sound, during several months, cured both the irritability of the bladder and the neuralgia of the testis. The little lump (probably a cyst) remained, but its sensitiveness on handling disappeared gradually as the bladder-symptoms got well.

In neuralgia of the testis no nerve-lesion has been found. Sexual hygiene will be often found at fault. The affection may last for years and (possibly) then disappear spontaneously.

Treatment.—Neuralgia depending on bladder, urethral, or kidney disease, disappears with its cause. In true neuralgia, a strict hygiene is all-important; this involves marriage. Among drugs, arsenic, quinine, and iron, bear the best reputation internally; belladonna, opium, and aconite, externally. But little reliance can be placed on them, however; sexual and general hygiene outrank all remedies. If the testicle be extirpated, there is always danger of a return of the pain in the cord, or in the other gland. Diday recently very strongly advocates the continued application of cold in all pure cases of neuralgia, and claims remarkable success with this agent. His method consists in filling two bladders with large pieces of ice. One of these he places upon towels, so arranged as to underlie and support the testis, the patient being supine. The other bag is now placed upon the testis, so that the whole organ is surrounded by ice, or, rather, iced-water. This application is kept up night and day, for two to four days, after which (Diday states) the neuralgia does not return.2

CHAPTER XXVI.

MALADIES INVOLVING THE GENITAL FUNCTION.

Impotence.—True Impotence, its Causes and Treatment.—False Impotence, its Causes and Treatment.—Sterility.—Masturbation.—Pollution, Nocturnal and Diurnal.—Spermatorrhœa.—Erotomania.—Satyriasis.—Priapism.—Aspermatism.

IMPOTENCE is a symptom, usually, of some physical morbid condition entailing inability to accomplish the sexual act. Its causes are very numerous. Most of them have been already considered; the others will receive a few words of detail in this chapter. Impotence will only be considered as affecting the male.

Impotence, from whatever cause, is a complaint not unfrequently submitted to the surgeon; not always frankly and openly as such, but often by implication, as though it should be recognized and inquired about, in answer to remote indications which the patient has scantily

¹ "Annales de Derm. et de Syph.," 1869, No. 3, p. 182.

furnished. Indeed, the surgeon who would meet the daily wants of his fellow-men, in reference to troubles of this sort, must possess an accurate knowledge of the physiology of the sexual function, and of its various derangements, and be ready to anticipate the reticence of patients; otherwise he will fail to sound many of the depths of human nature, where suffering lurks—which suffering is for the most part preventable or relievable.

Impotence signifies that an individual cannot beget children because he cannot perform the sexual act properly, no matter what the obstacle may be, whether he have spermatozoa or not. The term must be carefully distinguished from sterility, which signifies inability to beget offspring on account of defect in the semen, whether the individual can have sexual intercourse properly or not. The two are undoubtedly often associated in the same individual, but they may be totally distinct, as the following examples will illustrate. Thus there are two methods of making eunuchs in the East: by one the penis is removed as well as the testicles, and such a eunuch is necessarily both impotent and sterile. By the other method the testicles alone are removed; and a eunuch of this description, though sterile (having no spermatozoa), may be still partly potent, and does not bring so high a price as another eunuch who has no penis. It is a well-known fact that both animals and men, from whom the testicles have been removed after puberty, still retain sexual desires, and may have intercourse, with venereal orgasm and ejaculation of prostatic mucus, occasionally during a period of several years. A cryptorchid is rarely at all impotent, but is very apt to be sterile, and so of a patient with double gonorrheal epididymitis; while, as instances of impotence without any sterility, may be mentioned, deformities preventing sexual intercourse, where the spermatic fluid is normal (extrophy of the bladder), extreme incurvation of the penis, with or without hypospadias, aspermatism.

The distinction between impotence and sterility being now plain, a few words regarding each of these complaints will perhaps serve to clear them of the mists of uncertainty which often surround them.

Impotence may be considered as true and false.

TRUE IMPOTENCE.

This is exceedingly rare in the male. Any one who can perform the sexual act is potent. This act imperatively involves two conditions, namely, sufficient erection to make intromission possible, and a mucous fluid leaving the body by ejaculation. Roubaud 1 has added two other factors as essential to the act of copulation; namely, the existence of venereal desire and pleasure in the act; and although both of these undoubtedly exist in a state of health, nevertheless the absence of either of them by no means necessitates impotence, while the absence of either

² In weak subjects the possibility of sphacelus of the skin, or of at least impairing the vitality of the parts by a too rapid reaction on removal of the cold, should not be lost sight of, although these points are not mentioned by the high authority who suggests the practice.

^{1 &}quot;De l'Impuissance et de la Stérilité," Paris, 1872, second edition.

of the first-named conditions is impotence. An illustration of these points will bring out all that can be said practically concerning true

That lack of desire before the act, and pleasure during its accomplishment, are not absolute essentials to sexual intercourse, is shown by the two conditions, priapism from cantharides, in which there is no desire, and yet intercourse is possible with perfect intromission and ejaculation, and certain diseases of the cord attended by more or less paraplegia, where intercourse may take place, followed by conception, and yet there be no pleasure in the act of ejaculation, the patient being unconscious at what moment it occurs.

CONDITIONS INVOLVING TRUE IMPOTENCE:

1. Absence of penis, as in the cases already referred to (p. 5). In these cases, if there are healthy testicles, the patient cannot be called

2. Minute size of penis may involve impotence, as in Roubaud's case of a student whose penis was so small that, although he could practise masturbation, he was not able to reach the stage of ejaculation during sexual intercourse, on account of the minute size of his penis, between which and the vaginal walls there was little or no friction. Roubaud 2 rendered this man potent, and, he says, greatly increased the size of his penis by fitting him with an artificial one, into a depression in which his own would fit, and directing a series of copulative acts, anointing the penis, etc.

That small size is only relatively a cause of impotence is evident, and that it by no means involves sterility is shown by Orfila,3 in a case where an action for rape was brought against a man with only the stump of a glans in place of the full penis, by a woman who was impregnated by him. Orfila decides that impregnation may take place under these circumstances, but only through the consent of the woman, and that rape is consequently impossible. The numerous cases on record where impregnation has taken place without rupture of the hymen shows that a deposit of semen within the ostium vaginæ may fertilize an ovum, and such a deposit of semen might be accomplished by the smallest possible penis. Intromission and ejaculation might take place, and impotence, though possible (as in Roubaud's case), is not necessary. The patient is not sterile.

3. Extreme size of the penis is a (relative) cause of impotence. Under the same head might be ranged double penis, with common cutaneous sheath (Case I.).

4. Extreme epispadias and hypospadias, with or without extreme incurvation (p. 38), involve impotence, without sterility. Extrophy of the bladder the same; and, although, as in Huguier's 4 case, copulation might

¹ A case has been encountered by the authors. ³ "Médecine légale," vol. i., pp. 177, 178.

be possible with extrophy, yet intromission of semen would not take place, and impotence would be inevitable. The female with extrophy is neither impotent nor sterile. Slight hypospadias may, but does not necessarily, involve impotence. The semen is not properly ejaculated into the upper part of the vagina, and impregnation sometimes fails to take place—through the fault of the male. A very short frenum may act in the same way as slight hypospadias.

5. Large size of the prepuce, excessively tight and narrow orifice of the same, may involve impotence, as may also any tumors or growths upon or about the penis, elephantiasis, fatty tumor, hydrocele-or neighboring deformity, as faulty position of the thigh from anchylosis of hip, excess of abdominal fat, etc., all of which may mechanically interfere with copulation without in the least implying sterility.

6. Very tight stricture of the urethra, especially if there be large and multiple fistulæ behind it, may involve impotence. The semen does not escape by ejaculation, but dribbles away after erection subsides. A similar cause of impotence exists in a vicious direction of the orifices of the ejaculatory ducts, by which the semen, during ejaculation, is turned backward into the bladder, and escapes afterward with the urine, as in Peyronie's case, or from prostatic disease. According to Grimaud de Caux, such a condition of things may be caused by the action of a certain class of Parisian prostitutes, who, fearing pregnancy, watch for the moment of ejaculation, and then press forcibly upon the urethra of their partner just in front of the prostate, by inserting a finger into his rectum. By this means the veru montanum, the natural dam to prevent reflux of semen into the bladder, is forcibly turned backward, and finally, by a repetition of the act, assumes a fixed, faulty position, and the individual remains impotent, ejaculating his semen into his own bladder.

7. The peculiar affection called aspermatism is impotence. The patient is not sterile; his copulation is perfect, except ejaculation.

8. Imperfect, irregular, bent erections, due to inflammation of (p. 24) or deposits of various kinds in the sheaths or substance of one of the erectile cylinders of the penis, may sometimes be extreme enough to prevent intromission, and entail impotence.

9. Eunuchs, and patients having atrophy of both testicles, are usually impotent, always sterile.

10. Planque 3 mentions a case where a blow on the head was followed by permanent loss of erection. The same may follow prolonged spermatorrhœa, or excessive and continued masturbation.

11. Impotence may be symptomatic—not to speak of the physiological impotence of childhood and old age—and then is only conditional or temporary, and disappears usually with the removal of the cause. Im-

Physiologie de l'Espèce," Paris, 1847, p. 337. 3 "Bibliothèque choisie de Médecine."

⁴ Gaz. des Hôp., 1840, p. 467

Quoted by Orfila, "Traité de Méd. légale," fourth edition, vol. i., p. 186.

potence depending upon most of the conditions already enumerated is, critically speaking, symptomatic, such as impotence from local deformity or overgrowth, or obesity, or stricture; but the term "symptomatic" is used to make a class apart from idiopathic impotence, in both of which the entire sexual tract and the penis are seemingly in good condition. A single example will illustrate the point: A. has double syphilitic orchitis; has no desire, no erections, has, in short, impotence symptomatic of syphilis. Prompt treatment is employed; his testicles return to a normal state, his erections reappear, and he is well. B. has the same condition of the testicles, the same impotence, but he employs no treatment; both testicles go on to atrophy, and he passes from a condition of symptomatic into one of true impotence, with sterility as well.

In symptomatic impotence there is always lack of erection, and often also temporary sterility. Under the head of impotence symptomatic of intoxication, Roubaud mentions, as causes, hashish, camphor, iodine, antimony, arsenic, lead; and, although some of these have some influence over the sexual function, it is well not to over-estimate their power. The supposed efficiency of iodine in producing atrophy of the testicle is largely hypothetical, and evidently based, to a great extent, upon the influence of iodine over syphilitic enlargement of the testicle, and the coincidence of atrophy of the same after an inefficient course of iodine.

Symptomatic impotence, broadly considered, is found in connection with all acute (general) febrile diseases, more or less marked with all cachexiae, in connection with any advanced condition of disease of the testicle, especially with syphilitic testis, often depending on syphilis, without any appreciable affection of the testicle. It is encountered with severe varicoccle and neuralgia of the testis, with bad cases of spermatorrhæa, and as a result of the lack of tone of the genitals, produced by long-continued excess—especially by masturbation—with severe diabetes and other advanced devitalizing diseases. Roubaud relates an exceedingly interesting case of symptomatic impotence, where a patient applied to him with large double hydrocele, and was entirely impotent. Roubaud supposed that the continued pressure of the hydroceles had caused atrophy of the testes. He punctured on both sides. The patient recovered his potence, and impregnated his wife. He lost power again when the sacs refilled. The testicles were not atrophied.

12. Finally, impotence may come on without assignable cause; but there are certain well-recognized causes which, acting upon certain subjects, are capable of producing impotence, more or less prolonged. Partial erection, attended by rapid ejaculation, is a not uncommon variety of impotence, due usually to continence, over-excitement, etc., and observed in animals as well as in men. In such cases also there will be found, not infrequently, a neuralgic condition of the prostatic sinus, and the treatment usually most effective is that of neuralgia of the vesi-

cal neck, with, perhaps, the use of tannin, with the cupped sound, local external applications of cold water, and general hygienic measures. These means, aided by the confidence with which a physician should inspire his patient, and the counsel to be deliberate in the sexual act, and to practise it in the early morning rather than the evening; or even to trust to a second effort, rather than place all hope upon the first, will usually overcome this variety of impotence. Circumcision may sometimes be necessary to diminish the sensitiveness of the glans penis, which is often over-acute.

FALSE IMPOTENCE.

False impotence is an affection which the practical physician is often called upon to treat. True impotence involves the treatment of the physical irregularity, deformity, disease, cachexia, etc., giving rise to it. False impotence requires a treatment of the individual, and not of any disease. In false impotence the cause is always nervous, or, it may be, a moral one; and there is often no impotence at all, except in the mind of the individual. Here the surgeon requires all his delicacy, all his sympathy, in order to obtain the confidence of his patient, overcome his suspicions, and gently lead him to a cure, which is always possible, if only the patient have faith.

Among the causes of false impotence may be mentioned sexual indifference, either temporary and spontaneous or more or less prolonged, as a result of sudden shock, grief, excessive joy, fright, repugnance, lack of affection for the individual with whom copulation is attempted. Under the two latter circumstances, the patient will sometimes think of another person than the one with whom he is lying, and thus maintain erection and effect ejaculation. The sudden flooding of the vagina with warm mucus will sometimes cause erection to cease at once. Drunkenness, which is not habitual, may induce temporary impotence. Roubaud mentions a curious case where impotence came on with an indigestion, and remained long after its cause had disappeared. He speaks ' of another man who became impotent on drawing a prize of thirty thousand francs in a lottery.

Another curious case of false impotence is related by the same author: A young man brought up in the country was, at the age of fourteen, initiated into the mysteries of Venus by a young friend of the family, twenty-one years old. Her hair was light, and worn in curls, and, for precaution's sake, she never had intercourse with the boy except when dressed—that is, wearing a corset, high boots, and a silk dress. The boy yielded for the sake of pleasure, but had no affection for the lady. She was passionate, and drew largely upon his young powers during four years, after which he went to the military school. On entering garrison, he found that he had full sexual powers,

¹ Op. cit., p. 186.

² Op. cit., p. 439.

but that they were aroused only by certain women, and under certain circumstances. A dark beauty had no power over him, and a night-dress extinguished all his fire. In short, he found himself utterly impotent except in the company of a light-haired woman, wearing curls, with high boots, a corset, and a silk dress.

This false impotence had a powerful hold over him. Twenty-five years after having left his seducer it was still upon him, and that, too, in spite of his having meantime fallen desperately in love with a brunette, to whom he was afraid to offer himself on account of his incapacity "d'exercer le coît dans le négligé de la couche conjugale."

In this case, the exercise of tact, aided by an aphrodisiac potion of cantharides and phosphorus, in time effected a complete cure.

An equally instructive case, illustrative of false impotence, occurring in the practice of Peirilhe, is related by Grimaud de Caux, of a celebrated mathematician, who married a young and beautiful woman, whom he loved tenderly. He felt the power of her charms, and could commence the sexual act creditably, but, although they both ardently desired a child, before the moment of ejaculation arrived, the thoughts of the philosopher would unconsciously stray toward some favorite and engrossing mathematical problem, and erection would fail. A cure—at least to the extent of making Mr. —— father to several fine children—was effected by instructing his wife to get her husband partially intoxicated before accepting his approaches—the success of the expedient establishing the truth of the old adage:

" Sine Cerere et Baccho friget Venus."

Treatment.—This form of moral impotence requires special attention to all the agencies which may be active as causes, and the exercise of patient tact, and often of sympathy to acquire and retain the patient's confidence, a point of treatment most essential to success. The surrounding hygienic conditions must be made favorable, the advantages derived from change employed, all indications of deviation from health in any respect appropriately met. It is necessary to arouse the moral sentiment of carnal desire, as well as the power of the organs, locally, to respond. The first is attained by favorable relations to the sexopera, theatre, etc. The second, by general dry frictions of the whole body, by massage and flesh-brush; cold-bath; sea-bathing; generous diet, and the internal use of tonic medication; the mineral acids, strychnine, ergot, and especially phosphorus and cantharides, or the two combined, commencing at a fair dose, one-fortieth of a grain of the former to ten drops of the tincture of the latter, three or four hours before the desired erection, and increasing the dose carefully. Cantharides produces erection without desire; phosphorus is apt to increase desire directly. Cold and heat, by the douche, electricity, and

1 Op. cit., p. 341.

local applications of mustard, are sometimes serviceable in recalling erection. In one case of syphilitic impotence, decided advantage was derived from the use of a quack-treatment, by an instrument called the equalizer, a large cell, in which the patient sits with his head out, and from which the air is exhausted. (A modification of the ventouse *énorme* of the French.)

Nervous impotence, the most common form of false impotence, encountered frequently in young men, remains yet to be described. The patient is young and usually healthy. He has generally masturbated more or less, and has nocturnal pollutions. He has usually plentiful evidences of virile power. He has desires, which are sometimes excessive. He awakes with erections. He can provoke erection, or even emission, at will; but, in presence of a woman, and when he desires to have sexual intercourse, his organs will not respond; or, if erection comes on, it lacks full energy, and is liable to fail at any moment during the act. In short, the patient can do any thing he wishes, except that he cannot rely upon an erection at the critical moment.

This form of impotence is the result of unnatural excitement of the sexual functions. It may come from protracted chastity, ungratified desire, or excessive erotic excitement at the moment. It is not infrequently accompanied by involuntary emissions during sleep, and by the occasional escape from the urethra at any time of a semi-transparent, viscid fluid furnished by the urethra and prostatic follicles. The most persistent and obstinate mental dejection usually accompanies this form of impotence. Under the pressure of imperious desire, and after prolonged chastity, the sufferer has probably approached some incongruous female, and at the portals of success his erection has failed him. The mental depression following an experience of this sort is of the most exaggerated nature, the existence of impotence is considered as demonstrated beyond cavil, and hope is obstinately banished from the horizon. The seminal fluid, it is assumed, is escaping in the urethral discharges, and with it manhood and vitality. These ideas are intensified by the cunningly conceived advertisements of charlatans, with which the swarming newspapers abound, and the patient is still further enveloped by them in despair. False promises of cure often tempt him to a trial, and their failure relegates him to the surgeon sooner or later, more than ever deeply despondent. Such cases, which are unhappily not rare, require for their management all the ability and tact that can be brought to bear upon them.

Treatment.—The best treatment for a man with nervous impotence (who invariably awakes sooner or later with an erection) is to patiently instruct him in sexual physiology and hygiene, acquire his confidence by sympathy, and get him married, with the advice to attempt no intercourse, to be entirely frank and honest with his wife (who will more than equal him in timidity and ignorance), and, awaiting some morning

when awaking with a vigorous erection, to accomplish coitus promptly, without delay or dalliance, as a matter of imperious duty. The act once accomplished, the charm is broken. The use of the steel sound and of local applications of tannin, with the cupped sound (p. 451), often of decided service where ejaculation is too rapid, is also sometimes useful here.

STERILITY.

The consideration of sterility is so interwoven with that of impotence, that but little remains to be said. Sterility is an inability to beget children, on account of absence or imperfection of the semen, and in many such cases there is impotence as well. All eunuchs are sterile; when both testicles are degenerated or destroyed by disease or atrophy, or retained as in cryptorchids, (usually), sterility results. In two special conditions there is sterility without impotence, namely, obliteration of the canal of the epididymis, after double gonorrhœal epididymitis, and obliteration of the orifices of the ejaculatory ducts, after stone or operations, from cauterization of the prostatic urethra with solid nitrate of silver, after the process of Lallemand. Of the latter we see and hear little in this country at the present day, but, according to Grimaud de Caux, in his time the instrument of Lallemand made more eunuchs than did the demands of the harems of the East. Whenever the seminal duct is occluded on both sides at any part of its course, sterility is the natural result, since the spermatozoa cannot reach the urethra, but, under these circumstances, if the testicles are healthy, the patient is fully potent, his desire, his erection, his ejaculation, his pleasure, are normal; his ejaculated fluid resembles semen in every respect except that it contains no seminal element.

The relief of sterility depends upon its cause, which often cannot be directly reached by treatment.

SELF-ABUSE.

Self-abuse is the production of the venereal orgasm upon one's self. The term masturbation signifies that an orgasm is produced by means of friction with the hand, as it most commonly is. Masturbation is not a malady. It does not necessarily produce disease, unless it is carried to excess. The practice of it is not confined to man. Monkeys are often masturbators, bears have the same habit, goats, making use of the mouth, indulge in it, turkeys sometimes practise it upon a round object, like a smooth stone. In the human being it is practised by both sexes, at all ages. Females are much less given to it than males. The majority of women have very little passion, and suffer the approaches of a lover or husband largely as a matter of complaisance. There are undoubtedly numerous exceptions to this rule, but still a rule it is that the female, naturally modest, retiring, refined, learns what passion is only as the result of education after marriage. With the male it is

different. His passion is natural. He often has erections while yet a child, and sexual yearnings long before puberty. Planque 1 mentions two children four years old whose sexual organs were so developed that they could perform sexual intercourse. Rarely does a boy escape an initiation into forbidden pleasures by his school-fellows, or his elders, and, when he escapes these, he is still very apt, when handling himself during erection, to find the sensation agreeable, and go on, really ignorant of what he is doing, until he becomes a confirmed masturbator. Male babies are sometimes handled by their nurses to keep them quiet, a practice which is certain to beget the habit, even in the earliest years of life. Stone in the bladder, irritation of the prepuce from retained smegma, traumatic stricture and bladder-disease, ascarides, etc., lead a child to handle himself, and inevitably end in masturbation, if long enough continued; indeed, there are so many causes, natural and unnatural, why a boy should masturbate, that probably few escape. The most common incentive, however, is undoubtedly instruction, and this is usually received by children from other boys at school.

It may be safely assumed that a large proportion of mankind have at some period of life masturbated more or less, and it is equally safe to assert that at least ninety per cent. of such masturbators are not physically injured by the habit. Sexual indulgence in the natural way will produce evil effects if carried to excess, yet it is probable that sexual intercourse is not only harmless, but even beneficial in moderation, when carried on naturally—as it can be only in the married state (p. 40). It is not the loss of seminal fluid which is of the first importance in producing disease from sexual excess, but the nervous shock of the oft-repeated orgasm. Babies and young children lose no seminal fluid, women have none to lose, yet, in all of these, evil results follow excess, as certainly as they do in the male after puberty. It is probable that any succession of nervous shocks as sharp and decisive as the sexual orgasm, even although they were purely intellectual, such as joy or fear, would shatter the vitality and nervous tone of an individual, perhaps as much as masturbation. Such writers as Lallemand, Acton, Belliol, certainly make too much of the solitary vice, while quacks find here the largest and most lucrative field for their nostrums. The latter scatter their books and circulars broadcast over the land, and often, under alluring titles, thrust them within the eager grasp of the young, the inexperienced, the hypochondriacal, of the nervous, overworked, unmarried youth, whose sexual needs, stimulated by his impure thoughts, do not find adequate relief. Here their tenets find ample faith and ready acceptance, and errors are implanted in the ingenuous mind which years of sober after-thought and experience, aided by the surgeon's careful and conscientious advice, are scarcely able to eradicate. Self-abuse is not confined to youth; middle and old age are not free from it.

1 Op. cit., Art. "Accroisement."