and unicorn uterus.** When the uterus is unicorn, if the single horn of which it is composed has its complete development, pregnancy occurs without hindrance.

The women who have a double uterus are very apt to conceive. The greater number of them reach the limit. The rest have numerous miscarriages without being able to come to the ninth month.

**Anomalies of the ovaries.** If an autopsy has demonstrated their absence, it is an anomaly so great that there is no reason for taking count of it. Even in women who have no menses and are barren, almost the best sign of their absence, they still manifest their influence by head-aches and periodical monthly symptoms. The presence of the matrix in this case is an evidence of their latent, rudimentary, minute existence.

" (52) Consulted in 1867 regarding the marriage of a dressmaker aged 21, well developed, but who never had had menses, although troubled every month by terrible head-aches and other discomforts. I discovered, by touching it, the neck of the urethra, without any appreciable body. It was undoubtedly imperfectly developed, as it is in young girls. I asserted that she could not become a mother under these conditions.

The marriage took place nevertheless. The woman continued to be troubled, although the conjugal intercourse evidently diminished the periodic symptoms; yet all the excitements and the pleasures of sexual intercourse have not caused the appearance of the menses. There has been at times a slight stain of blood on the linen, sufficient to

preserve the hopes of maternity. She became stout at the age of 36, and this caused the discomforts and indispositions to disappear ". (Garnier, *Anomalies sexuelles*.)

**Complete absence of the uterus and ovaries**. We are only aware of one observation of this, mentioned by Martineau (*Leçons sur les Déformations vulvaires et anales*. Paris, Adrien Delahaye).

" In a woman aged 30, placed under my care for a blenorrhagia vaginitis, I ascertained beyond all doubt that the internal genital organs, the uterus and ovaries, were completely wanting. The vulva was slightly developed. Its development corresponded to that of a young girl from 11 to 12 years of age. The Mount of Venus was destitute of hair. At the bottom of the vagina, the finger felt a slight projecture, or small tubercle, probably the rudiment of a uterus. The rectal touch, and the catheter passed to the bladder, demonstrated the absence of a normal uterus. The woman had never had menses, nor had she at any period experienced the disturbances which result from the menstrual hemorrhagic diathesis. In spite of the absence of the internal genital organs, venereal desires were very pronounced in this woman; the exaggerated development of the clitoris indicated inveterate habits of manualisation ".

**Anomalies of the urinary meatus**. In the child, the meatus has the shape of a longitudinal slit, and it faces forwards, so that the jet of urine is projected directly forwards. In the woman, on the contrary, owing to the change of direction undergone by the vulva, the meatus faces downwards. Thence arises the impossibility for her to urinate upright. It is projecting, circular, and frequently gaping.

In the woman, as in the man, the urethra may be clos-

ed. But this case is very rare, and a simple stroke of the bistoury is sufficient to give passage to the urine.

The anomalies of the canal of the urethra are much fewer in the woman than in the man. This is because the canal has a larger meatus in the woman, and its depth is only from two centimètres and a half. It is also much more dilatable, which results from the absence of the prostate and of the swelling of the bulb, etc. Consequently, the strictures which play so active a part in man, are almost unknown.

# CHAPTER XIII

## FOREIGN BODIES IN THE URETHRA AND VAGINA OF THE WOMAN

*A*. Foreign bodies in the urethra.

Limits of dilatability of the feminine urethra. — Husbands who mistake the hole. — Calculi of the urethra. — General shape of the calculi in the woman. — Foreign bodies introduced into the urethra. — Numerous and curious examples.

*B*. Foreign bodies in the vagina.

Cystes. Polypi. Descent of the matrix. — Foreign bodies introduced into the vagina. — Some curious examples. — Dangers resulting from foreign bodies introduced into the vagina. — Two cases followed by death. — The wood pencil, and the glass decanter stopper Mulericides. — The criminal phallus. — Extraordinary outrage committed by a mother on her daughter. — Outrages and acts of unnatural obscenity committed on a young girl aged seven, and a young boy aged five. — Very remarkable local disorders.

**Foreign bodies in the urethra of the woman.** As in the case of man, the foreign bodies may come *from within or from without*, or be introduced *from without or from within*. In order to comprehend perfectly how the foreign bodies, often of very large size, can pass through the canal of the feminine urethra, let us first show the extreme dilatability of the urinary meatus.

**Extreme dilatability of the urinary canal.** Its extreme dilatability is, at the present day, a matter of almost common knowledge. It was ascertained at an early date. In France, it dates back to the 16th century. Franco, in his treatise on hernia (1561), pointed it out as a means

for the extraction of calculi, and proposed an instrument named ' dilatoir '. Fabrice de Hilden, Colet, Collot, Pierre Dyonis, and many others, showed themselves as advocates of urethral dilatation in women. Bertrande practised it by means of an instrument with three branches, and proceeded, availing himself likewise of the finger, to search for calculi. Rivière and Boerhaave extolled in their turn the dilatation of the urethra with the finger.

In England, Astley Cooper preferred the prepared sponge to the introduction of the finger. In 1874, Christopher Heath demonstrated in London that recourse may be had to dilatation of the urethra in women by means of the finger, without incurring too great risk of tearing the canal or of an incontinence of urine. His process consisted, after a previous administration of chloroform, in first passing a probe into the urethra, and then the index finger above the probe. Heath also made use of the lithotomy forceps and of a speculum without a mandrin cut obliquely.

Professor Simonin of Nancy has also pointed out the extreme and rapid dilatation of the canal in women. Hybord in his thesis declares himself an advocate of gradual dilatation and rapid dilatation combined. He made use at the same time of the prepared sponge, of probes of increasing calibre, of the lithotomy forceps, and of dilators with several branches.

**Limits of dilatation of the feminine urethra.** It is interesting to know to what limit dilatation may be carried without incurring serious inconveniences (incontinence of urine, tearing). A very interesting observation, supplied in 1872 to the Society of Surgery by Dr Davat, appears to us to establish very clearly the possible degree of dilatation of the canal of the urethra in women, and for this reason we reproduce it below.

" Twenty years ago, a woman from Méry, aged 47, in her first child-birth, was in delivery for two days, without the labour making any progress. I was summoned. My first duty was to examine the woman by touch; parting therefore the labia majora, my index and middle finger joined together penetrated into a shallow part, where I met with an unctuous and limited pocket, behind which I felt the child's head. Surprised at this obstacle, which had none of the characteristics of shaking or of the uterine neck, an obstacle the walls of which expanded round my fingers like a purse, I withdrew them from it, and in order to observe the position, the woman was placed on the edge of the bed. On parting the labia majora, I found the urinary meatus gaping and dilated, as well as its canal as far as the bladder. This dilatation was equal to a circumference of 12 cms, the volume of my two fingers introduced together. This dilatation, which had been effected in ten hours slowly and progressively by the ignorant midwife with the aid of her index finger, had only occasioned pains less acute than those of child-labour, and a few spots of blood. What had led this village midwife into the error of mistaking the urinary meatus for the opening of the vagina, was that the latter was obliterated by a membrane of considerable resistance and density.

The membrane was incised.....

The woman for a long time retained an incontinence of urine, which disappeared gradually and completely without remedies, at the tenth month... However, this incontinence, which has never re-appeared now that she is an old woman, takes place sometimes during sleep ".

Undoubtedly such a degree of dilatability could not be admitted as a rule. But authors are far from being in agreement regarding the figures which would give a more exact indication. While Hybord, in France, declares that it should

not be dilated beyond 3 to 4 centimètres in circumference, or 10 to 12 millimètres in diameter, the German doctor Spiegelberg declares that it may reach 7 or 8 centimètres in circumference, and 25 millimètres in diameter. Simonin, of Nancy, also adopts the figures of Spiegelberg, and declares that the rapid dilatation of the urethra of a woman, under anaesthetics, may reach 23 to 24 centimètres in calibre.

This dilatation may be effected by the bleeding method, by slightly incising the urinary meatus, or by the non-bleeding, slow, and progressive method; when recourse is had to the prepared sponge or stalks of *laminaria digitata* with mechanical dilatations by the speculum, or the finger, it is more frequently rapid and forced ".

**The husbands who mistake the entrance.** Everybody is acquainted with the story, related by Portal, of the husband who copulated in the canal of his wife's urethra. Morgagni has related a similar story. M. Phillips relates that, in 1833, Boyer had under his care in the Southern Hospital a prostitute, aged 36, who made use of the urethra for coition, and whose hymen was intact.

Professor Courdes has ascertained that the slow and gradual dilatation of the urinary meatus in a girl, had allowed the complete introduction of the virile member.

This was the case with the simple husband who resided in the neighbourhood of Orléans, whose story is told by Garnier. Speaking one day to his confessor of the barrenness of his wife, the priest replied that perhaps he was not following the right path. He changed his path so clumsily, that an incontinence of urine was the speedy result. The error was thus cleared up by the intervention of the physician.

**Calculi of the Urethra.** Just as the man, so also

the woman may have calculi in the bladder. But what we have said regarding the extreme dilatability of the urethra, explains equally how very voluminous calculi may come forth spontaneously by this path. Authors quote numerous cases of that nature, and we will satisfy ourselves by mentioning only the more remarkable. Carreo has seen a woman, aged 50, eject spontaneously a calculus weighing 101 grammes, three inches five lines long, and two inches seven lines wide (*Gaceta Medica,* 1847). M. Segalas has observed a woman who cast successively two calculi, one weighing 40 grammes, and the other 105.

**The Report of the Dublin Society** (1862) quotes an instance of a calculus, wieghing 119 grammes, ejected spontaneously by a woman. Middleton (*Dict. des Sciences Médicales*) has seen a calculus of four ounces ejected. Howship has drawn a calculus weighing five ounces six grains, ejected by an old negress. Gurliep speaks of a calculus weighing 5 1/2 ounces. Lecat has seen one of six ounces six grains, three inches and three lines long, by twenty-five lines wide, and five thick (*Deuxième recueil*, page 102).

And, finally, Clauder has seen a calculus of twelve ounces issue spontaneously, the expulsion of which was followed by incontinence of urine. The latter symptom — incontinence of urine — is, however, not rare as a result of these forced distensions, and has frequently been observed by different practitioners.

The calculi of the urethra may be met with in all parts of the canal ; but they stop by preference behind the meatus, which is the most contracted point. The feeble resistance offered by the tissues of the side of the vagina explains how the calculi can dilate the canal in this way, to the point of leaving the canal permeable. Berard quotes a fine instance of this in the *Gazette des Hôpitaux*. Côme

reports that he withdrew, by the small apparatus, a large pear-shaped stone lodged at the root of the urethra, which it had contracted and enlarged, without interfering with the body of the bladder; the place where it was lodged communicated with the bladder, the walls of which were considerably thickened, and a distance of over an inch separated it from the os pubis, by an opening two or three lines in diameter.

**Usual shape of calculi of the urethra.** In women the usual shape of calculi of the urethra is conical. In the Civiale Museum there is a calculus which displays on its upper surface two slightly concave facets, separated by a mesial ridge. These facets were joined with a large vesical stone which was destroyed by lithotomy. Some are grooved on their surface with a gutter, for the passage of the urine. Others are cut out with facets. Lastly there exist mixed calculi, belonging at the same time to the bladder and to the canal of the urethra, and displaying a contraction which corresponds to the neck of the bladder. Bartholin has seen a calculus of the size of a hen's egg, weighing six ounces, which had a nipple separated from its body by a narrow neck, and which had been extracted from the urethra of a villager, who had suffered cruelly for several years. But the most complete fact of this kind belongs to Larrey, who has left a drawing of this remarkable object.

"During my sojourn at Toulon in 1796, I performed an operation on a woman, aged 54, with such success that the patient was cured on the seventh day, and without incontinence, a rather rare circumstance. I avoided cutting the partition which separates the urethra from the vagina, by incising this canal on the sides, according to Louis' method, with the difference that I made use of the bis-

toury and the channelled probe, more simple instruments and easier to guide, and by their means made two incisions, inclining from right to left, between the walls of the vagina, which I left untouched, and the ascending branches of the ischium. The operation resulted in the extraction of a stone, formed of two portions united by a neck ; the larger part, rounded, was enclosed within the bladder, and the smaller portion was entangled in the canal of the urethra : these two portions separated and were extracted without much trouble " (1).

**Foreign bodies introduced into the urethra.** The rarity of calculi of the urethra in women is due not only to this dilatability of the canal, but also to the relative infrequency of disorders of that organ. In fact, the strictures, which play such an active part in men, are almost unknown.

But if the woman has the privilege of a certain number of purely negative causes, there is a positive cause which is met with much more frequently in her than in man. We refer to the introduction of foreign bodies into the urethra, either by accident or by a perversion of the generic sense. We have no pretention to enumerate all the foreign bodies which have thus strayed, and which have been extracted, simply encrusted with a calcareous layer, or completely enveloped with the saline deposit. We shall be content with quoting the most curious, and we take them as they are described in the remarkable work of Dr Touillet (2).

" Moreau, head surgeon of the Hôtel-Dieu at Paris, related in the course of his operations that he had extracted from a woman's bladder, a small apple encrusted with calculous matter.

— A young girl introduced into the bladder, through

(1) Larrey, *Clin. chir.*, t. II, p. 560.

(2) *De l'Onanisme chez la femme*. Paris, 1897, pp. 124 to 134.

the urethra, a wooden case which is used to hold needles. It was extracted at the end of three months; it was surrounded with calculous matter. Several small calculi were at the same time withdrawn from the bladder, some of which were of the size of a nut, and some gravel was also brought out by injections. The girl recovered, and has felt no more inconvenience.

— A young girl, about 16, rubbed her urinary meatus with the head of a long black hair-pin. Having introduced it into the urethra, the pin escaped and penetrated into the bladder. At the end of several months, having fallen into consumption, the unhappy girl confessed the origin of her disorder. The probe was used, and a stone was discovered in the bladder. This calculus, of the size of a hen's egg, was broken and extracted after long, troublesome and very painful atttempts. As to the pin which was situated from behind forwards and with the point towards the pubis, it was also extracted. It measured three inches in length and was incrusted with calculous matter. The girl recovered.

**The bone-needles of lascivious girls.** Morgagni, after Chopart, reports several observations on the bone needles which the Italian women use for their hair, and which lascivious girls introduce into the urethra, and allow to escape into the bladder. The pains which these girls feel in the urinary channels, compel them to declare the cause of it, but there are some who from shame or other motives, try to disguise the truth, and to have it believed that these needles have passed through the channels of deglutition into the stomach and bladder. Their story cannot deceive those who are acquainted with the natural and easy channel by which these needles and other larger bodies may penetrate into this cavity. Moinichen quotes the case of a Venetian girl, who, while rubbing the

urinary meatus with a bone needle, allowed it to escape into the bladder, from which it was only possible to withdraw it by dilating the urethra.

— A girl of Parma, aged about 20, was in bed with another girl who introduced into her urethra a large needle with an ivory head. This needle, the length of a finger, fell into the bladder. A few days afterwards, the girl only urinated drop, by drop and with very great pain. The shame of confessing her adventure caused her to conceal her misfortune for five months. At length, growing thin and having fever, she had recourse to a surgeon, who, passing his finger into the vagina, felt a hardness, discovered an end of the needle which had pierced the bladder and the vagina, and contented himself with removing the calculous matter which encrusted the foreign body. The patient feeling no relief, another surgeon was summoned, who introduced a probe into the bladder, and felt there a hard body. In order to relieve the patient's acute pains he caused her to take a large quantity of olive oil, and a few days afterwards, the needle, which was encrusted with calculous matter appeared at the orifice of the vagina by the hole made at the bladder. It was withdrawn by the hand without the aid of any instrument. The girl ceased to suffer, and was able to work, but a vesical fistula remained, which occasioned an incontinence of urine (*Académie des sciences de Paris*, année 1736).

— A girl of Padua, affected, she said, with a tickling of the vulva, rubbed the urinary meatus during the night with the head of a long iron pin. The pin passed into the urethra and gained the bladder, from which the young girl tried in vain to withdraw it. Shame compelled her to keep silence regarding her adventure for eight months, but the declining condition into which she fell, and entreaties of her friends, induced her, at last to confess the origin of her sufferings.

A surgeon, who was called in to attend her, introduced his finger into the bladder, and discovered the pin, which had served as a point of origin for a calculus. It was decided to perform the operation by cutting, and in this way the stone and its metallic nucleus were withdrawn. But the young girl died at the expiration of three days.

— " In the month of June, 1855, says Dr Deunce in a memoir published by the *Journal de Médecine de Bordeaux*, I was summoned to a young girl, aged 18, a seamstress, residing in Rue Saint-Hyacinthe, Paris, who had been in bed for three days, suffering, she declared, from painful colics. I first examined the stomach which gave no pain when touched. As the patient persisted in locating the seat of the pains which she felt in the hypogastric, I was induced to investigate the vagina by touch. I was much surprised to feel in the anterior wall of the vagina a hard and sharp point which lifted up the mucous membrane. The patient confessed to me that in order to allay a very violent tickling, twelve days previously, she had applied to the genital part a crochet-needle which she used for embroidery, and that she could not explain how it had slipped from her hand. A fresh examination, made with aid of a probe and the speculum, permitted me to ascertain that the foreign body had penetrated into the bladder, that it was difficult to move, and that its pointed end was entangled in the posterior part of the inferior wall of the urethra, which was, so to speak, harpooned. In fact, the point of the instrument, as is well known, resembles a hook, and this little hook rendered its extraction difficult. On the side of the vagina, three or four centimètres deep, the point made a noticeable projecture.

Having succeeded in seizing the foreign body with a pair of dressing forceps, I was able to recognize clearly

that each effort which I made to disengage it and draw it towards me was useless, and served only to drive it deeper. During this manœuvre, by means of my finger which I kept in the vagina, I was able to assure myself that the point of the crochet-needle was becoming quite superficial. I did not hesitate to apply a little more force to the forceps which held the crochet-needle in the bladder. The point passed completely through the urethro-vaginal wall and by the aid of another pair of forceps, I managed to seize it in the vagina, and to draw the whole crochet-needle through this passage. I should add that, having taken the precaution to keep a probe in the bladder for two days, the narrow opening closed, and the patient recovered without any trace of a fistula.

— " A cleaner of lace, a young girl aged 21, indulged, when she went to bed, in acts of masturbation, and for this purpose made use of a bone needle, fusiform, blunt at one end and pointed at the other, and 11 centimètres long. These manœuvres were prolonged until the moment, when overcome by slumber, the young girl fell asleep, leaving her hand and the instrument of her solitary pleasures in their place. She passed a good night, and even returned the next day to her usual work, when some dull pains, combined with the absence of her needle, caused her to suspect the accident which had happened to her during her sleep. Nevertheless, she endured her sufferings with courage, but, being compelled at length to preserve an attitude of repose, she came, on the eighth day, to consult M. Bron, and confessed to him what had happened. The surgeon immediately proceeded to probe the patient, in order to ascertain the presence of the foreign body, and when he had gained this certainty, he proceeded to the extraction of the needle, which, after different unsuccessful attempts, was withdrawn in the following manner : the pa-

tient was placed under anaesthetics, and an injection of water having been made into the bladder, M. Bron introduced a finger into the vagina, and a pair of forceps with a ring into the bladder. By means of his two hands, he ascertained that the needle was in front, a little to the left, at the upper portion of the pubis, and was pressed against the posterior wall of the bladder by its opposite extremity. Guided by this diagnosis, M. Bron kept his index finger on the projecture which he perceived deep in the vagina, in order to learn the result of his manœuvres and in order to assist them, while with the left hand he seized the needle with a pair of forceps, and drew the anterior extremity as near to him as possible. At this moment, combining the pressure of the left index finger with a double movement of propulsion backwards;and of traction downwards, performed by the right hand, he made a see-saw motion, as he wished, with the needle which was displaced and extracted without any other inconvenience resulting than a slight cystitiswhich lasted only for three days ".

**Further improper practices.** The cases which I have just related are not the only ones which are known ; I add a few more.

— At the Hôtel-Dieu of Lyon, Cartier saw a single woman, aged about 40, who had introduced into her bladder, through the canal of the urethra, a case full of needles, because she experienced a difficulty in urinating, and wished, as she said, to enlarge the canal. Cartier performed an operation by cutting. When he seized the case, he perceived that it was placed transversely, and he was obliged to alter its direction with the forceps. Then applying the instrument to the middle of the case, so that the latter might not open, he easily withdrew it and the patient promptly recovered.

— In 1692, Lamotte was consulted by an old member of a sisterhood, who had introduced a large pin into her bladder; he probed three times with much attention and patience, and felt the pin very distinctly. At the fourth examination, the pin chanced to get caught in the holes of the probe; the surgeon passed his right middle finger into the vagina to hold up the pin, while with his left hand he drew towards him both the probe and the pin, the extraction of which had appeared to him to be impossible.

— In 1751, according to Morand, Lachàse was consulted by a girl aged 20 who, on the previous day, had introduced an ear-pick into her urethra, and had lost it there. After various attempts, he felt the foreign body by aid of a catheter, but he was unable to withdraw it from the bladder with ordinary forceps. Fearing inflammation, he bled the patient several times, and injected emollient and oily liquids in order to relax the parts and facilitate the extraction of the ear-pick. At the end of two months he brought this object forth, the urethra having been previously dilated. The patient experienced no inconvenience in consequence. The ear-pick, in spite of its short stay, was incrusted on the greater part of its length with calcareous salts.

A single woman aged 31 — M. Pamard relates in the *Annales de médecine pratique de Montpellier* — used to masturbate herself with an ivory whistle three inches and a half long, and five lines round at the middle and the top, by which she introduced it into the canal of the urethra; this article advanced so far into the canal that the young woman was unable to withdraw it. After probing her, the surgeon introduced, but in vain, a pair of dressing forceps into the canal; he then took the polypi forceps with which he seized the article by one of its extremities and extracted it.

— A young lady aged 20 had introduced into her bladder a sandal-wood case full of pins and sewing-needles. M. Rigol injected honeyed water into the bladder, and incised the urethra on two sides with the lithotome caché; the case, situated across behind the pubes, was changed from its position by means of the finger, after which it was seized and brought out; it was three inches and a half in length, and an inch and a half in circumference. The patient recovered.

— A girl from 17 to 18 years of age, was in the habit of introducing a large piece of wood into the canal of the urethra. One day the piece of wood penetrated too deeply, could not be withdrawn and passed into the bladder. M. Faure was obliged, in order to extract it, to perform the operation of vaginal cutting.

— A single woman, aged 28, in order to allay the intense itching occasioned by herpes on the genital parts, rubbed the affected part with a needle-case. Owing to her rubbing the urinary meatus for several months, she enlarged it so much that she was able to introduce into it the instrument which she made use of, producing thereby an incontinence of urine; at length she drove it in so far that it slipped into the bladder. This article remained there for three months with no other symptom than a strangury. M. Retif was called in; he introduced his index finger in order to assure himself of the existence of the foreign body; directing it on the side of the bladder, he felt a hard oblong tumour in that organ. The canal of the urethra was much dilated; it was possible for him to pass the finger in and insinuate into the bladder a pair of forceps with which one of the ends of the case was seized and brought outwards, but he was unable to extract the foreign body; as it was surrounded at its centre with calculous matter. It was then decided to perform an operation by cutting. The operation

was performed in the usual manner, and the foreign body was withdrawn by means of a pair of dressing forceps. The patient succumbed on the one and twentieth day after the operation."

**Foreign bodies in the vagina.** The foreign bodies in the vagina may, like those of the urethra, come from within to without, or from without to within. The former proceed from Cysts or Polypi which obstruct the vagina. It is the same with *prolapsus* or descent of the matrix, proceeding from the relaxation of the ligaments which hold that organ suspended. It results that the uterus, leaving its place, comes forwards into the vagina, and this relaxation may become so great that the neck, in certain cases, may project to the entrance of the vagina. If fecundation is possible, copulation is so no longer, and again we speak of an artificial fecundation which could not take place, unless the uterus were restored to its place.

To combat this accident *pessaries* are used, intended to keep the uterus in its place. A large number of kinds of pessaries are in existence; we have no space to enumerate them here.

**Foreign bodies introduced from without into the vagina.** These bodies may be introduced by the subject herself in a fit of erotic fury provoked by vaginal masturbation by means of the said foreign body; the hand may let it go, and then it is necessary to have recourse to a surgeon in order to withdraw it from the vagina. Everything is good for the masturbatress; she employs whatever is handy. Sometimes the foreign bodies are portions of needle-cases, pins, sewing needles or needles for the hair, bits of straw, ears of corn or grass, carrots, turnips, pears, fragments of candle or wood, small scent-

bottles, sometimes drinking-glasses, stoppers of glass or cork, a jam-pot, etc., etc. We give a few examples borrowed from Dr Touillet (1).

— A girl presented herself to a practitioner and asked him to free her from an insupportable pain in the genital parts.

On touching them a hard and inert body was observed at the upper part of the vagina, the mucous membrane of which was swollen in such a manner that it appeared to embrace this body and retain it by force. Great care and more than one attempt was required to seize and extract it, when it was seen to consist of a large cork.

It is beyond all doubt, in spite of the shame-inspired denial of the patient, that it was while making use of the neck of a bottle to satisfy her depraved imagination, that she met with the accident which we have just nar rated.

— While I was house-surgeon at the Hôtel Dieu — writes Lisfranc, — a woman lying in Dupuytren's division experienced violent pains in the pelvis. A purulent fetid discharge escaped from the organs of generation. The woman was unwilling to give any information regarding her condition; she always replied in an evasive manner to the questions which were addressed to her.

The inferior orifice of the vagina which did not enclose the foreign body was contracted by the swelling of the mucous membrane. This tumefaction ascended to considerable height in the vulvo-uterine canal; it formed a very slight projecture to the vulva. The finger passed deeply into a wide cavity, the walls of which felt very hard, and it was impossible to detect the neck of the uterus. The female probe gave the same sensation, and the percussion produced a very remarkable hollow sound.

(1) *L'Onanisme chez la Femme*.

Dupuytren introduced the teeth of a wide pair of forceps, which he moved in a see-saw manner in different directions, as he drew them back slowly and gradually.

He succeeded thus in extracting, without breaking it, a jam-pot, slightly conical in shape, the small end of which came out the last from a position in which a criminal passion had involved it. Emollient and nearly cold injections were made immediately.

The patient, ashamed and confused, left the hospital on the very day of the operation. We learnt that no accident resulted; the cure was complete. "

*Les Annales de la Société médico-chirurgicale* of Bruges contain an observation very similar to the preceding, which has been reproduced by the *Journal de médecine et de chirurgie* (2nd series, year 1850).

— Dr Janssens, jun. of Ostend was summoned to a woman who was unable to extract from her vagina a beer-glass, the whole of which was buried in it, and left her a prey to the most horrible pains. On touching it, it was observed that the bottom of the glass corresponded to the os uteri.

Fearing that he might injure the important organs which are in connexion with the vagina, M. Janssens directed all his efforts to extract the foreign body without breaking it; but that was the difficult point, by reason of the fragility of the substance and the polished surface of the article. However, after numerous unfruitful attempts, the practitioner had the idea of applying the forceps to the extraction as if it were the head of a child; he introduced, not without difficulty, the first branch of the instrument, but he was unable to introduce the second. Bringing the branch which he had introduced towards the posterior part of the vagina, he made use of it as a lever, and while two assistants forcibly parted the vulvary ring and made the axis of

the glass to correspond with the lesser pelvis, he had the satisfaction of bringing away the foreign body, while causing the patient to undergo sufferings which cured her, to all appearance, of her incomprehensible passion.

Women, let us state a propos of the forms of onanism, have carried the aberration so far as to introduce instruments into the cavity of the matrix itself for an erotic purpose.

The following observation, borrowed from Vol. II of Lisfranc's *Clinique chirurgicale*, is an evidence of this.

— A woman indulged in improper practices ; she was having her menses. She broke the stalk of a reed in her uterus. No symptom resulted. The organ doubtless had been accustomed for a long time to the contact of foreign bodies ; but at the next menstrual period, violent pains were developed : they resembled those of child-birth : the matrix had increased in size ; it was easy to be assured of this by touching it through the vagina and on the hypogastric region.

The orifice of the uterine neck appeared to be closed, and the neck was hypertrophied as in pregnancy of the second or third month : by exploring it several times attentively and methodically, I felt at the centre of its inferior extremity, a very slight projecture which offered a great resistance. I applied the speculum. I wiped the mucosity with a piece of lint and I saw nothing which justified my presumptions. Besides I was without the necessary information ; but I passed a blunt channelled probe into the bottom of the instrument, I raised the anterior lip of the os uteri, and immediately I felt and saw the foreign body which was hardly displayed at the exterior of the cavity in which it was enclosed and the walls of which fitted closely upon it. I introduced a pair of forceps with flat and narrow teeth ; one of the branches fortunately penetrated

into the thickness of the foreign body, the other slipped on the external surface of the uterine walls : I made with the instrument some slight movements of rotation on its own axis, while at the same time I drew it strongly towards me. It slipped its hold twice, the third attempt was more fortunate, and I freed the patient: a stream of pitchy blood flowed out, the colour of wine-lees; it proceeded from the matrix where it had accumulated,and the tissue of which immediately returned to its position. The organ seemed then to display its normal size, and the symptoms disappeared. "

**Dangers resulting from foreign bodies introduced into the vagina.** The foreign bodies introduced into the vagina by the masturbatress generally have serious and sometimes mortal results. Their extraction, on the other hand necessitates surgical manœuvres of a certain difficulty and even of great importance, seeing that when they remain for a lengthy period in the genital organs, they frequently become encrusted, and even perforate the vagina-vesical and recto-vaginal partitions.

Peritonitis is the result most to be feared of these vaginal manœuvres, and death results from it through the formation of pus.

The canal has, however, a remarkable tolerance for foreign bodies. Pessaries which have been forgotten may remain there and become encrusted without producing notable symptoms. A reel of cotton, two centimètres long was extracted from a woman aged 36, who had introduced it when she was 14 years old. In spite of several attacks of peritonitis and hemorrhage in the interval, she had been able to marry twice, concealing the existence of this foreign body, but she had remained barren.

By operating directly on the matrix with these blunt

bodies, there is a danger of causing wounds and ulcerations to it, the more so as the neck in its normal condition is hardly sensible to the touch of the finger and of the various instruments. And so there may result from this contusions, ecchymoses, hemorrhages, losses, just as after coition performed brutally and with excess, without the woman being cognisant of it.

Two cases of death resulting from the introduction are related by Dr Pouillet (*l'Onanisme chez la femme*).

**The wood pencil and the glass decanter stopper; Mulericides.** " The subject was a woman aged 28, who troubled, as she said, by a difficulty in urinating (a woman never confesses but half the truth), tried to pass a cedar-wood pencil into the canal of her urethra. While she was engaged in this manœuvre she was suddenly surprised by some person's approach, and the pencil slipped from her hands. When she sat down a few moments afterwards she felt an excessive pain in the left side of her abdomen, as if a foreign body had perforated that region, and although a surgeon was summoned directly, he could not discover any trace of a wound. Frequent attacks of peritonitis followed this accident, and when, eight months after, Dr Erichsen was summoned to the patient, he found her much emaciated, continually troubled by a violent pain in the abdomen, and a prey to repeated vomitings. No symptoms announced a disorder of the bladder or intestine; blood had certainly been voided through the anus, but this was attributed to the presence of hemorrhoids, from which she had suffered previously. On examining the patient, it was noticed that the point of the pencil projected into the wall of the abdomen from the right side, at an equal distance from the umbilic and Poupart's ligament. Under these circumstances, Dr Erichsen

made an incision on the abdominal wall, came across the point of the pencil, which penetrated between the fibres of the fascia transversalis, and seized it, while one finger, introduced into the rectum, forced the foreign body forward. The pencil extracted in this way was five inches and a half in length.

The patient died of peritonitis on the fourth day after the operation. It was discovered at the autopsy that the pencil had penetrated into the abdomen through the vagina, which it had perforated at its superior and posterior part, near the insertion of the uterine neck.

Abscesses of the vagina are also engendered by wounding instruments, or by a foreign body remaining in the vulvo-uterine conduit, and thus causing inflammation and perforation.

A few years ago a village girl entered the... hospital, under the surgical attendance of Dr... now Professor to the Junior Faculty. The girl displayed a diffuse tumour in one side of the abdomen. Later on an abscess was formed, which opened, and the long suppuration carried off the patient. Was a diagnosis made? I am not aware; in any case it was purely fanciful, for it was only the autopsy which revealed, to the great astonishment of the head-surgeon, a perforation of the vagina and the presence of a decanter stopper in a large pelvic focus.

The skilful master— whose name delicacy prevents me from giving up for the verdict of his colleagues—imagined an affection of the pelvis, and observing a voluminous tumour, had simply forgotten to make an examination by touching the vagina, like the monkey in the fable who did not think of lighting his lantern; this operation, necessary even without any confession by the patient, would have given him the key to what he called a pathological mystery, and would have enabled him, in spite of his no-

torious incapacity as a surgeon, to relieve, and perhaps to save, the girl, by removing in time the foreign body from her vagina. "

It may happen also that the foreign body may be introduced into the vagina by a person other than the subject for the purpose of erotic curiosity, or as a criminal act.

**The criminal phallus.** Dr A. Corre (*Ethnographie criminelle*. Paris, 1896) quotes a curious instance of this from the medico-legal report of Dr Dubois (Saigon, 1893). " An Annamite physician, wishing to avenge himself on his mistress for her infidelities, had the infernal idea of taking advantage of her slumber at the hour of her siesta, to introduce into her vagina a piece of wood cut into the shape of a virile member and provided with a crown of iron spikes; its free extremity, which was very sharp, must when introduced, rest against the walls of the conduit, and owing to its direction towards the vulva, become buried in it at the slightest effort to extract it. The injuries inflicted on the unhappy woman, as may be supposed, were terrible. "

Dr Tardieu, from whom we have already borrowed a quotation, gives two instances of abominable perversity through which acts of unqualified obscenity were committed on very young children.

He describes them in this manner.

**Incredible outrage committed by a mother upon her daughter.** " The third fact which we have had to verify is much more serious, and constituted an instance of the most frightful perversion of the senses, and of the most incredible outrage committed by a mother upon her daughter.

III. A woman, still young, had, under the influence of

an aberration of the imagination which it is impossible to comprehend, deflowered her little daughter, now twelve years of age, by introducing her fingers very deeply and several times every day, for several years, into the sexual parts and the anus. The woman asserted that in these monstrous practices she had nothing else in view but the interests of her child's health and a singularly refined attention to cleanliness. But her guilty passion was revealed by the very manner in which she had touched her, and by the circumstances of the case. The child related, with an accent of striking truth, how that it was not unusual for her mother to wake her in the middle of the night, and to abandon herself to unbridled acts upon her which were prolonged for a whole hour; and during this scene, before which the mind recoils, the mother was panting, with animated look and colour, and heaving breasts, and when she stopped was bathed in perspiration. The examination to which I submitted the child was most conclusive, and it is certainly allowable to say that, had it not been authenticated by science, the fact no doubt would have been considered impossible. But the parts were the seat of a most characteristic deformation; the vulva was wide and gaping, the hymen completely worn out and reduced to an indurated ring; the vagina dilated to the highest degree, permitted the passage of several fingers; it was the same with regard to the anus, the orifice of which was enlarged and revealed the repeated acts of violence which the child had undergone. The little girl was otherwise well-formed and of an interesting appearance; her general health had not suffered.

Casper, as if to contradict his too absolute teaching regarding the incompetence of physicians in these matters, has had to verify a fact himself which shows a striking analogy to the preceding, and which we cannot omit to

quote in order to complete this totally new portion of our studies. An abominable accusation was brought against the mother of a child aged ten, who had brutally introduced into her child's genital parts first one finger, then two, then four, and finally an oval stone, in order to render the parts fit for coition. The child, more developed morally than physically, was pale and of a feeble constitution. The orifice of the vagina was slightly wider than in children of that age; the mucous membrane of the vagina was red and painful; the circular hymen was not entirely destroyed, but displayed several lines of tears on the two sides; a mucous secretion took place from the vagina.

As to the last case, which gave rise to a most important criminal trial at Paris in 1866, it reveals facts of a revolting nature perpetrated by two women-servants and their lovers upon two young children belonging to the house where they were in service.

IV. Lessons of the most disgusting lewdness had not been spared to a little girl aged seven, and a little boy two years her junior. On the former, outrages were inflicted both with the hand and tongue; foreign bodies, carrots, potatoes, were introduced into the sexual organs, in addition to the violations which were consummated; as to the latter, the anus had been dilated not only by means of the fingers, but also with different objects, particularly small spoons. The authentications to which I had to proceed in this deplorable affair, have left no doubt as to the reality of the facts, and have shewn what disorders resulted from them.

**Outrages and acts of unnatural obscenity committed on a little girl aged seven and on a little boy aged five : very remarkable local disorders.** I have already reported the case of

the servants who used the most disgusting violence on their master's two children, the details of which were unfolded before the Seine Court of Assizes in April 1866.

I ascertained the existence of the following disorders in these children.

The little girl, dark-complexioned and seven years of age, is fat, and of a pronounced strumous constitution. The lower parts of her body are excessively developed. The thighs are very large. The vulva is enormous and covered with hairs. The clitoris is voluminous, the nymphae are projecting and hard, displaying an unusual turgescence.

The vestibule is wide and funnel-shaped. At the bottom appears a red mammilated tubercle formed by the hymen thrust back and partly torn. The vagina is contracted and does not admit the finger. There is no inflammation there, or running, or communicated complaint.

The fork is effaced. The anus, scarcely separated from the vulva, is very wide, almost gaping, and capable of receiving a body larger than the finger.

The little boy, aged five, has a very long penis and a very mobile prepuce. The anus displays only a certain degree of dilatation. "

## CHAPTER XIV

### OPERATIONS AND MUTILATIONS PERFORMED ON THE GENITAL ORGANS OF WOMAN

Elongation of the nymphae.
Infibulation.— 1st by a ring, 2nd by welding.— Manner of performing this operation in the Soudan. — The small bells of the Abyssinian women.— Girdles and padlocks of chastity. — Bridled C....s are not always closed (Brantôme).
Clitoridectomy. — Feminine circumcision as practised in Africa and other countries.
Ovariostomy or Extirpation of the ovaries.— The castrated Amazon.
Extirpation of the uterus. Touching story of a young artiste.

**Operations and Mutilations performed on the genital organs of the woman.** These are as numerous as in the case of men. We place them under the headings of *Elongation of the nymphae*, *Infibulation*, *Clitoridectomy*, and lastly *Extirpation of the Ovaries* or *Ovariotomy*. We merely mention the operations which are performed on the uterus after serious disorders, such as cancer for instance, although the extirpation of the uterus as been performed with complete success, only it is not an ordinary operation.

**Elongation of the Nymphae.** The Hottentot Venus has the nymphae naturally very elongated, but this peculiarity may be shown among European women.

Broca (1) has stated that in a young French woman they formed a projecture of from five to six centimètres.

At Beyrouth, Duhousset (2) has seen and drawn a case similar to that of Broca.I have seen myself the nymphae very projecting, and sometimes one exceeding the other to a notable extent.

According to Mantegazza, (3) " the traveller Merenskij (4)asserts that the apron of the Hottentot women is artificial. He was led to this erroneous opinion by seeing the Basutos and other African tribes artificially lengthening their wives' nymphae. He declares that the elder young girls perform this operation on the younger ones almost immediately after birth. They stretch out the nymphae, and later on wind them round small sticks.

**Infibulation.** To speak exactly, infibulation in the woman is an operation which consists in passing a ring through the labia majora in order to prevent their being parted, and, therefore, any sexual intercourse. It is a means of compulsory virginity, employed in India and in some countries of Africa. The word comes from *fibula*, an instrument by means of which the anciens Romans prevented actors from copulating, with the object of preserving their voice. Martial speaks of singers who sometimes broke the ring, and whom it was necessary to bring back again to the black-smith : " Et cujus refibulavit faber penem ". Celsus speaks of the infibulation of Roman women, and indicates the method. It

(1) Société d'Anthrop. de Paris. Séance du 22 janvier 1880.

(2) Bulletin de la Soc. d'Anthrop. de Paris, 1878. XII, pp. 124, 126.

(3) Archivio per l'Antropol. IX. 1879, p. 280.

(4) Die Hottentotten. Zeitshr. fur Ethnol. Bd. VII. S. 22. Berlin, 1875.

appears that the anus was also infibulated, in order to protect it.

The term " infibulation " is also applied to an operation whose object is completely to close the external opening of the vulvo-vaginal canal, either, as in Darfur and Nubia, by stitching together the labia majora of young girls in infancy, or in cutting out a shred of flesh, as practised by Asiatic tribes, from each of the labia, and uniting the wounded parts by means of suture. But in either case a small opening is contrived for the outflow of the urine, and of the menses.

**A Sudanese prostitute.** Prof. Panceri (1) as quoted by Mantegazza, was able to study the genital parts of a young prostitute in the Sudan. When she was standing up, the prominence of the depilated *Mons Veneris* was immediately observable, as also the absence of the entry to the vulvar slit. Panceri believes that this form of the *Mons Veneris* is connected with the transversal contraction of the pelvis, and its development recalls the ancient statues of Venus and the Graces, or of eunuchs, except that in the latter the orifice of the urethra is seen on a level with the skin. On looking closer, a linear cicatrix is distinguishable in place of the vulvar slit, above which the finger could feel the clitoris in its place, but not very moveable, hidden beneath the cicatricial tissue. It was only after the legs have been stretched apart that the vaginal orifice becomes visible in form of a slit near the peritoneum; its edges were constituted by the ridge of the labia minora almost welded together with the labia majora, and by the fork of the vulva. Directly after this ridge the black coloration ceased, and the rosy tint of the vaginal mucous

(1) Archivio per l'Antropol. e la Etnologia, vol. III. Firenze, 1874.

membrane began. So that in this manner the upper commissure, the clitoris, the orifice of the urethra, the anterior half of the nymphae were hidden by the adherence together of the labia majora.

**The mode of operation.** Infibulation is performed thus : the labia majora are scarified with a razor on their internal surface, then a canula in shape of a catheter is placed in the urethra to allow the urine to flow out. The big toes are bound together by a cord, then the ankles, after which the lower members are more or less regularly bandaged together to half-way up the thighs, in order to keep the legs together, so as to aid the cicatrization of the labia majora. It is therefore untrue that stitches are made as has been often asserted.

When the apparatus is removed, there remains only a small orifice on a level with the fork for the passage of the urine and the menstrual blood. During eight days the patient must remain on her back. She is then allowed to rise, but her feet are kept bound together for another eight days, in order that the labia majora may not separate.

If an infibulated young girl marries, a midwife comes forward with a sharp knife and cuts open the cicatrix from below upwards in presence of the husband, reserving to herself to make larger openings previous to accouchement.

Panceri also observed another infibulated negress on whom the cicatrix had been three different times cut open (1); she informed him that they employ in the Sudan for infibulation, the pollen of a plant called *sene sene*.

1) Panceri, Letter from Prof. Mantegazza (*Acrhivio per Anthropologia*, etc. Vol. III, 1875, p. 335.

The Mussulmans condemn infibulation, and stigmatize the young girl thus mutilated by the name they give to the castrated, *mutahara*.

Lindschotten writes, according to Dr Ploss, that the little girls in Pegu are sewn, all but a small hole, and that when they marry, the husband enlarges the opening more or less (1).

Waiz also speaks of infibulation, and says that it is much in vogue in many parts of Africa. He adds that frequently the husbands sew it up again whenever they go on a journey, and that slave-dealers assure themselves in this manner of the chastity of a woman.

The late Dr Ploss collected a number of traveller's reports concerning this curious and barbarous custom, and we condense what he has put on record :

**The cutting open again of infibulated women**. " We have been able, " says this profound anthropologist, " to convince ourselves, that in general, infibulation causes an almost complete occlusion of the " shame-cleft ", in which only a very small opening is left the outflow of the urine. No explanation is necessary to show that genital organs so treated are quite unfit for the marriage functions, and that when rarely and exceptionally a conception takes place, which as it is known does not always absolutely require a veritable *emissio penis*, a regular delivery is out of the question. This inconvenience is remedied, among the tribes who practise the infibulation of girls, by cutting open again, at the proper place, the cicatrised part. "

**Women of the white Nile**. Cailliaud says,

(1) Lindschotten. See Zeitschrt f. Ethnologie. 1876, vol. 3, page 48.

referring to the Sennaar women (1). " A little while before marriage, this adherence, so contrary to nature, must be destroyed by incision. If any grievous symptom supervenes, the red hot iron and the razor are there. It would seem as if the blunted sensibility of these peoples prevented them from appreciating the unheard-of sufferings, and the serious and unavoidable accidents which accompany these inhuman practices, invented by the despotism of the stronger sex to insure themselves the first enjoyment of that virginal flower so fugitive in all other countries. However that may be, it costs dearly enough to render a young girl again fit to fulfil conjugal duties. If it happen that a girl, from want of means, marries without having been subjected to this essential preparation, the husband has to undertake it in the way that best suits him; but if he succeeds, — a difficult matter, — in getting her with child, she has the right to require that one of the matrons who exercise this cruel trade shall gratuitously remove the obstacles which impede child-birth. The young widow, who hopes to marry again, does not hesitate to undergo a second time the tortures of this double laceration ; but the case is rare. "

What Vita Hassan relates of the unfortunate Sudanese women is very similar (2): " Other tortures await them at the moment of marriage. This custom is practised by all Muhamedans in the Sudan, from Berber to Sennaar, including Kartum, Metamme, Schendi, Mussalamije, Walad, Madani, Refâa, Harâs, and Sennaar with its dependencies. It is said that this operation is not only required as a religious rite, but that its object is also to prevent a certain

(1) Cailliaud, *Voyage à Meroe, au Nil blanc*, etc. Paris, 1826-27, II.
(2) Die Wahrheit uber Emin Pacha, die Œgyptische Œquatorial.— Provinz, etc. Berlin, 1893.

malady, to which women who have not been so mutilated are exposed ".

" When the time of delivery draws near, another fearful mutilation awaits her. The babe about to be born must not come by the open and known road, the woman's muscles are cut through from the crease of the leg right up to the loin on one side, and through this the child is extracted. After the birth the opening is sewn up again in the same way as above before marriage, and in this manner is the woman restored to the same condition as before her marriage. It is not until a long time after her delivery that another Seehâma or matron makes her again fit to fulfil her marital duties.

**The re-opening of Nubian girls.** — Penay in his accounts of the Sudan also mentions this re-opening of the woman's parts (1).

" When the Nubian girl takes a husband, it is then to the matron that she applies for the latter to give to her sexual parts the dimensions necessary for the accomplishment of marriage. For the opening is too narrow, and not sufficiently capable of dilatation (by reason of the cicatrix surrounding it) to allow the most vigorous husband to succeed in penetrating. The matron now intervenes, and by means of a longitudinal incision, produces an opening sufficient to permit copulation. But as this fresh wound might tend to close again if the bleeding surfaces remained in contact, the matron introduces between the lips of the wound, and to the depth of two or three inches in the vagina, a new wooden cylinder, much more voluminous than the first : for this last is intended to represent the dimensions of the husband's member. This second

(1) *Bull. de la Soc. de géog. de Paris*, tome XVII, p. 4.

cylinder remains in place for forty days, when the cicatrisation is complete and its presence is no longer necessary ".

" But this is not all the torture that awaits the unfortunate woman who has already once or twice undergone the operation. If she conceives, which is generally the case, she will not be able to be delivered without once more undergoing the ordeal of the cutting instrument; for the same resisting frenum, which surrounds the vulva and which impeded copulation, also prevents the expansion of the parts through which the child will have to pass. Therefore the parts which refuse to dilate must be opened out by large and deep incisions. If often occurs that at the moment when the child, on leaving the pelvis, comes to lean against the interior partition of the genital parts, it then happens, as I said, that the matron, who has to seize the opportunity, proceeds to deeply incise, and in so doing inflicts dangerous wounds upon the infant seeking to find an exit, I have myself witnessed on such occasions razor-cuts unskilfully given, inflict mortal wounds upon the child. And yet, notwithstanding the torture which always accompanies this horrible practice of infibulation, notwithstanding the dangers to which it exposes both mother and child, in spite of all the efforts of the Egyptian government to put a stop to this frightful custom, the women of the Soudan do not the less persist in their ideas on this subject; as for the young girls, they seem to be more attached to it than the men, for they pretend that without infibulation they would not find husbands ".

In Tanner's account we read :

" *Festum, quod in honorem nuptiarum celebratur, ritu, qui finem castitati adhuc coactæ imponat, concluditur. Sponsa a quibusdam ex amicis suis, officio pronubarum fungentibus, tanquam jure occupatur. Mulier, rei agendæ perita, ferramentum*

*acutum, curvatum, in falsae urethræ canalem inserit, quod eum admodum curvatum est, ut, quum cuspis cura adhibita sursum propellitur, cutis, ubi opus est, perforatur. Uno ictu tegumentum dissuitur, et rimæ longitudo eadem prope, quæ prius fuerat, restituitur. Ex illo tempore sponsa summa vigilantia a pronubis observatur, a quibus ad mariti tugurium deducitur, etc., etc.* (see Ploss, *op. cit.*, vol. I, p. 183) (2).

Another learned German, Werne, speaking of the tribes South of the first Nile cataract, amongst whom he had travelled, says (1): "When now a young girl, whose virginity has been preserved in so scandalous a manner — has sooner or later become a bride, the obscene treatment is continued. One of those women who perform this operation comes a little before the marriage to visit the bridegroom, in order to take the measure of his manly advantages. She then manufactures a sort of phallus out of clay or wood, of the same dimensions, and incises the infibulated parts of the girl to the measure, and the instrument wrapped in a greased rag, is introduced and left in place, to prevent the borders of the wound from healing together again. After the usual noisy marriage rejoicings the husband takes his wife home, she biting her lips from pain, and leads her to the marriage bed behind a rough woollen

(1) A Feast held in celebration of the nuptials is duly consummated as ending the period of enforced chastity. The bride is laid hands upon, with a violence custom legalizes, by certain of her young companions who act as bridesmaids. Then a matron, an adept at the operation, inserts a sharp curved instrument of iron into the artificial urethral passage. This instrument is curved in such a way that, when the point is carefully adjusted and pushed up, the integument is perforated at the spot required. A single push severs the protecting membrane, and the longitudinal aperture is restored to just about its previous dimensions. From that time on, the bride is watched with the utmost vigilance by the bridesmaids, by whom she is eventually conducted to the husband's hut.

(2) Werne, *Reise durch Senaar*, etc. Berlin, 1852, p. 25.

curtain — and hardly have four or five days elapsed and even before the wounded parts have had time to heal, the human brute falls upon his victim. Before childbirth, the woman's parts are by incision integrally restored to their natural condition, but afterwards, according to the will of the man, they are again closed up so as to leave a smaller or larger opening, and so on. "

Brehm quite corroborates the above in almost identical terms (1).

Lanzi (2) also says that the same custom is practised among the Danakils, adding that this barbarity is so anchored in their habits that there are women who after childbirth spontaneously have themselves again infibulated.

Naturally this formation of cicatrices on the genital organs has a very prejudicial effect upon the act of child delivery. The traveller, von Beuermann, informed the late Dr Ploss that among the tribes who practise infibulation the women often have very difficult parturition ; and he adds miscarriages are there very frequent. The latter accidents cannot of course be attributed to cicatrisation of the genital parts. However, Beuermann noted also that in Africa, the women who do not undergo infibulation have very easy childbirth.

But infibulation is the cause of other evils; for instance there are often to be seen in the Egyptian hospitals women several times infibulated, affected with syphilis, and who, in consequence of that operation were afflicted with very extensive ulcerations. Uhle saw there several slave negresses dragged from a long distance in the interior of Africa. A syphilitic slave-driver had, on the road, taken them out of the slave-chain, and after slitting them open, had abused

(1) *Reizeskizzen aus Nord-Ost-Africa,* etc. Jena, 1855. 1 Th., S. 169.
(2) *Archivio per Anthropol. public dal Mantegazza.* 1883.

them. Their fresh wounds had been rapidly transformed into extensive syphilitic sores, with which they had to march for many weeks, without any means of cleaning and under a burning sun, until they finally found a haven in the hospital.

Very often, after having been delivered, the unfortunate women are again subjected to infibulation, as Hartmann, Vita Hassan, Brehm and Werne have informed us. Hartman (1) says :

" There are also female slaves that are thus infibulated. There exist cruel masters (Europeans even !) who have had at times their slaves for mistresses and who have had them subjected to this operation two or three times running, and finally have sold the unhappy creatures. "

Werne knew in the Berber country a young widow whose husband had forced her to undergo the operation on seven consecutive occasions. There remained fearful looking scars resulting from this atrocity.

Lindschotten, whom we have already referred to, says. — " When they are then grown up and marry, the bridegroom will cut them as much or as little as he thinks may just fit him ".

In Kordofan, according to Ignatius Pallme (2), among most of the tribes the bride is subjected to the " second circumcision " about 20 days before marriage ; by which he evidently means the cutting open. Ruppell, who in 1829 visited these people, says (3) : " The cutting open of the bride, that is to say the operation of opening the genital parts, does not take place until the stipulated marriage price (the wives are bought) has been paid down. The opening

(1) *Die Volkers Afrika's*. Leipzig, 1879. S. 69, 70, 88.
(2) *Beschreibung von Kordofan*, etc. Stuttgart, 1843.
(3) *Reise in Nubien Kordofan*, etc. Frankfurt A. M. 1829, S. 42.

thus effected is made larger according to the requirements of the husband. When pregnancy ensues, and that the moment of delivery is near, the opening is made larger by fresh incisions, and after delivery the borders of the entire opening are once more scarified so as to be ready to agglutinate again together, by which means the delivered woman returns at the same time to a state of virginity. She remains in this condition as long as she suckles her child; after which she is again cut open. These operations are renewed, if the husband requires it, until the third or fourth lying-in ; but are more frequently abandoned after the first childbed. — I have seen women, whose husbands having died shortly after their first confinement, and the subsequent operation having produced a second occlusion of their pudenda they were obliged by their parents to remain in that unhappy condition, because the cutting open again , excepting for marriage, would class them voluntarily among the loose women. »

Among the Somalis, according to Paulitschke, before marriage, certain female surgeons, or even the girls themselves, cut open the cicatrised part, which is further completely opened out shortly before lying-in (1).

**The circumcision of girls.** Among a certain number of peoples the strange custom exists of performing also on girls a sort of circumcision of the genital organs. This was at first considered to be a specially African custom, because it was at first from Africa only that information came to us on this subject. Since then we have learned that something similar also exists in Asia, and particularly in Indo-Asia, where the custom is prevalent. Taking into consideration the difference of race, and the distance be-

(1) *Dr von Hardegger's Expedition in Ost-Africa.* Leipzig, 1886.

tween the two places, it is altogether impossible to imagine a transmission of such a custom from one people to another. We can rather see once more that it is possible for the same peculiar range of thought to exist and to develop itself in the minds of quite different and far separated races of men.

The circumcision of girls is usually designated under the name of Excision. It consists in a sanguinary ablation of the smaller lips, together with the clitoris with its foreskin. But the peoples who practise this vicious custom do not all perform it in the same manner. Among certain tribes the whole of the parts mentioned are excised, whereas among others only one or the other is cut off. The custom of female circumcision is found to prevail in Egypt, in Nubia (Kordofan), in Abyssinia, in Sennaar and the neighbouring districts; in Belad-Sudan, among the Galas, Agows, Gaffats and Gongas, as well as among numerous other tribes of Eastern-Africa. It is said also to prevail in the small oases of the Lybian dessert, and among the Arabs, with whom the expression : " Oh ! son of an uncircumcised woman ! " is considered to be a term of most particular contempt (Wilken) (1).

Panceri, it will be recollected, has given us the graphic representation of a castrated woman of this kind.

**Circumcised Negresses.** But not only among the Muhamedan peoples of Africa, but also in the West of this continent, is female circumcision to be met with among the genuine negro tribes, such as the Susus, in Bambuc, the Mandingos, in the neighbourhood of Sierra Leone, in Benin, Congo and in Aera on the Gold-Coast,

(1) Bijdragen tot de Taal-Land-en Volkenkunde van Nederlandsche Indie. S'Gravenhaage, 1885.

among the Peuhls, the negroes of Old Calabar and in Loanda; in the South-East, among the Massai and Wakuasi tribes; in the South among the Betchuanas. This custom has also been noticed among the Malays of the East-Indian Archipelago. It has also been found to exist among the Kamtschadales, and lastly, and most astonishingly, among the Indians in Peru (the Chunchos or Campas and Tuncas) as well as among the Panos and all the other Indian tribes along the Ucayale river.

As was already observed, the original invention of this custom cannot be attributed to any particular people. It has been sought to trace it back to the Arabs and to find it in Muhamedan ritual. But Strabo (1) already speaks of female circumcision among the Arabs, and Bochofem mentions a Papyrus which confirms also the existence of this custom among the ancient Egyptians (2).

**The records of the Papyrii.** In the XV^th^ of the British Papyri, according to Bernardio Peyron, it is said as follows: « Armai, an Egyptian, living within the sacred precincts of the Serapeum of Memphis, presents the following written petition to the Strategen or high priest: " *Tatemi*, the daughter of Memphis, residing with him in the Serapeum, has already amassed by her collections and by the free gifts of visitors a certain fortune, amounting to one talent and 390 drachmas, which she has deposited in his hands to be taken care of. Thereupon was he deceived in the following manner by Tatemi's mother: she had pretended to him, that her daughter had attained the age when, according to Egyptian custom, she should be circumcised (περιτέμνεσται); and therefore that he should

(1) Strabo. *Geogr.*, L. XVII, c. II. § 5, ed. Siebenkees.
(2) *Das Mutterrecht*. Stuttgart, 1861.

pay the said sum into her hands, so that on the occasion of this solemn celebration she might be able to properly dress and endow her daughter. If it should come to pass that this intention be not fulfilled, of the circumcision of her daughter Tatemi in the month Mechis of the year XVIII, she would then refund him the sum of 2400 drachmas. He had accepted this proposal, and had handed to Neforï the said sum of one talent and 390 drachmas. But the mother had in no wise kept her word, and now, when the daughter addresses reproaches to him, claiming her money back from him, important business had prevented him from going himself to Memphis to attend there to this business. Therefore does he pray that Nefori be cited before the tribunal, and be made the subject of a judicial decision. "

The above passage proves that the Egyptians, who performed circumcision only on boys of the sacerdotal or warrior caste, submitted all the females without distinction to that operation, by which the daughters obtained their dowry, so as thus in a certain measure to earn their marriage portion. For as Herodotus testifies, no woman exercising any priestly function in Egypt, their circumcision could not bring them any priestly advantage, as in the case of the men; it was then either a privilege of the girls brought up in the serapeum, to be circumcised on attaining the age of puberty, or else all maidens were submitted to the operation.

Besides, there are Roman authors also who speak of this custom of the Egyptians, for instance, Paulus Aeginus (1), who lived in the 7th century A. D. says : " *Quapropter Aegyptiis visum est, ut antequam exuberet, amputetur, tunc præcipue, quum nubiles virgines sunt elocandæ* ".

(1) Paulus von Ægind, lib. III c. 70. Où il recommande lui-même l'ablation du clitoris anormalement développé.

**The age for female circumcision and the methods employed.** The circumcision of girls is accompanied among most peoples with peculiar ceremonies and festivities. The age chosen for the operation is usually early youth. In Arabia, according to Niebuhr (1), it is done a few weeks after birth; the Somali perform it at the age of from 3 to 4 years (Paulitscke); in Southern Egypt the girls are submitted to it before they attain puberty, in the 9th or 10th year (Werne); among the Mandingo negroes at the age of puberty (Mungo Park) (2); in Nubia in early infancy (Russegger) (3); in Abyssinia, among the Gallas, the Agows and others, usually when the girl is ten years old (Bruce) (4); according to Stecker the Abyssinians now perform the operation at the eightieth day after birth. In Dongola (Kordofan) it is done at about the eighth year (Rüppel) (5); among the Matkisses, a Betchuana tribe in South Africa, at the age of puberty (Delegorgue); it is the same in Old Calabar (Hewan); among the Malays, in Java, etc., it takes place at the time of the second teething (Epp) (6); among the Peruvian Indians, the Chunchas or Campas practise it on girls of ten years of age (Grandidier) (7). The Massai and Makuasi tribes, in South-East Africa, who circumcise their boys at the age of 3, perform the same operation on their daughters shortly *after* marriage; the Loanda negroes perform it 8 days *before* marriage. The Peuhls in West Africa perform it shortly after birth. In Persia, according to Chardin, some nomad

(1) *Reisebeschreibung nach Arabien*, etc. Kopenhagen, 1772. S. 69.
(2) *Journeys into the Interior of Africa*. Lond.
(3) *Reisen in Europa, Asia et Afrikan*, etc. Stuttgart, 1843.
(4) *Reisen in Nubien, Kordofan*, etc. Frankf. A.-M. 1829.
(5) Epp. *Schilderungen aus Hollandisch Ost-Indien*.
(6) *Nouv. Annal. des voyages*, 1861, VIII, October, p. 73, etc. 1862. Augt. p. 146.
7() *Voyage en Perse*, Paris, 1811.

tribes circumcise their girls when they become marriageable; but Polak (1), notwithstanding all his enquiries, was unable to confirm this.

Duhousset gives us a description of the operation as performed in Egypt.

" The circumcision consists only in the ablation of the clitoris, and is practised in the following manner on girls of from 9 to 12 years of age. The operator, who is generally a barber, makes use of his fingers, steeped in ashes, to seize hold of the clitoris, which he several times draws from behind forward, so as to be able to cut it off in one stroke of a razor, when it presents itself as a mere filament of skin. The wound is covered with ashes in order to stop the effusion of blood, and cicatrizes after a complete repose of a few days. I saw later, with the avowal of the operators, the little care they take in circumcising girls to remain within the religious limits of the operation, which they practise more largely by seizing the nymphæ at the level of the clitoris, and cutting them off almost at their root, at the inner surface of the larger lips, of which the mucous folds, which interest us, are as it were the lining which hides the organs of reproduction; what remains of the lesser lips forms, by the cicatrization of the smooth walls, which indurate and retract, a gaping vulva, which presents a singular appearance in young circumcised fellahs ".

Ecker (2) obtained as a present from Bilharz (3) an anatomical preparation of the parts in question proceeding from a Fellaheen woman. In this preparation there is no trace of the clitorid gland, of its prepuce, nor of the minor lips; all these parts have been entirely cut away. Ecker in-

(1) Polak. *Persien, das Land u. sein Bewohner.* I. Leipzig, 1865.
(2) *Archiv. f. Anthrop.* Bd. V, 1872. S. 225.
(3) *Zeitshr. f. Wissenschaftl. Zoologie.* Bd. X. S. 281.

jected the cavernous bodies from their root, and it then appeared that they were absent up to their point of junction; from there, the injected matter penetrated no further, and the parts were lost in a cicatrized tissue. An injection of the *Bulbi vestibuli*, specially known as communicating with the vascular system of the clitorid gland, did not succeed. Therefore, as Ecker says, it may be taken for granted, that in this operation the clitorid gland, together with its prepuce, had been seized, drawn forth, and rather deeply cut away.

According to Hartmann (1), in Egypt and in Abyssinia, the prepuce of the clitoris, but less frequently the clitoris itself or one of the lumps at the forward extremity of the outer lips, are cut away.

Gallieni has noticed that the custom of female circumcision also exists among the Malinke and Barbara tribes, on the upper Niger. On that subject he says (1): « Among these tribes the girls generally have attained the age of from ten to fifteen years before they are subjected to the operation, which usually is performed after the winter season, when the natives are amply provided with millet, necessary for the copious repasts which are prepared on this occasion. The operation is performed on the boys by blacksmiths, and by their wives on the girls. The instrument used is simply an iron knife, rudely sharpened. The patients must betray no sign of weakness at the moment of excision. On expressing our astonishment to see the operation of circumcision so often practised upon young girls, we were answered that they then remained more faithful to their husbands. Nevertheless, the native women do not take overmuch pride in their chastity.

" The families, whose children have just been subjected

(1) *Bullet. de la Soc. de Géogr.* Paris, 1883, t. IV, p. 573.

to the operation of circumcision, celebrate this event by dancing and singing, accompanied with more copious repasts than usual. Rich natives kill goats, fowls, sometimes even an ox; poor people are content to catch a stray dog or two in the village, which they add to their rice or *Couscousu*, and, wherever dolo can be prepared, they give themselves up to abundant libations.

" After the operation, the young circumcised, dressed in long robes with hoods attached which cover their head, do not come back to their families until they are quite healed. The lads are separated from the girls... the latter carry small calabashes filled with little pebbles, similar to our children's toys. In the morning early, they return beneath their family tree. The cicatrices take a long time to heal, for these natives have nothing to hold the skin after excision; from 40 to 50 days are required for perfect healing. Their return to their families is the occasion of prolonged festivities. Henceforward the lads are entitled to carry arms, and to state their opinion in council; THE YOUNG GIRLS MAY NOW MARRY. "

**The Indo-Asian peoples**. As we have already mentioned the same custom prevails in Indo-Asia.

According to the accounts of Riedel (1), female circumcision prevails on almost all the islands of the Dutch-Indian archipelago, particularly throughout the Mussulman population. It consists generally in a partial re-section of the clitoris. Concerning the inhabitants of Burn Island, he says :

" Before the advent of the first menstruation (with the boys, just before puberty), the teeth are filed down to the level of the gums, and circumcision is performed. The girls

(1) *Zeitschr. f. Ethnol.* 1885, S. 77.

take a bath, after which they are seated on a stone, and an old matron proceeds to cut from them a portion of the clitorid gland, for the purpose, it is supposed, of suppressing sexual desire before marriage. To stop the bleeding they apply to the wound the burnt and pulverized ribs of leaves of the sago plant (*Sagus Rumphii*). The operated girl is then led by the matron into her hut, where she is subjected to a special diet, and is not allowed to go out until the wound is perfectly healed. This custom is of Muhamedan origin. "

He adds that in the Seranglas and Gorong islands, amputation of the clitoris is performed between the ages of 8 to 10 years, and is accompanied by great festivities. It not unfrequently happens that the hemorrhage caused by the operation terminates fatally; but the victims are considered to be very lucky, as they will then go straight to Muhamed's seventh heaven. The operation is performed on girls by the mollah or priest's wife, and the child is afterwards put into a bath.

In Celebes, in the districts of Holontala, Bone, Boalemo and Kattinggola the young girls are circumcised between the ages of 9, 12, to 15 years. The operation is called " Mopolihoe Olimoe ", that is to say, " to be bathed with the Citrus hystrix " (a variety of the orange tree, the so-called prickly orange). Here also it becomes, as for the boys' circumcision, the occasion of great festivities, but the feeding is less costly. The operation on girls is performed by women (Riedel).

According to Wilkens, the girls are circumcised in earlier youth than the boys. This is also confirmed by Van Hasselt (1) as regard the Menangkabaw Malays. It is the same in Java, where the girls are submitted to the opera-

(1) *Zeitschr. f. Ethnol.* Bd. VIII, 1876, S. 184.

tion at the age of from 6 to 7. Among the Gorontalas it is performed much later, between the ages of 9 to 12 or 15 years, but always earlier than the boys, and on girls it is always women that operate, within the house, and it is affirmed, as among the Boeginese and the Macassars, the men are not allowed to be present, excepting perhaps the father. The act is as usual generally the occasion of festivities, although, particularly among the Gorontalas, there is less pomp and expense than when the boys are circumcised. It is only among the Macassars and Boeginese that the act is accomplished in quiet and without any festivities. The only information obtained concerning the operative methods employed, relates to the Javanese, the Macassars and the Boeginese. Among the first of the above-named, a small piece of the clitoris is cut-off, perhaps the clitorid gland, and the part cut-off is wrapped-up, together with a bit of turmeric root, in a piece of cotton and buried beneath a Kelor tree (*Moringa pterygosperma*). That the clitoris has really been cut, appears by the expression *putingitil* by which the operation is designated, and which signifies the breaking off of the *itil* or clitoris. According to Dr Mathes, only a very small portion of the clitoris is cut off, just sufficient to cause a slight flow of blood, for which reason the operation is called *kattang* or *katta*, which means planing. The operation is practised by two women, one of whom takes her place behind the girl, and separates as wide as she can the lips, so as to make the clitoris protrude (what Epp says, that the smaller lips are cut seems to be founded on a mistake). In the Archipelago among the Muhamedans, the occasion of the circumcision seems, as well as for that of the boys, to be celebrated by festivities which have more or less the character of a religious initiation.

It is quite the same, according to Riedel, among the So-

lanese. He writes as follows: — " The circumcision of girls, at which no man is permitted to be present, is in usage only among the Muhamedans, and is performed by old women, even by Dudukus, who, with a sharp knife, shave off a little bit of the *pokooti*, or clitorid gland. The child is seated on the knees of a woman, her legs being held wide apart, and maintained in that position by two other women. The wound is smeared with the sap of the *Curcuma longa* (turmeric), and as soon as it is healed the child is bathed by the same women. So long as the wound is not quite healed, the children are obliged to abstain from all heating foods. "

This operation is effected at the age of from 9 to 10. Uncircumcised girls are strictly forbidden to have any sexual intercourse, unless they marry.

Steller in speaking of female circumcision among the natives of Kamtschatska, alludes (1) to their largely developed nymphæ : " These are henceforth considered as a great shame, and are cut away, exactly as the ears of puppies are ".

It is particularly remarkable that the custom of female circumcision also prevails as a national custom in America. Its introduction there from other continents is quite out of the question. In the Republic of the Ecuador, in the Maynes district are located the Panos Indians, who were visited in the last century by the missionary, Francis Xavier Veigl who found that they were in the habit of circumcising their girls; on enquiring the reason, he was told by the Indians that they found circumcised women to be more capable and more skilful in the performance of their natural duties (2).

(1) *Beschreibung von dem Lande Kamtschatka*. Leipzig, 1774.

(2) *Grundl. Nachr. über die Verfassung der Landschaft von Magnat in Sud-America*, anno 1768. Nürnberg, 1798.

The Peruvian Indians along the Ucayale river, known as the Chunchos and Pampas, also practise excision on their daughters at the age of ten. On this occasion the neighbours assemble together, thoroughly decked out, and during 7 days prepare the festival with ceremonial songs and dances, during which they largely absorb the intoxicating Chicha, prepared from manioc. On the eighth day the girl is given a strong dose of fermented manioc which intoxicates her and renders her insensible; while in this condition, an old woman performs the operation on her, and the hemorrhage is stopped simply with cold ablutions. Immediately the songs and dances recommence ; the victim is then laid in a hammock and escorted from house to house. By circumcision the young girl is numbered among the women (1) (Grandidier).

**Girls in Egypt.** Our talented frend, the late Dr Godard, has supplied precise information on the circumcision and infibulation of girls in Egypt. " As was previously remarked, it is towards the twelfth or thirteenth year that the young girls are operated on at Cairo; in some provinces it is towards the age of from seven to eight years. Circumcision is usually performed by the accoucheurs, but often by those abkazars of whom mention has been already made, and sometimes by barbers. This is how the operation is performed :

The child having been placed and disposed as has been described for boys, the operator plunges his hand into ashes, in order that the parts may not slip from his grasp, he then seizes the clitoris, draws it forcibly forwards by repeated forward tractions and with one stroke of the razor he amputates the organ. M. Coulomb's barber, who

(1) Mantegazza, *op. cit.*

supplied these details, assures me that as for himself, he never cuts off the labia minora. But I found them absent in the women whom I examined; they probably follow the clitoris and are cut off at the same time. Another barber admitted to me that he seized at one and the same time both clitoris and labia minora, and that he cut off the whole with one stroke of the razor. This explains to me why I have always found the clitoris badly cut; because it is less easy to draw forward than the labia, which are elastic.

In Arabic, the clitoris is called *lambour* or *chamtra*, and the labia minora *chaftoura*.

The excision terminated, a small quantity of ashes is strewn on the bleeding wound and the hemorrhage is stopped. Instead of ashes, cotton soaked in oil is sometimes employed.

In general, the little girls remain for ten days without moving a step, and during another ten days they walk only with their legs wide apart. The operator employs the razor only, and does not make use of pincers as he does for the boys. Further, the barbers perform all their operations with the razor.

Later on, in the chapters which follow, I will make known the deplorable effects of this unfortunate operation. The passions are developed as usual, but the ablation of the clitoris prevents the Arab women from deriving the slightest pleasure in the procreative act. Besides, at the moment of accouchement they cannot be delivered until after numerous incisions of the vulva.

I questioned Solyman on the infibulation of women; this operation is performed from Jebel-Lilsileh, following the Nile, up to the Sudan. M. Linant had assured me that it was practised in Nubia; M. Bellandeau's cook had witnessed it at Dea; my coachman at Dorydab had told me that it was common in his country, so there can be no

doubt that infibulation is practised. Moreover, the details of the operation are constantly the same and as the information supplied by these various persons agrees perfectly, I think that they merit full confidence. This is further what Solyman relates.

The operation is performed towards the age of seven years. The Reïs makes use of both his hands to make himself well understood. He simulates the labia majora with the forefinger and thumb of the right hand to represent a knife. He tells me that a portion of the labia majora is excised and the totality of the clitoris. There is no suture, but as soon as the operation is terminated, the upper part of the patient's thighs are bound together, and the legs just above the knees as also the ankles. During three days she is left lying on the ground, incapable of making a movement; on the fourth day the bandages round the thighs are removed; on the fifth those above the knees, and on the sixth day those of the ankles. However these last are more generally left in place for another seven days. After the sixth day the girl operated on can walk, but with difficulty, the bonds holding her ankles preventing her from parting her legs. She can make a few steps and that is all. The entire treatment lasts thirteen days, and at their expiration she is permitted to walk, but very little. Girls, after their operation and until their marriage, are not allowed to mount on a camel, nor on horseback, nor on a donkey, so that their genital organs may not become enlarged. The husband alone is privileged to dilate his wife.

The operation is performed by old women.

I asked Solyman why they infibulate women? He thinks that it is prescribed by religion."

**The little bells of the Abyssinian women.**

Infibulation may be in some peoples attributed to a cer-

tain habit of coquetry. The Rev. Father François Alvarez informs us that among the Abyssinians the girls wear, from coquetry and to attract the men, little bells attached to their genital parts, where they hang and tinkle freely.

In several kingdoms of Africa, the king's wives and the principal women of the court, have their parts pierced the same as their ears; little golden rings and jewels are passed therein which these ladies are obliged to remove when their husbands wish to approach them.

**Girdles of Chastity**. These famous but little understood articles were, together with the padlocks of virginity introduced from the East into Venice, and thence the custom soon spread over the whole of Europe. The first to employ this apparatus was Francis of Tarrara, Provost of Padua in the XIV$^{th}$ century. It was a belt having a central piece made of ivory, with a barbed narrow slit down the middle, which was passed between the legs and fixed there by lock and key. A specimen of this safety apparatus is to be seen actually at the Musée de Cluny in Paris; but there were, it appears, skilful locksmiths in those days and false keys were not unknown. The troubadour, Guillaume de Machaut, speaks of a key that was given to him by Agnes of Navarra, and which evidently refers to a girdle of chastity.

. . . . . .

Then around me her arms she laid
And a golden key to me she gave
Which a master's hand had made.
See, this of my love is the measure,
Lo guard it till life is outdrave;
For this is the key of my treasure.
I make you the lord of my gold.
This makes you the master of Agnes,
And to you does her body hold.
In this lies my fortune, my riches
Of which I here give you largesse.

The existence,, or the use of these girdles of chastity, has been denied, but the presence of many undoubt-ed specimens of them preserved in several of the most important museums in Europe place their authencity beyond all doubt. This custom existed more particularly during the time of the Crusades, and exceptionally up to the fourteenth century; but a very curious instance is mentioned as having occurred as late as the middle of the eighteenth century, for it is recorded that the advocate Feydeau pleaded before the supreme court of Montpellier on behalf of a woman who accused her husband of making her undergo this shameful treatment. (Petition against the introduction of padlocks or girdles of chastity. — Montpellier, 1750).

**Bridled C***s are not always closed**. According to Brantôme, in fact, we read the following in the *Vies des Dames Galantes* of that genial and marvellous author : "In the time of king Henry II, writes he, there was a certain ironmonger who brought with him a dozen of certain machine to the fair of St Germain to bridle women's c.....s : they were made of iron and went round like a girdle, and went below and were shut with a key : so cleverly were they made that it was not possible for the woman when once bridled with it to arrive at the sweet pleasure, as there were only a few small holes in it for pissing.

They say there were five or six jealous tiresome hunks who bought them, and bridled their wives with them in such a way that they might well say, " Good-bye, happy time; if there had not been one who bethought her of applying to a locksmith very clever in his art, to whom she shewed the machine and her own and everything, her husband being then out in the fields, and he applied, his mind to it so well, that he made for her a false key, with which the lady closed it or opened it at any time

she wished. The husband never found out anything to say about it; and she gave herself up to her own good pleasure to the full, in spite of her foolish jealous cuckold of a husband, being always able to live in freedom of cuckoldom. But the wicked locksmith who made the false key tasted of it all; and he did well, so they say, for he was the first to taste of it : and was there not danger of it, for Venus, who was the fairest woman and whore in the world, had Vulcan, a locksmith and blacksmith for a husband, who was a very rascal, dirty, lame, and very ugly.

They say too that there were many gallant, honest gentleman of the court who threatened that ironmonger in such wise, if he ever presumed to carry about such merchandise, that he was afraid and returned there no more and threw away all the rest; and no more was he heard of, wherein he was wise, for it would have been enough to lose half the world, for want of any body to people it, through such bridles, clasps, and fastenings of nature, which are abominable and detestable, and enemies to human multiplication. "

**Clitoridectomy.** The clitoris is amputated with the greatest facility. This operation is performed by means of the bistoury, scissors, or galvano-cautery, and presents no gravity. The flow of blood is then stopped with ice or caustic. Garnier performed this operation with the linear crusher, without the slightest effusion of blood, " on a woman aged 48, whose clitoris had been developed by buccal onanism on the part of her husband, so that it formed a troublesome appendage, of the size and length of a leech when full of blood. Cicatrisation was complete in the course of a few days.

Formerly, physicians had scruples in doing it, through

fear of depriving the woman of all voluptuous sensations in the future. That this is an error is demonstrated at the present day by numerous cases of ablation of this organ. Levret, the celebrated French accoucheur, appears to have been the first to tkink of performing it, and his successor Dubois obtained a remarkable success in the case of a young girl wasted by consumption. Its first application in Germany was at Berlin, on June 20th, 1822, when Graefe performed it on an idiot girl, aged 15. Her intelligence developed immediately, and, three years later, she knew how to talk, write, and count.

An English surgeon brought it into vogue in London, about a quarter of a century ago, as a preservative against manualisation by little girls, and the nervous symptoms which result thence in married women. Experience of it has been acquired since in the United States, where this slight operation in frequently performed and meets with great success. Dr White performed clitoridectomy on a young girl addicted to onanism, suffering from epileptic fits. The vicious habits ceased directly, and there had been no recurrence of the epileptic fits three years after the operation.

Another mode of its employment is as a corrective to the excessive size of the organ. It succeeded notably in the case of a young lady aged 21, whose clitoris was as voluminous as the penis of a boy aged 14. Many observations attest, says Roubaud, that the amputation of this organ, while preventing fits of erotomania on the part of the woman, has not dried up the sources of pleasure. It has been seen that in its default, or in its absence, two other erogenous centres exist to arouse and develope the sentiments of love.

Clitoridectomy is employed as a cure for masturbation; it succeeds in the great majority of cases, and has been

extolled by Dr Varrin on the same ground and with the same object as circumcision in boys.

**Feminine Circumcision as practised in Africa.** If our surgeons remove the clitoris for a well-defined medical object, the ablation of this organ is a current practice in vogue among several nations.

" Dahousset describes the circumcision which is practised in Egypt on girls from nine to ten years of age, and which consists in the amputation of the clitoris and, moroever, of a portion of the nymphae, owing to the clumsy method employed. He believes that the Egyptians do not hold to the woman's participation in the pleasures of coition. The women on the other hand procure it by means of an exciting beverage which leaves them only the desire for pleasure unsatisfied. (*Bullet.*, 1877, p. 127.)

Panceri has studied the amputation of the clitoris and the infibulation of the woman in Northern Africa. The suture is made with scissors by a mid-wife, or by a woman engaged at the public baths. The operation is called *cassura* in Arabic. Either the gland of the clitoris is amputated together with the small prepuce and a portion of the nymphae, or the gland avoids the unskilled scissors, and they only succeed in removing the prepuce together with a part of the nymphae. This custom however is not general, and there are some families in which it is not practised.

Among the Ijvaros of the Upper Amazon, the clitoris is removed from all the women with special scissors, which Luciolli promised to give me when he paid another visit to that country. But on his return he unhappily perished together with his little daughter on the vessel which was conveying him to Brazil, and his body was thrown into the sea.

He assured me that the natives amputate their wives' clitoris because they are too lascivious, and as they have several wives, they hope to keep them faithful by this cruel means. It is difficult to imagine a more egotistical perversion, since love is a pleasure which is shared. To desire to abolish our companion's pleasure is a barbarity, which is punished with interest by the diminution of our own. " (Mantegazza, *l'Amour dans l'Humanité.*)

**Ovariotomy (Extirpation of the Ovaries).** The extirpation of the ovaries on account of disease, and the exision of the tubes which join them to the matrix, are performed frequently enough for operations to be known authentically after which the majority of the subjects have continued their sexual relations as before. The question proposed publicly in the American Medical Societes in 1887 has been answered in the affirmative, according to the following declaration of Dr Brown upon this point. " Several conservative physicians assert that this operation by desexualising the woman, changes the soft voice into a hard and masculine tone, causes the beard and moustache to grow, and destroys the sexual appetite. All these accusations are generally without foundation in the majority of cases. The advocates for or against feminine castration are therefore guilty of exaggeration. It is true that many young American surgeons are capable of going to these extremes. The surgeon ought not to be either encouraged or deterred by this ancient dogma of desexualising the woman, for sex is no more in the ovary than it is in the testicle; it is in the brain (1). "

This question raised in England has also been decided there by Professor Cust, a distinguished specialist. He was

(1) *Dictionnaire annuel des progrès des Sciences médicales*. Paris, 1887.

acquainted with three young women deprived of the uterus and annexes, the tubes and the ovaries, and who perfectly fulfilled their duties as wives. (British Gynecological Soc., 1887.)

Nevertheless the results obtained in France do not confirm the optimist theories of the Americans and English. Duplay, in 171 cases of ovariotomy had 145 recoveries and 25 deaths. In the account of a surgical excursion in England, M. Fort reported that he had seen M^r Spencer Wells perform his 1025^th extraction of the ovaries. (A peculiarly English detail, the 1025^th operation was performed on the wife of a Bishop.) The method is simple and expeditious. The patient is laid on a raised bed; the legs are brought together, stretched out, and kept in position by a strap; the two hands are fastened to the right and left on the side of the bed. When the anasthesia is complete, the surgeon, standing up, makes an incision along the mesial line of the abdomen below the umbilicus.

Let us end at length this chapter on surgery with a bright passage, consisting of a story borrowed from Victor Meunier (1).

**The Castrated Amazon.** An unhappy young lady of wealth, who by the death of her parents had been made mistress of her fortune and her own actions, discovered no other employment for her vitality and wealth than that of horseriding. Her passion for the horse was so exclusive of all else, that in order to be freed from the periodical impediments of feminine nature, she sought for a surgeon who would open her stomach, and perform upon her that extraction which Velpeau reckoned " among the prerogative of the doers of lofty works".

(1) *Excentricités physiologiques*. Paris, 1889.

Velpeau may have changed his opinion doubtless about that, as about hypnotism, and his skilful hands to-day practice ovariotomy. It is none the less true that such a mutilation has no excuse but when it is praiseworthy, that is to say when the sacrifice of the part is made in the legitimate hope of saving the whole.

It is stated that in Arabia ovariotomy is practised on the women employed in the harem; but they are barbarians. It appears that it is practised in India on the dancing-girls; but that is outside our civilisation, and the horror of the means is in harmony with the ignominy of the end. Among ourselves, putting aside the surgical cases in which it is always the relief and safety of a human creature which are sought, castration is commonly performed on chickens, the sow and the cow, in order to fatten them and sometimes on the mare to abate its ardours. Two illustrious men, Wier and Graefe, relate that in the hope of putting an end to his daughter's licentiousness, a castrator of pigs did the same to her as he did to them. When a girl has a mind sufficiently depraved to claim the same treatment with the sole object of riding a horse every day of the month, it is to be hoped that the diplomaed scoundrel necessary for the perpetration of the outrage may not be met with. He was met with. I am happy to say it was not in France. I regret to add that it was in Geneva.

The young girl was put to sleep and opened, and for the sake of a bribe, a surgeon made out of a healthy body intended to hand-on life, a barren and worthless thing.

If the ablation of the *tester muliebris* (Galix's expression) involve an absolute infecundity as necessarily as the analogous operation in the other sex, it is only in the very great majority of cases that it involves the suppression of « that periodical tribute paid to the star of night, " as Villaret says of Joan of Arc, who, according to him, was exempt

from it; but that noble creature was only twenty when she died. It is but very exceptionally that the « clock of health », so named by Moriceau, continues to mark the hours. Well! you are going to exclaim that is very well, but the history of our amazon — I say ours, but she is no more yours than mine — her history increases by a unit the number of exceptions. The unhappy creature pays her tribute as before. Nothing is changed, neither the dates, or the rate, or the number of days during which it prevents her each month from mounting her horse. This is the first punishment, while she waits for the precocious excessive corpulence which comes to domesticated females who have undergone castration, and then, on the top of all, the horrible old age of an eunuch. If the conscience is silent, the flesh will speak.

**Extirpation of the Uterus.** The total extirpation of the uterus is much more rare than the extraction of the ovaries. This operation may however be performed without danger to the patient, as in shewn by the following statement, borrowed like the preceding from Victor Meunier.

**Affecting Story of a young Artiste.** On the same day that M. Duplay was discussing the ablation of the ovaries at the Academy of Medicine, the total extirpation of the uterus by the natural paths was performed on a young dramatic artist, aged 21, under the care of M. Pillaux at the Hôtel-Dieu.

The *Gazette des Hôpitaux* recalls a fact in connection with this, giving us some idea of that progress for which we can never be sufficiently thankful. It refers to the first extirpations performed by Recamier, before anaesthetics were known: which does not carry us back beyond the period of our own youth.

The medical journal finds this account given in one of its previous numbers. Such stories are enough to make the flesh creep. The editor does not reproduce it litterally, but gives only its general impression : " it is like a nightmare ". The patient filled the amphitheatre with her piercing screams, and struggled desperately. In a too hasty dissection of the points of union between the bladder and the uterus, the former of these two organs was laid open. How in fact could the courage and strength be found in surgeon and patient necessary to allow all the time required for this work of art. We think we can see Roux and Récamier... tearing the uterus with their fingers, drawing it with all their force, trying in vain for a long time to give a see-saw motion to that organ by bringing it down, so as to make it come out bottom first " — by the natural paths.

What a difference there is to day, as a result of that beneficent progress. The patient (from *patiens*, suffering) though dissected alive in the most sacred part of her being, suffers nothing, feels nothing, remains dumb and motionless. The surgeon is as calm as though he were preparing himself to perform the operation by a previous rehearsal on a dead body. Nothing hurries him. He has all the time to perform it thoroughly.

On this occasion the patient is a nice-looking girl of dark complexion, with an intelligent countenance, full of confidence in the surgeon, whom she has implored to cure her at any price, and with no less confidence in the result. She was a mother when she was fifteen years old; she had an early apprenticeship to those joys and griefs, which also become prematurely for ever unknown to her. An epithelioma (cancer), from which she has been suffering for some time, necessitates the terrible operation for which she now lies stretched on her back, in a state of unconsciousness, which has not been reached without some trouble, in one

of the special wards contrived in the roof of the hospital and lighted from above, and where all the operations affecting the abdominal cavity are now performed at the Hôtel-Dieu.

The ward is under the roof in order to be as far away as possible from the rest of the hospital. It is reached through an apartment which is completely empty, and the only use of which is to make the isolation perfect. The operating-ward leads into a third apartment in which anaesthetic preparations are first applied to the patient. She is then carried to what used to be called the bed of pain, but which is now merely an operating bed.

When she returns to consciousness, the patient declares that she feels no pain.

It may be considered improbable, but there does not remain even the slightest trace of it on the stomach which is flat, supple, and indifferent to pressure.

She only complains of ennui in her isolation, and of the heat under the roof, and never makes any request but to be brought into the general wards.

She was completely cured at the beginning of July (the operation had taken place in the month of June) and left the hospital.

Towards the end of June, as her companions in misfortune had clubbed together to offer some flowers to the head-surgeon, whose birth-day it was, she even found herself strong enough to take the part, which was hers by right, of complimenting M. Tillaux in the name of the patients under his professional charge.

*Plaudite cives.*

Art is great, and consequently the mind.

## CHAPTER XV

### ANATOMICAL IDYLLS

We reproduce some extracts from the work of Dr Hager (1) which he entitles Anatomical Idylls.

" Villemain d'Abancourt agreeably describes these anatomical details in the following verses :

Nature one day did form a vase,
Whose shape was first designed by Love.
'Tis not of gold or silver made,
Or porcelain or common clay,
But ivory white and ebon black
Entwind around its graceful shape,
Contrasted are and yet agree.
The mouth of every common vase
Is first bent in and then turned out,
Like jasmine which the garden crowns ;
So Nature's hand with cunning art
Bent back the edges of this vase.
If you, dear reader, seek to find
An emblem of its shape divine,
Go, seek the shell, on ocean's shore
'Tis found, a maidenhead 'tis named.
The edges of the magic vase
Are rosy red, or coral's hue,
Two columns of enamel fine,
Their name I may not tell to thee,
A double pedestal, support
The virgin vase, placed' neath an arch
Where always reigns eternal spring.
And there secure it fears not anght,
For cold or heat cannot there come.
Tis fashioned for the God of Hearts,

(1) *Anatomie des Organes génitaux.*

So Cupid comes, when he is wrath,
And pours his tears upon its breast.
Flowers and fruit alike are found
At times upon its fertile ground.

Voltaire, has likewise traced with his universal pen in the lively and witty style which characterizes his lighter efforts, the portraits of the amatory region which engages our attention.

I seek a little bushy wood
Which you own, my dear Aminthe
Which shelters, if it be not shorn
A most delightful labyrinth.
And every month the flowers return.
To deck its paths with hues of love.
Permit me then to shed a tear
Within the borders of your grove.
— Begone, fair sir, and take your tears
Beside another stream to rove;
For much I fear that you may spoil
The flowers which grow within my grove.
For if you weep with might and main,
Such tears as yours may me compel
Before the year comes round again
Myself to shed some tears as well.

Dr Lacombe treats of the same subject (1).

At the foot of a Mount which is Venus's own,
In a valley enclosed by the shade of a wood,
Is a temple renowned; its appearance alone
Is enough to betoken Dame Nature's kind mood.
At its portal are seated sweet Love and Desire
And they beckon to Pleasure with smiles to come in
At their feet is a stream which two Naiads conspire
To guide now in torrents and now in cascades
To a rosy red basin, surrounded with flowers,
Lying hid by the path which leads through the glades
To the shrine where the home of the God is concealed.
On two sides it is open; the eye is entranced
At beholding the beauties which there are revealed.
For'tis here, in this sacred mysterious shrine
That the form and substance together combine
To hallow the union of Hymen and Love.

(1) In the *Luciniade*.

## CHAPTER XVI

### ORGANS ANNEXED TO THE GENITAL APPARATUS. — THE ANUS IN MAN. — THE MAMMÆ IN WOMAN.

**The anus and its importance.**

Anatomical description of the anus and rectum. — Muscles of the anus. — Relation of the prostate and the seminal vesicles with the anus in man. — Variation of the dimensions of the rectum and anus. — Remarkable dilatation of rectum and anus. — Limits of the dilatability of the rectum and anus. — Foreign bodies introduced into the anus. — The beer-glass broken in the rectum. — The sheath of the Cook's knife. — The neck of Petine's bottle. — A new way of eating hard-boiled eggs. — Tardieu's opinion on the dilatability of the rectum and anus.

**Importance of the Mammæ or breasts.**

Anatomical description of the mammary gland. — The lacteal secretion. — Chemical composition of the milk. — Anomalies of the mammæ.

Conclusion of the 1st part.

**The anus and its importance.** The importance of the anus cannot be gainsayed, not only by reason of its intimate connexion with the genital organs of the two sexes, but in addition because it serves (and that oftener than its turn) for a coition for which nature did not create it. It is therefore a veritable accessory genital organ and on this ground we give its description according to Beaunis and Bouchard.(*Nouveaux éléments d'Anatomie descriptive*).

**Anatomical description of the anus.** "The

anus, the inferior orifice of the alimentary canal, is a circular opening situated $0^m03$ before and beneath the coccyx on the mesial line. When closed, it has radiated folds which disappear when it is distended. The skin, which is provided with hair in man, sinks down into the opening to form a connection with the mucous membrane; up to a height of $0^m008$ to $0^m015$ above the anal orifice, it has peculiar characteristics (*anal mucous membrane*); on this level it is separated from the rectal mucous membrane by a line formed by the folds at the superior concavity, which intercept the small *culs-de-sac* open above, *sinus of Morgagni;* from this line seven or eight reddish, vertical projectures descend, which are lost above the anus the columns of the rectum. This anal mucous membrane is thin, moist and soft, of a bluish or bright-red colour, and it always remains harder and drier than the rectal mucous membrane. In fact, it is only the skin slightly modified, as is proved by its structure: it has a tesselated epithelium; it possesses papillæ and large sebaceous glands and is entirely without Lieberkuhn's glands.

**Vessels and nerves of the anus.** The arteries of the anus come from the hemorrhoïdal arteries. The veins form an internal sub-mucous plexus with longitudinal meshes, and external plexus situated in the cellular tissue which surrounds the external sphincter. These two plexus, which in a normal state display dilatations and strangulations, communicate by the anastomotic branches which traverse the fibres of the sphincter. From these two plexus start veins which follow the arteries and the anastomoses of which cause the system of the veins and the general renal system to communicate together. The deep lymphatics proceed to the pelvic ganglia, those of the sub-cutaneous plexus to the inguinal ganglia. The ner-

ves come from the sacral plexus and the great sympathetic.

At the lower portion of the rectum and the anus a striated muscular apparatus is annexed, composed of two muscles : the external sphincter and the levator of the anus.

**The rectum.** The rectum has a length of about $0^{m}25$. It begins at the left sacro-iliac articulation, proceeds downwards and to the right as far as the third sacral vertebra; then follows the bend of the sacrum inclining first a little to the right, then to the left; it then returns on the mesial line and, having reached the point of the coccyx, turns backward to finish at the anus. It is then inflected in the lateral direction and the antero-posterior direction. As far as the second sacral vertebra it is enveloped in the peritoneum, which forms a mesorectum to it, in its second portion, as far as the last sacral vertebra, the peritoneum covers it only in front and on the sides; finally, for the remainder of its extent it is perfectly free.

**Connections.** 1st The first portion reaches, in man, to the depth of the bladder and prostate, from which it is separated by a loose cellular tissue; lower down, as it turns backwards, it deviates from the membranous portion of the ureter (*recto-urethral triangle*). In the woman, it reaches to the vagina, to which it is closely united so as to form the *recto-vaginal partition*, then it becomes separate from it (*recto-vaginal triangle*); 2nd, the *second* portion is separated from the bladder in man, from the uterus and vagina in woman, by the *cul-de-sac* which results from the reflexion of the peritoneum over those organs, a *cul-de-sac* in which the circonvolutions of the slender intestine are situated.

**Interior conformation of the large intes-**

**tine**. The walls of the large intestine are $0^m0015$ in thickness on a level with the ligaments of the colon, $0^m001$ on a level with the embossments. They are composed, like the slender intestine, of three tunics, the serous, the muscular tunic and the mucous.

(1st) The serous, much more incomplete than on the slender intestine, will be described together with the peritoneum.

(2nd) The muscular tunic displays two layers; one of longitudinal fibres, the other of circular fibres. 1st *longitudinal fibres*. These fibres, on the cœcum, the ascendant colon and the transversal colon, are accumulated in three longitudinal bands, and only a few of them very lighty spread remain on a level with the embossments; these bands are shorter than the length of the large intestine; on a level with the descendant colon they are reduced to two; finally, on the rectum, they surround the whole periphery of the intestine, while leaving here and there a few lacunæ. As to their termination, some of them are lost in the pelvic aponeurosis, and some in small elastic tendons, which traverse the external sphincter to unite with the sub-cutaneous cellular tissue of the anus (Luschka). A portion of these rectal fibres go to form two flattened fasciculi $0^m004$ wide, situated in the levator of the anus and which unite with the anterior surface of the coccyx (recto-coccygian muscle of Preitz). 2nd *Circular fibres*. They accumulate at the lower part of the rectum and form there a sphincter (*internal sphincter*) $0^m03$ high and $0^m007$ thick.

3rd *Mucous*. The mucous of the large intestine has a pale reddish yellow colour. It displays irregular folds, which disappear on distension; in the cæcum and the colon, it displays longitudinal projectures which reach to the ligaments of the colon, and falciform folds which reach to the transversal grooves of the external surface; these folds en-

circle recesses (cellules of the large intestine), which by distensior may form veritable pockets. The internal surface, with no villosities or valvules, has a riddled appearance due to glandular orifices ".

**Muscles of the anus.** We have seen above that the anus forms the outlet of the rectum. Its opening is kept closed, in order to prevent the exit of fecal matter by two muscles, 1st *the external sphincter of the anus*, which forms round the lower part of the rectum a muscular ring 20 millimètres in height by about 8 thick. Its *superficial fibres*, *sub-cutaneous sphincter*, are inserted in front of the coccyx and behind the bulb in the sub-cutaneous cellular tissue and at the under-surface of the skin. The deep fibres rise behind the external surface and the point of the coccyx by a fold; in front they reach to a fibrous fold which joins the bulbo-cavernous to the sphincter, which passes beneath the fold of the transverse superficial; the deepest form a little bay which reaches without interruption to the front of the rectum. The superior fibres are continued with the inferior fibres of the levator of the anus, in such a manner that the two muscles may be considered to be but one single muscle in the shape of a funnel, of which the levator forms the extended portion and the sphincter the neck.

(2nd) **The levators of the anus.** This thin, membranous muscle is firmly inserted 1st in the internal surface of the sciatic spine; 2nd at the posterior surface of the pubes on each side of the symphysis; 3rd in the interval of these osseous points, at an aponeurotic arch adhering to the pelvic aponeurosis. From these insertions the fibres of the levator incline backwards and pass some of them, the smaller number, in front, the rest behind the anus and the rectum.

The two muscles of the anus are in close relation and are enclosed with the muscles of the perineum, the description of which we shall give further on.

It is the same with the arteries and the nerves with which this region is richly supplied.

The muscles of the perineum are furnished with nerves from the *internal pudic nerve*, while the levator of the anus is supplied directly from a branch of the sacral plexus.

The levator of the anus conduces to contract the abdominal cavity ; it rises besides the posterior wall of the rectum in front and behind, and manages the anal opening behind; it acts in defecation.

**Relations of the prostate and seminal vesicles with the anus in man.** The relations of the anus with the genital organs are closer in man than they are in woman. The *prostate* in the first place, a little behind the entrance of the anus, and the *seminal vesicles* a little higher, are only separated from the rectum by some muscular tissues and fibres of inconsiderable thickness.

This is to be noted in order to comprehend the nature of the pleasure which certain depraved persons feel in passive sodomy. The intimate connection of the muscles, nerves and sanguine vessels renders the two so to say solid, and we shall give the proofs of this in the physiological portion of this work.

Bouchard (*Nouveaux éléments d'Anatomie descriptive*) has the merit of affording a clear comprehension of the relations of man's genital apparatus with the anus.

**Variation of the dimensions of the rectum and anus.** The rectum forms a bowel of considerable calibre in man. The anus closes it by a narrow slit, by the help of the two muscles which surround it. In child-

ren this slit often hardly admits the small canula of an enema. In many persons, especially in women, the anus always remains contracted, and the fecal matter, thoroughly ground up, has a volume scarcely exceeding an ordinary taper.

In other persons, on the contrary, especially in men, the fecal deposit may reach the size of a forced-meat ball, and in the case of an individual indulging in habits of sodomy, it is not surprising to meet with veritable puddings.

A similarly great difference arises from two causes : 1st congenital conformation : there are large and small ani, just as there are large and small mouths; this is evident; 2nd all manœuvres performed on the anus result in dilating the anus, frequently in an extraordinary manner. The reason is easy to comprehend. The two muscles which surround the anus close it after the fashion of the strings of a purse. They are so disposed as to open *from within outwards* at the will of the defecator. But when, in consequence of the often repeated intromissions of a hard voluminous body, like the virile member, they are accustomed to open *inwards from without*, their elasticity is overcome by this manœuvre in an inverse direction of their organic disposition. Then the anus may attain a truly extraordinary dilatation which is only limited by that of the rectum.

**Remarkable dilatation of the rectum and the anus.** This dilatation may be 1st *progressive*, or 2nd *rapid*. The first is more particularly the result of sodomical practices. We shall study it in detail in that part of the work which relates to sodomy. Nevertheless it is also employed in surgery. It is *slow* and *gradual* when the calibre of the instruments with which it is performed is in-

creased little by little. It is *intermittent* when the dilator only remains for a certain time in the cavity. Lastly it is *permanent* when the instrument is left and remains until it can be replaced by another more voluminous one.

**Rapid dilatation** is a surgical operation employed long before our time. It goes back to the time of Ambroise Paré, who was the first to invent a dilator with three branches. Without going back farther than the end of the last, and the beginning of the 19th century, we already see a number of processes and instruments invented to obtain the dilatation of the lower end of the intestine.

Desault, in order to struggle with the contractions of the rectum, confined himself to the use of twists and rolls of lint. Later on, other surgeons, not so timid, had recourse to mechanical dilatation, and brought with it the true forced dilatation. The instruments have multiplied more and more to our own day.

Let us recall the dilators invented by Ancelin, Larrey, Demarquay, who contrived a dilator with three blades or stems of metal, soon followed by Huguier's dilator.

Nélaton and Beylard brought this class of apparatus to perfection. Lastly other surgeons, Wisseman and Amussat. have had apparatus manufactured in which incision was combined with dilatation.

But of all these apparatus, the best is still the operator's hand. The illustrious Récamier discovered a mode of forced dilatation to cure fissures of the anus, in which the operator's two thumbs are introduced into the anus, and by drawing them rapidly in opposite directions, the violent opening of the entrance of the anus is effected. We shall estimate the value of this process, when we say that it is still the *only* one in use.

It was reserved for Dr G. Simon of the University of

Heidelburg to demonstrate that it was possible to extend the dilatation of the rectum as far as *the introduction of the hand* into this cavity, and thus to show how far the dilatability of the rectum can go. We give the method of the German surgeon according to the thesis of Xavier Lacoussière (1).

**Limits of the dilatability of the rectum and the anus.** " The exploration of the lower part of the intestine by means of the finger and even of the hand is far preferable to the introduction of mechanical dilators. Jobert de Lamballe distrusts with good reason " the three branch instruments which are used for the dilatation of the rectum. " Particularly when no operation is in question, when it is only desired to form a diagnosis, what is the good of having recourse to dilators, which, alas, often produce another result than dilatation .

With the fingers and hand an exact calculation is obtained of the enlargement which it is desired to obtain.

" During the last few years, says M. G. Simon, the examination of the rectal cavity has been made with one or at the most two fingers, or again by means of a narrow speculum. We have now learnt to feel all the cavities of the abdomen with half and even with all the hand and to pass into the rectum the largest and widest speculum. " The German Professor's method, though new in surgical practise, is not so, we believe, in the veterinary art. For a long period the exploration of the horse's abdomen has been performed according to Dr G. Simon's process. It is groped, to use an expression which is sanctioned. Nevertheless it was a courageous thing to put forward a practise which was looked upon as strange or rather unknown to all in its application to man.

(1) *De la dilatation rapide de quelques cavités naturelles.* Paris, 1876.

Experiments have been made on a living body and on a corpse.

In clinical surgery, the diagnosis of tumours of the uterus, ovaries and bladder, even those of the kidney, would have been much facilitated by the introduction of the hand into the rectum. The latter although thrust very far in, has not entailed any serious inconveniencies to the patients. In 20 or 30 cases, which are not recorded in the memorandum which we have had in our hands, Professor G. Simon reached the height of the umbilic in his exploration, and his manœuvres have never resulted in the slightest lesion.

When it is desired to use the hand for the exploration of the rectal cavity, it is of course necessary to make use of chloroform, and to prolong the anaesthesia to complete resolution. The sphincter does not then offer any resistance. If a rent was to be feared, it would be prevented by a few incisions made in the skin on the periphery of the anus, or again by the complete incision of the sphincter behind.

The width of the rectum being, say $65^{m}$ in diameter to the height of $0,14^{m}$ or $0,15^{m}$ above the anus, the hand at first can give itself free scope. But, when it arrives at the commencement of the meso-rectum, it finds itself stopped by the diminution of the calibre of the intestine, which at this level is not more $45^{m}$ to $50^{m}$ in diameter. Therefore only two or three fingers can be passed into the sacro-iliac. To increase the dilatation any further would be dangerous, and could not be done without risking the rupture of the abdomen.

The German Professor assured himself of this on the corpse. " In order to try, he says, if the rectum, in its upper part, could become sufficiently enlarged to allow the passage of the hand, I pushed with all my might, having

first taken the precaution to thoroughly twist it, so that it only measured 0,020 in diameter. I was able to push high enough to reach the processus ensiformis (!) ; but on inspecting the intestine, the latter was torn in several places above my hand. "

Dr Nussbanne, of Munich, in the case of a woman with a small abdomen, reached the same point as M. Simon did in the corpse, and that without occasioning the least rupture of the smallest disorder. And M. Popp, his first assistant, thinks that we may profit by this experience for " the diagnosis and clearance of strangulated hernias or the diaphragm. " We shall not follow the Munich surgeons as far as that, and we absolutely reject this practise agreeing in that with M. Simon himself. "

**Foreign bodies introduced into the rectum**. Whether it is owing to refinement of pleasure or to any other cause, the list of foreign bodies which may be introduced into an anus, whether it be masculine or feminine, would be lengthy. The extraction of these foreign bodies involves in the majority of cases dilatation without bleeding. Now after what we have said regarding the extreme distension of the ano-rectal conduit, it will not occasion surprise to find foreign bodies in the rectum frequently of a considerable size.

The introduction of the entire hand is conceivably but a small matter after such bodies. Let us say however that for objects of the least size, for those especially which are situated in the upper part of the rectum, the indication shewn by manual exploration would be the same. In the latter case it would be better not to make use of instruments which are more difficult to direct than the hand or finger to reach the object. Nélaton reports an interesting case.

**The beer-glass broken in the rectum.** " In 1814 a man had introduced a large beer-glass into his rectum after a drunken orgie. The attempts to extract it were fruitless; the forceps were applied, but the glass broke, and it was possible to extract only the smaller fragment. M. Velpeau, after several unsuccessful attempts, was obliged to turn the foreign body round in order to bring it out by its smaller extremity, and in spite of the care which he took to protect the walls of the intestine with a shoe-horn, he was unable to prevent considerable lacerations. The patient succumbed eight days afterwards to a phlegmon of the pelvis. "

This fact fully confirms our statement above, that the introduction of instruments into the rectum is not always without danger, and also that this conduit is susceptible of an extreme dilatation.

Saucerotte, however, was obliged to make use of the forceps to extract from the anus of an old maid a scent-bottle, five inches long by one in diameter. — The operation had no serious results.

**Diversity of the foreign bodies introduced through the anus.** When we run through the observations of surgeons respecting foreign bodies introduced through the anus, we see the most incongruous objects figuring there, some of which we quote in the following observations.

Morands reports (1) that a man aged 50 complained to the Academy that he had the canula of a syringe in his fundament, and that when he felt the foreign body seized by Professor Gerard's forceps, he completed the operation himself by running out of the hospital, but leaving between

(1) In the *Mémoires de l'Academie de Chirurgie.*

the forceps of the astonished operator a large wooden knitting-sheath.

Another case is that of a man, aged 30, who left a conical piece of wood in his rectum, three inches long and two inches wide at its base, which Saucerotte could not extract without the help of a gimlet.

Again a weaver thrust through his anus a turnip with its head complete, and still equipped with its principal root, and we hear of a monk, from J. Nolet, who inserted into his rectum a phial full of Hungary water, in order to cure himself of the colic, as he sanctimoniously declared.

Desault preserves an observation for our benefit of a public writer who inserted in his fundament a jam-pot, five inches long, of a conical shape without any handle at bottom, and the small extremity of which measured two inches in diameter.

M. Buffet informed the Medical Society of the case of an individual who, having thrust into his anus a tavern glass, the fragments of which had to be extracted with the forceps, was not cured by this of his curious fancy, but later on thrust into the same place a glass decanter which he broke himself in the paroxysm of his suffering, by hitting it with the handle of a fire-shovel.

This practitioner also relates the story of a husbandman, aged 46, who, while polluting himself in the ordinary way by means of an ear of barley insinuated into the urethra, did not disdain however a pollution by the posterior also. On the first occasion he pushed into his rectum a large snuff box, of a slight cylindrical shape, which, as it would not come out, compelled him to have recourse to a surgeon's assistance; but this experience was of no profit to him, for a short time after he again introduced into the intestine a wooden mug, which this time it was impossible to extract and which caused his death.

De Marchetis mentions the introduction of a pig's tail into a prostitute's anus. It was a most troublesome matter to extract it because the persons who had played this sorry trick, had introduced the animal's tail the same way as the hairs lay, so that it was impossible to withdraw it without brushing up the hairs.

The American doctor, Parker, succeeded in extracting a glass mug, 3 1/2 inches high, and having a diameter of 2 inches at the base, which had been introduced by a prostitute into the anus of a Chinaman, aged 60, while he was drunk, and which was successfully extracted without breaking the glass.

But perhaps the two most original cases are those of a cook's knife and of the neck of a bottle. Before detaching these let us recall what we have mentioned of the case related by Tardieu of the two children, the brother aged 5 years and the sister 7, who had been subjected to monstrous practices, and particularly to the introduction of carrots, potatoes and spoons into the anus, from which such a dilatation of the anus resulted to the little girl, that it was nearly blended with the vagina.

**The sheath of the Cook's knife.** A knife, according to the cook's tale, had been stuck into a bench by its point. The cook, who apparently must have been lightly clad, wishing to sit down on the bench, sat down with *his hole open wide*, and *swallowed it up*. This was his first version.

Two days after, he was obliged to give up his work. At the end of a month suffering great pain (and he must have been) not to say seriously ill, he consulted M. Le Dentu, who examined the offending part. At 7 or 8 centimètres from the entrance of this chance sheath so benevolently supplied to the knife, an inflammatory tumour had deve-

loped. The point of the instrument was felt there, which had slipped very high into its new case, and it was possible to touch the handle. Incision! A compassionate pair of forceps seized the point. The patient had been chloroformed. *In vino veritas*, says the Latin proverb. Anaesthesia has its intoxication too, and under its influence the cook stammered out, " I did it myself " (1).

**The neck of Pitinè's bottle.** Pitine, surnamed the Little Guano, resided in a snug little apartment in the Avenue des Champs-Elysées, and earned his bread by following an industry which dates back to the time of Sodom.

He had a respectable circle of clients, and on Sundays he used to frequent the Avenue des Acacias, and on that holiday he used to reduce his price to 5 francs. This pitiful creature was afflicted with an all-pervading passion for sodomy, and during the week he used to climb on the outside of the omnibuses to offer himself to the butcher boys. When he was repulsed and returned home alone, he gave himself up to anal masturbation by means of the long neck of a bottle.

An accident occured to Pitine which created a great commotion in the medical world.

Owing to a cause which is somewhat difficult to explain, the neck of the bottle while performing its office was swallowed up in the intestine. Pitine, in consternation, summoned a doctor, who decided that a surgical operation was necessary. The doctor chloroformed the patient and did not awake him until after he had very skilfully extracted the object. When he awoke, Pitine perceived his instrument of pleasure, threw himself upon it, seized it and cried out, displaying the greatest joy.

(1) Victor Meunier, *Excentricités physiologiques*.

" Here you are then, my darling, another time I will tie a bit of string to you, so as not to lose you. (1) "

**A new way of eating hard-boiled eggs.** We will complete this series of anecdotes by relating the story, verified *de visu*, of a convict in the Island of Nou, in New Caledonia. The convict, a youth employed as a domestic, was cook to an employé of the Penitentiary, and had cooked a dish of hard-boiled eggs with spinach. Half-a-dozen eggs had been given to him, but the master of the house when he came to examine the quarters which had been cut up, could only find those of four. *Inde iræ!* He accused his cook of having eaten two eggs. The latter denied it with all his might, but he was betrayed by a small Kanaka scullion. The cook, as soon as the eggs had cooled, had taken the two largest and delicately introduced them into his anus. I was residing next door to the official. He sent for me to verify the delinquency; I ordered the accused to assume the usual position for defecating, and I made him penetrate his anus with his index finger steeped in oil. Then bidding him push the anal sphincter forcibly so as to open it, I gave the patient a sharp smack on the belly. An egg immediately came out by its small end. But the second egg, which had been put in with the small end first, besides being far larger than the first (the second was a duck's egg) showed its large rounded end clearly at the entrance, but did not pass it. I made a hole in it first with a gimlet, and then introduced a corkscrew in its place. The egg partly broke in the passage, but the larger piece having come out, I drew out the rest with my bent index finger.

Here is a new way of eating eggs which is unknown to the majority of people.

(1) Docteur Luiz, *Les Fellatores*. Paris, 1888.

Let us finish this series of strange facts by giving Tardieu's opinion, who thus sums them up.

**Opinion of Tardieu on the dilatability of the rectum and anus.** "These facts are of a nature to show that the dilatability of the anus and the rectum is almost without limits, or rather that the only ones are those which are offered by the osseous walls of the lesser pelvis. Besides, a surgical operation intended to put an end to horrible pains of fissure, and which has latterly been widely disseminated, the forced dilatation of the sphincter has just thrown a clear light on these singular and hitherto almost incomprehensible cases of enlargement of the anus and excessive extensibility of the rectum. It is certain that the dilatation which is effected abruptly by the surgeon's effort, is made more slowly but quite as completely in the case of the pederast who is addicted to habits of passive sodomy. The new element, which has been brought into the question by the surgical treatment of fissure of the anus, should not be neglected, and deserves our attention from the point of view of the means of defence employed to cover the traces of pederasty. We ought, for the present, to confine ourselves to bringing forth the really decisive significance which the fact of the introduction into the rectum of voluminous foreign bodies should not fail to have to the eyes of the expert."

**Importance of the Mammae, or Breasts.** It is not unreasonable for us to consider the mammae as an annex of the genital apparatus, for they secrete a liquid intended to nourish the new-born child when it comes forth from its mother's womb. The important part which devolves upon them as *erogenous centres* of genital sensibility has caused them to be abused, and there is a mammary

onanism in existence just as there in an onanism of the penis and clitoris. Their development is in constant correlation with that of the reproductive apparatus. It is the first sign of the young girls puberty and nubility,and these external charms, joined to all the rest, seduce the heart of man. Their sensibility which becomes more exquisite with each menstruation marks their relation and their close sympathy with the generative organs of the woman. They assume a more considerable volume at the moment of puberty and particularly at that of parturition. Well developed in girls who are properly shaped with reference to genital requirements, they display on the contrary a rudimentary appearance in those who are devoid of such endowments. We frequently see young girls with slightly prominent hips, with angular forms, with an upper lip lightly fringed with hair, with a masculine gait and a developed clitoris, displaying at the same time hardly any mammae, and those scarcely more developed than those of a young boy. The opulent development of these organs is most frequently a sovereign excitant for the two sexes in their conjugal caresses. The lascivious attraction and charm which these two eminences exert over the genital sense demonstrate the amorous heat, sensibility and excitement which exist in them.

We give below the anatomical description of the mammae taken from Beaunis and Bouchard (*Nouveaux Eléments d'Anatomie descriptive*) a work which has been of the greatest assistance to us in editing this first part.

**Mammary glands of the Woman.** The mammae, two in number in the human species, are situated on a level with the great pectoral, the lower edge of which they slightly overpass, from the third to the seventh rib and transversely from the sternal edge to the arm-pit. They

are about $0^m12$ wide at their base by $0^m09$ in height.

Their size is very variable, and depends on the size itself of the gland and especially on the quantity of adipose tissue which surrounds it.

Their shape is almost hemispherical, and may also be slightly conical. In any case, the summit of the gland, occupied by a voluminous papilla, the nipple, is turned forwards and slightly outwards. After gestation and lactation, the nipple changes its shape, becomes pendant and piriform, and may even become considerably elongated in certain races (Hottentots).

The *nipple*, ordinarily situated at the height of the fourth intercostal space, represents a voluminous projecture, cylindrical or conical, rounded at its extremity and of variable length ($0^m010$ to $0^m015$). Sometimes it scarcely goes beyond the surface of the breast, and may even be sunk below its level. Its colour is brown or rosy; its surface is wrinkled, like shagreen; provided with large papillae, and displays the twelve to fifteen orifices of the lactiferous conduits. The nipple increases in size during menstruation and pregnancy and is liable to grow hard when touched, or under the influence of lascivious thoughts.

The nipple is surrounded by a zone of $0^m03$ to $0^m04$ in width, called the *areola of the nipple*, of a rosy colour, which becomes brownish during pregnancy. It is covered with circular concentric series of papillae, which are in continuation with those of the nipple. During pregnancy and lactation, a certain number of nodules are observed there (5 to 10), reaching $0^m003$ in size, *Morgan's tubercles*. These are nothing else but *aberrant lactiferous glands*, incompletely developed, and sometimes a little milk may be obtained from their orifice. (Montganery, J. Duval).

The breast is composed, 1st of the mammary gland and its connective interstitial tissue; 2nd of a layer of adipose

tissue covered by the skin; 3rd of the skin and nipple. And lastly it possesses vessels and nerves.

(1st) *Mammary gland*. The mammary gland is isolated and has the shape of a disc thicker at its centre, and the posterior surface of which is slightly concave; the anterior or cutaneous surface is convex and hollowed with numerous cupuliformed depressions. Except when in the state of pregnancy it form a greyish white homogeneous mass, of an almost fibro-cartilaginous consistency and very incompletely lobulated. *During lactation*, on the contrary, the glandular granulations and the lobules become more evident, but can never however be so easily isolated as in the ordinary glands and clusters. It may there be seen that it is composed of from twelve to fifteen lobules, each of which gives rise to a distinct excretory conduit, or *lactiferous canal*; these canals open on the nipple, after displaying on a level with the areola a fusiform dilatation (*ampulla* or *lactiferous sinus*) which may attain a width of 0m008. After this dilatation they undergo a contraction, and on a level with their exterior opening they are hardly more than 0m004 in diameter Each one of the lobules may be injected separately; nevertheless anastomoses, which are denied by several authors, exist between the lactiforous canals and the different lobules (A. Dubois).

**Lactiferous conduits** (1). The mammary glands have the ordinary structure of cluster-shaped glands The *glandular vesicles* or *acini*, are rounded or pear-shaped, and are composed of a proper membrane and a polygonal epithelium, the cellules of which, at the moment of lactation are considerably multiplied and are infiltrated with fat. Acini of new formation are produced at this period. The

(1) After Vidal.

thinnest excretory conduits, which issue directly from the acini, have the same structure as the latter. In the larger conduits are found, from without inwards, a fibrous membrane, a proper homogeneous membrane, and a cylindrica epithelium. There are no smooth muscular fibres in their walls.

The connective interstitial tissue becomes excessively rich in plasmatic cells at the period of lactation. It is dense and resistant in the deep part of the gland and looser at the periphery. *Under* the lower surface of the gland there stretches a distinct fibrous lamina, which separates it from the aponeurosis of the great pectoral; on its superficial surface it encircles some species of depressions, in which are situated greasy lumps which give to the surface of the gland an alveolated appearance when these lumps are removed.

(2nd) *The adipose layer* which covers the breast and gives to it its rounded form and its elasticity, is $0^{m}03$ in thickness on an average, a thickness however which may vary within widely extended limits.

(3rd) *The skin* of the breast exhibits nothing in particular except at the level of the areola and the nipple. There it is pigmented, provided with large papillae, vascular or nervous, and contains sebaceous glands with hairy follicles, as well as sudorific glands. But what especially characterizes it is its wealth of smooth muscular fibres.

These fibres are for the most part disposed circularly in the areola and the nipple, and play the part of sphincters in connection with the lactiferous conduits which the traverse. By their contraction, they contract the areola, and elongate and harden the nipple (*erection of the nipple*). Longitudinal fibres are also found in the nipple which disappear at its base in the connective interstitial tissue.

**Vessels and nerves**. The *arteries* of the breast come from the internal mammary, from the long thoracic, and from the aortal intercostals. The deep *veins* accompany the arteries; sub-cutaneous veins are also met with, which are often visible beneath the skin and which sometimes form an incomplete circle beneath the areola (*Haller's venous circle*). The larger number fall into the external jugular. The lymphatics, exceedingly numerous, proceed to the ganglia of the arm-pit, and through the intercostal lymphatics to the ganglia of the thoracic cavity. The nerves come from the fourth, fifth, and sixth intercostal nerves, and from the thoracic branches of the brachial plexus. The larger part of them proceed to the skin. "

**Lacteal secretion**. The lacteal secretion first shows itself at the moment of parturition by the excretion, under the influence of pressure, of a transparent yellowish liquid, called colostrum, which represents the milk in the embryonic state. Soon the latter itself appears with the properties which characterize it.

The milk is a thick liquid, of a white colour and opaque, composed of an emulsion, that is to say of a large quantity of fatty globules held in suspension in a transparent liquid. If the milk is allowed to stand for some time, a layer of cream is formed on the surface, which exactly represents the fatty matter of the milk. By beating it, the membranes which envelope the fatty globules are torn, and the fatty matter then becomes *butter*. Under the influence of acids, hot air, and certain substances (rennet, etc.) the milk grows sour and curdles, the concrete part is cheese or *caseine;* the liquid portion left, which has a sourish taste, constitutes whey.

**Chemical composition of the milk**. The ana-

lysis of woman's milk furnishes the following proportions *per litre*.

| | |
|---|---|
| Water | 900 grammes. |
| Butter | 30 — |
| Caseine | 28 — |
| Sugar of milk | 45 — |
| Phosphates | 2.50 — |

The sugar is a complete aliment not only for the child, but often also for anyone recovering from a serious illness.

**Anomalies of the Mammæ.** Multimammal women, that is to say those who have more than two mammæ, are met with more frequently in warm than in cold climates.

History relates that the mother of Alexander Severus had three breasts. Madame Wethes, of Trèves, one of the loveliest women of her time, also had three pretty breasts on her chest, forming a kind of triangle.

Lynceus saw a handsome Roman lady who had four breasts arranged in two lines one above, the other below, which did not pass beyond the short ribs.

Gardner knew a mulatto woman at the Cape, possessed of five perfectly developed breasts, each of them able to furnish half a litre of milk. Nature had made her this gift on account of her fecundity. This woman became a mother when she was 14 years old, and bore children four and five at a time.

Percy, an army surgeon, speaks in his Memoirs of a vivandière from whose chest hung 5 long breasts, 4 of which were full ; the fifth was flaccid and wrinkled.

We find in the *Dictionnaire Philosophique* the story of the woman who had four large breasts on her chest, with ends of excessive length; an excrescence adorned with

hair proceeded from her rump; the hairs were so bushy that it would have been taken at first for a mare's tail.

Victor Meunier in his *Excentricités physiologiques* describes the abnormalities of the breast.

" The number of these magic bottles, always full, from which the woman's suckling draws with eager lip, is subject to variation. Instead of a pair, we find them up to half-a-dozen, quite a basketful which establishes between mammifers like ourselves and the other members of the class, a resemblance which is flattering to the latter. It is said that Anne Boleyn had three. A mother and her daughter observed by Adrien de Jussieu each had as many. A woman who a few years ago was under the care of M. Marotte had four, of which two were under the arm-pits and all gave milk. Here again, the men are in no wise inferior. François and Blandin give the case of a lieutenant in the Artillery who had four mammæ. Dr Handyside has published two facts of the same kind : the supplementary organs were situated beneath the two others and were much smaller than the latter : the subjects, whose photographs were displayed to the Medico-surgical Society of Edinburgh, were tall and robust, with large beards and a masculine physiognomy. Quite recently (1886) M. Blanchard has related to the Society of Biology the case of a man, the father of thirteen children, who, a few inches below each breast, bore a supernumerary nipple, a kind of badge of his generative merit; he has not transmitted this peculiarity to all his children, but to all those of one sex which is... the feminine? no : to the seven boys, each one of whom has, like him, these two supplementary nipples placed as they are on the father and more or less developed! Wait!

Of these seven sons, one only, the youngest, has had daughters; he has only had one, while he has had four

sons and all the latter are shaped like the six uncles and the grandfather, while the daughter, like her cousins, displays no peculiarity.

A young Polish woman, a servant, had her first child when she was aged 16, a boy whom she suckled herself. She did not then notice anything peculiar in herself, I mean to say on her chest, except some spots of pigment, which she took for *moles*, more especially as there were similar ones in different parts of the body, among others behind the neck.

When she become a mother the second time, she kept her bed for two days, when she observed that her *moles* gave milk. These supposed moles had become nipples. At the same time, she felt a " disagreeable moisture " under her arm-pits; on looking there, milk was seen again supplied by other accessory nipples, the latter without pigmented areolæ. M. Birganski, a few days later, having laid this phenomenal thorax bare in order to photograph them, discovered, beneath the breasts, which were extremely developed and pendant, two fresh nipples. On counting them all, their number was raised to eight, of which 2 axillary, 4 pectoral and 2 abdominal ; the six first were situated in a nearly symmetrical fashion, while the distance of the two latter to the mammæ was perceptibly different than from one to the other.

The child only drew milk from the well-shaped and developed mammæ, which were free from crevices and supplied a milk of excellent quality in abundance : he throve wonderfully. But when he sucked, a more or less considerable quantity of milk always exuded from the nipples under the arm-pits. On the other hand the other six did not supply any except when they were pressed, save however a tubercle of one of them, which gave a little of its own accord.

There are cases in which the situation of these organs seems to add somewhat to the interest which their number affords, and to strengthen the conclusion which it appears right to drawn from them. Thus, Dr Robert de Marjeski mentions the case of a woman who gave suck to several children by means of a breast situated in the fold of the groin (the left).

A German, M. Lichtenstern, the author of a monograph devoted to these curious anomalies, has observed half-a-dozen of them. They should be much less rare than could be supposed, in fact almost frequent, since one case has been found in 500 persons examined, which appears difficult to believe.

Their seat of predilection is the thorax. They are found there in nine cases out of ten. They are always disposed symmetrically, above or within the normal organs, so as to form in connection with them a line leading to the umbilic. In the cases which form the latter, the tenth, these breasts are found almost everywhere, at the groin (we have quoted instances of this), in the arm-pit, at the thigh, on the shoulders, and the back.

Regarding the significance of the fact, the author, it is unnecessary to say, proposes a Darwinian explanation. These surplus mammæ are a proof that the first representatives of our species had normally a larger number of mammæ than its present representatives. This being granted, the rest follows of its own accord. The mammæ which our ancestors had normally more than ourselves, as has just been *proved*, explain the supplementary mammæ which some of their descendants happen to show abnormally. Final causes, where Voltaire qualified *les causefinaliers* (1), as he did, were not more convenient.

(1) Believers in the theological doctrine of "Final Causes" concerning which so many books exist in the English language.

But, if that were very history which is still nothing more than a romance, the fact in which we are concerned and analogous facts, would not have the grossly materialistic significance which is attributed to them. Because the human species which, no more than any superior animal can constitute the general mean, is formed in the uterus of this or that species of mammifers, a fact which explains its zoological resemblances, should that prevent that species from being of another and more elevated essence than the rest of terrestrial creatures.

A case a little different from the preceding has been afforded by a young Moorish girl, passing through one of the hospitals of Algiers. In her case the organs in question were perfectly regular both in number and shape, which was irreproachable. The rarity consisted solely in this: besides the normal neck, each bottle had a second situated outside the first 5 centimètres from the latter and three times less in size; similar to it otherwise. It was not known if these supplementary organs were able to double the part of their principals; the latter never having been put in a position to operate. "

**Conclusion of the First volume.** We have terminated all that treats of the anatomical part of this work, and we believe that we have said all that concerns the *normal sex*, constituted according as Nature intended it.

Regarding the *abnormal sex* (Hermaphroditism), the study cannot be thoroughly understood until we have envisaged the laws of generation and gestation. This is the reason why we have placed it in the Second Part of this book, which treats of the Physiology of the Genital Organ, and its Anomalies and Singularities in the Human Species.

In the first volume I have done little more than follow the beaten path, marshalling the words of many minds in a narrow space. In the second volume I shall discuss and analyse, as they have never been analysed or discussed before, matters which are of the greatest moment to all men and women who have passed their majority.

Without descending to obscenity on the one hand, or to pretentious mock-modesty on the other, I shall handle the hidden things of human life in the spirit of the olden priests of Nature, who gazed upon the nakedness of their divinity without shame and without surprise.

These questions are still misunderstood; and shunned, misjudged, and feared, because of the misunderstanding. In England and her more puritanic Colonies; in the free States of united America, the *temeraire* who dares to probe into the secrets of life and generation is hunted down with more than sleuth-hound implacability, with a bitterness and a hatred that men rarely show over other things. Yet surely Aretino was right in maintaining that men have more reason to be proud than ashamed of those organs through whose instrumentation they come into being!

For my part, I must say that a desire to shed light has been the mainspring of my researches, and philosophizings. From ignorance of the vital things recorded in the present and succeeding volumes— corner-stones to a greater work in the future — most of the ills, dog-and-cat bickerings, cruelty between husbands and wives, domestic unhappiness, misery, divorce, suffering and death, step forth and evolve with the unerring sureness of fate.

These questions and studies *must* not be despised. Upon their correct interpretation hang the life and joy of humanity. Neither should they be made matter for vulgar mirth. In the knowledge of their mysteries is the reve-

rence and strengthening of body and mind. I do not seek to reduce the Science of Passional Ethnology to a lower level; my aim has been to lift it up to a greater height. Richard Payne Knight wrote the " Worship of Priapus ", my object has been to reveal and aureolise the outlines of its essential DIVINITY AND GLORY.

Dr JACOBUS X....

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Extract from *the Weekly Sun* (Lond. Jan. 1., 1899).

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**" SOCIETY "** (March 4th 1899) *Price* **16** *s.*

I have received a copy of the beautifully got-up *édition de luxe*, strictly limited to 500 copies, of « Sophie Arnould, Actress and Wit, » just published by Charles Carrington, 13, 13 Faubourg Montmartre, Paris. The book is compiled by Mr. R. B. Douglas, and contains some exquisite copper-plate engravings by M. Adolphe Lalauze. It is printed in large type, on thick plate paper, and is altogether a most engaging production. The varied adventures of Sophie Arnould's life are graphically described, as well as her operatic efforts and her many theatrical triumphs. We get an excellent *croquis* of what the Paris opera was like, and the private as well as public history of many of its stars 130 years ago, and as the principal playhouse of France was much interwoven with the Court and the Government of the time there are not a few funny little anecdotes, wich will delight alike the historian and the seeker after scandal. To say that Sophie Arnould was an unique woman would be untrue. France has had many like her — women of marvellous powers, who attained to the highest ranks in the theatrical profession, spent lives of mad extravagance and prodigal luxury, only to die in misery and want before their time, because they could no longer conjure up the means wherewith to supply their material needs.

Sophie Arnould's adventures are narrated very fully, even in some cases with what many may consider an excess of minutiæ, and it is only by their perusal that the English reader can grasp the conditions of life in Paris as it was lived in the reign of Louis XV. Some may be of opinion that the manners of those times have not greatly changed, and that Paris will always remain Paris. Such a view is, perhaps, not very wide of the mark ; but it must be said that the coarseness of Sophie Arnould's days is not so apparent under the present *régime*. The astonishing thing is that such a woman should have been deemed worthy at this lapse of time of such a full biography. The volume is more for the student than for the general reader ; but that it is an extraordinarily piquant record of private and public life of a queen of song can be justly said of it.

An example of Arnould's wit is contained in the following impudent reply to M. de Sartines, the Lieutenant of Police. It seems that unlike the kind Du Barry, Mademoiselle de Pompadour was a revengeful woman, and it happened that twenty years or more imprisonment was not an uncommon punishment for writing or singing a few scurrilous words about the favourite. Now it reached the ears of the Lieutenant of Police that at a supper-party given by Sophie some lampoons on the King's mistress were recited. De Sartines betook himself to the house of the actress, and questioned her, the answers being very unsatisfactory, the actress even asserting that she did not remember the names of the persons who supped with her on the previous evening. Much annoyed, the Lieutenant said, « But it seems to me that a woman like you ought to remember things of that sort. " Yes ", replied Sophie, « but before a man like you I am not a woman like me. " A reply which procured her twenty-four hour's imprisonment.

As a singer she was certainly a genius, and Gluck said of her, " If it had not been for the voice and elocution of Mademoiselle Arnould my ' Iphigenia ' would never have been performed in France. " It is amazing that so gifted and intelligent a woman could so squander her life in vice and dissipation. She died neglected and forgotten, " for want of means to procure remedies for the cruel sufferings she endured. " Belanger was the only one among her former admirers who had not forsaken her, " faithful among the faithless, only he, " but the Revolution had shattered his fortunes.

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# ÉTUDE

SUR

# LA FLAGELLATION

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## PRÉFACE A " L'ÉTUDE SUR LA FLAGELLATION "

En publiant cette étude, nous avons voulu franchement rompre en visière avec un préjugé suranné qui veut que certains sujets d'une nature parfois — mais pas toujours — scabreuse soient systématiquement exclus de la discussion. La Flagellation, dont l'origine remonte aux époques les plus éloignées, est un de ces thèmes que l'on s'est plu à classer dans la catégorie des *questions délicates* que l'on ne doit aborder qu'avec la plus extrême réserve. Notre but n'est pas d'imprimer aux idées de nos lecteurs une direction bien déterminée dans un sens ou dans un autre : de porter aux nues, grâce à une surexcitation pernicieuse des sens, cette antique institution qui, de nos jours, quoi qu'on en dise, n'en subsiste pas moins sous une forme identique au fond, mais modifiée dans les détails de son exécution ; nous nous bornons à soumettre au public un exposé aussi complet que possible, un recueil très consciencieux de toutes les théories émises sur ce sujet, une collection de faits s'y rattachant sans commentaires, tels qu'ils nous sont transmis

par d'antiques chroniques et de plus récentes études. A nos lecteurs d'en tirer la conclusion qui leur plaira. Déviant cependant au point de vue essentiellement documentaire auquel nous nous plaçons en ce qui concerne strictement la publication de cet ouvrage, nous croyons tout de même pouvoir émettre un avis tout à fait personnel, qui peut se résumer en quelques mots: « La Flagellation n'est, en somme, qu'un moyen comme un autre de provoquer une surexcitation des sens, que l'on a employé de tous temps plutôt dans ce but réel que dans un autre et qui a constitué, comme il le constitue encore aujourd'hui, un moyen détourné de faire naître chez les *émoussés* des désirs et des jouissances qui doivent fatalement amener un assouvissement d'appétits charnels. Le fanatisme religieux, les pénitences ascétiques et tous les autres prétextes qui ont servi de couverture à cette pratique n'ont dû avoir cependant qu'un résultat unique qu'il conviendrait plutôt de considérer et d'analyser au point de vue médical. »

Ce recueil, qui contient un certain nombre de faits et de relations entièrement inédits, intéressera certainement le lecteur à quelque classe qu'il appartienne: la lecture de cette étude produira sur lui, selon son tempérament ou ses principes, des impressions bien diverses : il pourra y puiser de l'étonnement; il pourra aussi s'en délecter, comme également il n'y trouvera peut-être qu'une amusante distraction, peut-être même, éprouvera-t-il un certain dégoût. Mais ce dernier cas se produirait-il, que nous ne saurions nous en plaindre, parce que nous aurions au moins réussi à faire prendre par ce lecteur-là, en légitime horreur cette manie qui n'a pu éclore et n'éclôt encore qu'en des cerveaux maladifs.

Nous n'éprouvons aucun embarras pour déclarer ici franchement que nous considérons la flagellation comme une des passions vicieuses inhérentes au genre humain. A ce titre, nous croyons le sujet digne d'attirer toute notre attention, et nous sommes persuadés que son analyse et sa discussion s'imposent. Au grand public de s'ériger en juge de nos efforts, qui ne s'appuient certainement pas sur une pudibonderie déplacée. Nous pouvons, en effet, avec une légère variante, faire nôtre, en la circonstance, un adage latin : « *Castigat scribendo mores*. »

En présence des lois de la nature, lois que certainement l'homme n'a pas inspirées, nos préjugés surannés, nos vertus hypocrites s'évanouissent comme fumée : la réalité, la vérité nous apparaît nue, entièrement nue, et quand nous cherchons à la travestir nous commettons tout simplement un crime de lèse-nature: ce n'est plus la vérité, ce n'est plus la réalité dès qu'on l'affuble des oripeaux de nos conventions stupides qui permettent bien de penser en toute liberté de conscience, mais n'admettent pas que cette liberté se traduise franchement et sans ambages, nous mettant ainsi dans l'obligation de vivre en un perpétuel mensonge à l'égard de nous-mêmes.

On nous a enseigné que le mariage, c'est-à-dire l'accouplement des deux sexes en vue de perpétuer la race humaine, tel qu'il nous est im-

posé par les lois, est le seul et unique système de copulation logique et légitime, l'idéal de l'hyménée, et que tous les autres systèmes, c'est-à-dire les rapports sexuels basés sur des principes différents, sont illicites et criminels et comportent forcément la damnation.

Cette théorie est identique à celles qui règlent toutes les religions : elle est trop consolante, trop idéale, pour répondre à la réalité des faits, car elle implique la bonté excessive et la vertu, ainsi que l'abnégation à toute épreuve chez les deux sexes.

Malheureusement l'homme, tout comme la femme, et cette dernière peut-être à un bien plus haut degré, sont dominés, subjugués par des passions qui ne sauraient obéir aux lois humaines, parce qu'elles subissent l'impulsion de la nature, souveraine maîtresse en ces sortes de choses.

Et ce sont précisément ces passions qui font naître en nous ces manies baroques, ces extravagances voluptueuses qui provoquent, de la part de notre pubibonderie de convention, les hauts cris que l'on pousse quand, par hasard, il se trouve quelqu'un qui s'attaque à la matière et entreprend de la disséquer et de l'analyser au point de vue psychologique.

De toutes les passions, la luxure est précisément celle qui s'impose le plus tyranniquement au genre humain : La flagellation, — et c'est un fait indéniablement établi, — est un des agents les plus actifs de cette luxure innée, à laquelle la chasteté la plus stricte n'échappe que très rarement.

L'homme a de tous temps cherché et trouvé dans la souffrance et dans l'influction de douleurs corporelles une âpre jouissance ; il n'a pas seulement puisé d'étranges sensations dans son propre martyre, mais il a aussi joui d'étrange, de cynique, et, disons-le, de révoltante façon des tortures infligées à son semblable.

Dans le volume que nous présentons à nos lecteurs notre rôle se borne à expliquer le but qui nous inspira cet ouvrage. Nous voulons propager, dans la mesure du possible, la connaissance approfondie d'une passion humaine qui se présente sous des aspects tellement divers et revêt des formes si variées qu'elle offre un champ d'études très vaste. On pourra puiser dans notre *Étude sur la Flagellation* maints enseignements, en tirer maintes moralités et se faire une idée exacte des différentes anomalies de la nature humaine dans ses vices, au point de vue des jouissances toutes charnelles, qui n'empiètent en rien sur le domaine intellectuel et moral. On ne saurait en effet taxer l'âme de tares qui n'affectent que la vile enveloppe humaine, le corps, et constituent, tout aussi bien que d'autres défauts constitutionnels, des aberrations physiques, c'est-à-dire un état maladif latent, dont, en somme, elles procèdent.

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L'ouvrage est encore moins un simple répertoire de faits imagés et sensuels, mais bien, comme le dit le célèbre Burton, traducteur de l'original des *Mille nuits et une nuit*, UNE ÉTUDE INTELLIGENTE DE L'ART ET DU MYSTÈRE DE SATISFAIRE LA FEMME « PHYSIQUEMENT » A UNE CERTAINE ÉPOQUE ET PÉRIODE DE LA VIE DE L'HOMME.

Peu de sujets présentent peut-être autant d'intérêt pour la majorité des hommes que celui traité dans ce livre. Du modeste paysan, jusqu'au plus puissant prince, la question de la vigueur génitale prime tout : chez les haut placés même bien plus fréquemment que chez les humbles. Aucune branche de la science n'est cependant traitée aussi superficiellement, avec autant de trivialité et, disons le mot, de criminelle négligence.

Le présent ouvrage, à la souscription duquel nous invitons les amateurs, est un traité de la plus haute importance tiré de la littérature médicale arabe. Il contient un grand nombre d'observations très curieuses et un exposé d'idées logiques et pratiques sur les sujets étudiés qui, certainement, donneront au volume un grand mérite en même temps qu'une valeur inappréciable.

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**The Pall Mall Gazette** (*June 5th, 1897*). DOCTORS IN LITERATURE:—"The medicine man has of recent years been infected by the *cacoëthes scribendi*. Heretofore, he was apparently inoculated with some lymph which rendered his verbiage intelligible to the layman and confined his writings to the medical journals. Since Dr. Conan Doyle escaped, a good many of his colleagues seem to have broken away invaccinated. Hence they make incursions into fiction, and generally with some success, for the doctor of to-days is, as a rule, a man of a liberal education. We now have the doctor as an historian in M. Cabanès's 'Secret Cabinet of History' (Paris: CARRINGTON), and very interesting he is. The side-lights the man of medicine throws on certain obscure points of French history are of real, if somewhat scurrilous, value. After all, the personal factor—more especially in the mediæval history—cannot be altogether eliminated. Professor Ihne was fond of saying that if Charles V. at one critical period had not had such a bad attack of gout the history of the Reformation in Germany would probably have been very different. Very amusing is the account of the maladies of Louis XV., and, as the translator points out, the Well-Beloved must have had a wonderful constitution to have withstood all the remedies—the tobacco pills, the two glasses of manna, and the 'spirits of crayfish'—a dozen physicians poured into him from time to time. The horrors too, of the deathbed scene in the Œil de Bœuf as painted by a doctor, surpass even Carlyle's lurid picture. Indeed all the essays in this little volume are of interest, full of quaint learning and deep research. The fate of the brain of Talleyrand, 'that brain', as Victor Hugo cried, 'which had inspired so many men, built up so many schemes, led two revolutions, deceived twenty monarchs, and had contained the world', and at the last was thrown into the drain of the Rue Richepanse, and the quest of the lost eye of Gambetta, are among the striking curiosities of history. At the same time it must be added that the volume is not written *pueris virginibusque*. Although the author is anxious not to outrage what the translator sweetly calls the 'pudicities', his resolve is at times swept away by the interest of his studies. Moreover, the original was written in French. Lest it fall into the hands of a maiden uncle the 'Secret Cabinet of History' should be kept under lock and key along with Balzac's Contes Drolatiques'; to which, by the way, it forms a sort of scientific commentary."

**Reynolds's Newspaper** (*May 30th, 1897*):—"This is a very curious book, as the titles of some of the chapters will indicate. Thus: 'A Youthful Indiscretion of Louis XIV.', 'The Fistula of a Great King', 'The First Pregnancy of Marie-Antoinette', 'What was Marat's Disease'? 'Gambetta's Eye', 'The Semi-Impotency of Louis XVI.', 'The Accouchement of the Empress Marie-Louise'. The author treats of the excesses and sensualities of the Bourbon monarchs of the pre-Revolution days—Louis XIV., diseased from his corrupt youth; the filth and immoralities of Louis XV.; the cruelty, sordidness, and stolidity of Louis XVI

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**Jamaica Post** (*Thursday, July 6th, 1897*):—"So thorough has been its success in the original (French), that an edition in English has now been brought out by the enterprising publisher. And that equal success will attend it wherever it penetrates throughout the British Empire and the United States, is a foregone conclusion. So far as our purview goes, there is nothing in literature with which it can be compared. Something (although not very much) in the nature of G. W. M. Reynolds's notorious 'Mysteries of the Court of London', there might be a parallel between the two works, save for the fact that whereas the 'Mysteries' is almost pure fiction, Dr. Cabanès's book is obviously pure, or rather impure (*very* impure!) *history*. The present volume is but the first of a series and the published contents of the forth-coming second volume give promise of equally entertaining matter."

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