

A treatise on the venereal disease. In three parts. I. An anatomical and physiological description of the genital parts of both sexes. II. An aetiological enquiry into the various stages of the venereal disease. III. A true and rational method of cure ... / [N.D. Falck].

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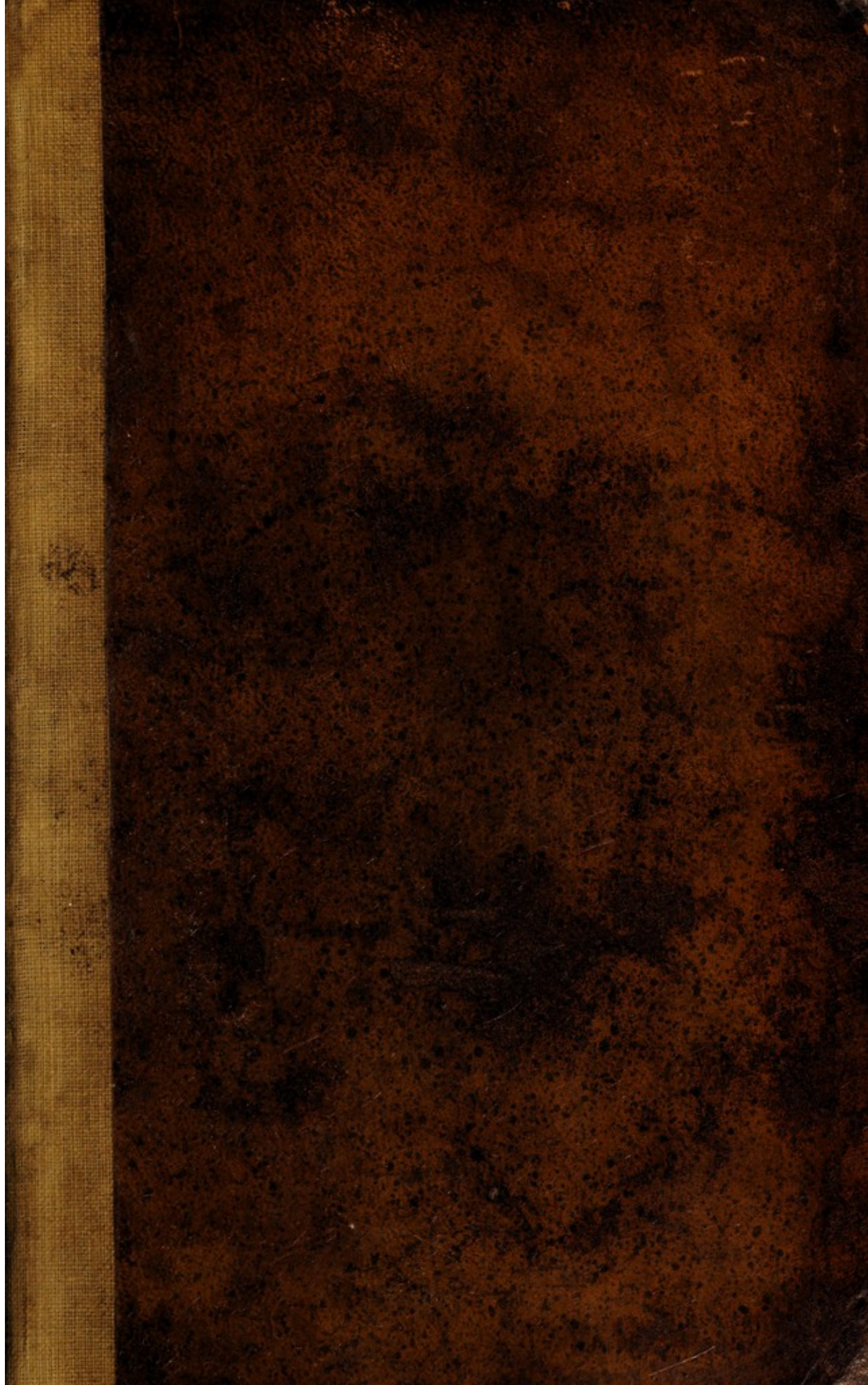
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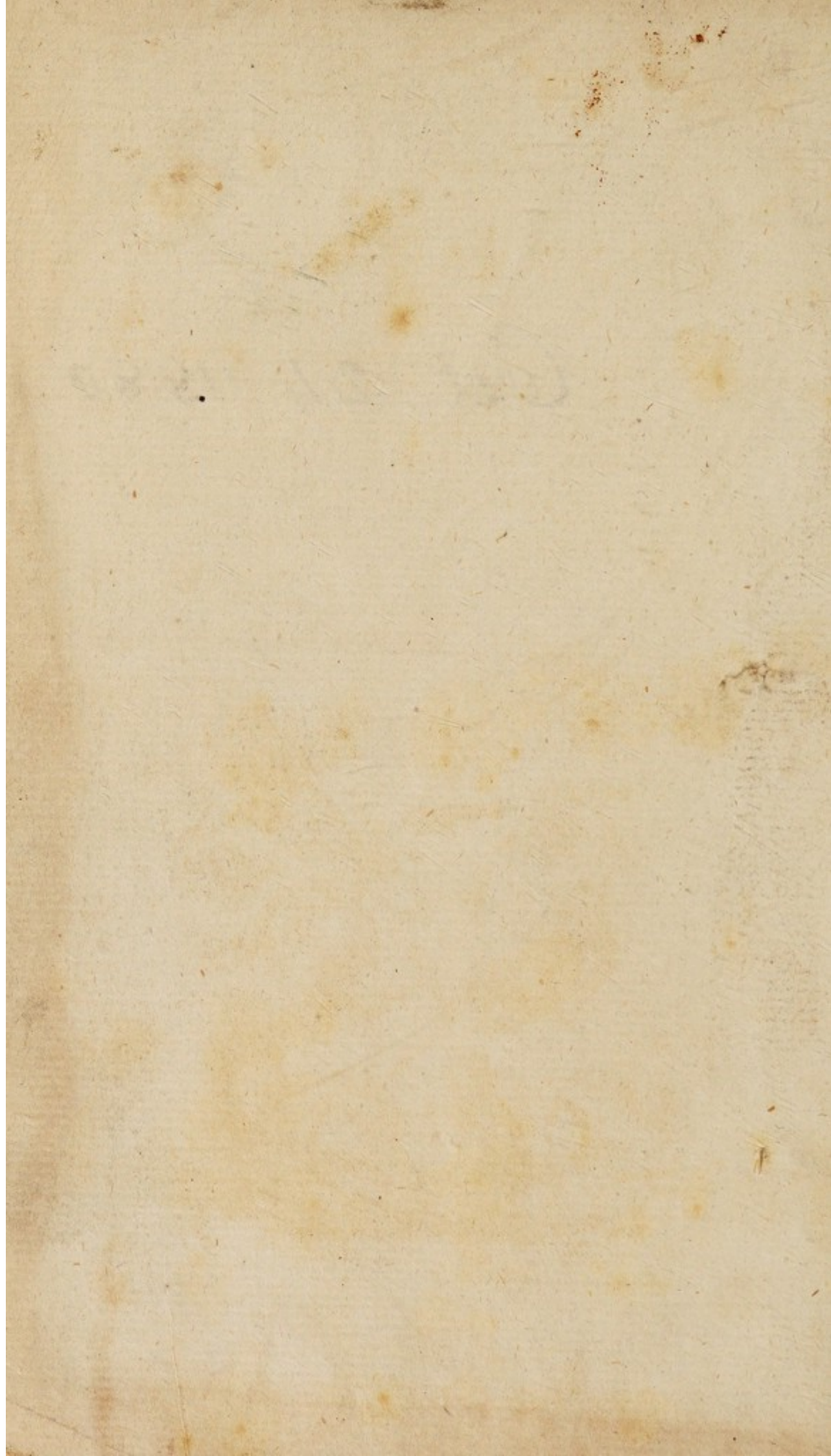
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A
T R E A T I S E
ON THE
VENEREAL DISEASE.
IN THREE PARTS.

I. AN ANATOMICAL AND PHYSIOLOGICAL DESCRIPTION
OF THE GENITAL PARTS OF BOTH SEXES.

II. AN ÆTIOLOGICAL ENQUIRY INTO THE VARIOUS
STAGES OF THE VENEREAL DISEASE.

III. A TRUE AND RATIONAL METHOD OF CURE.

ILLUSTRATED WITH COPPER-PLATES.

By N. D. FALCK, M. D.
THE SECOND EDITION.



L O N D O N :

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P R E F A C E

TO THE FIRST EDITION.

WHAT I here offer, is an unprejudiced theory, confirmed by happy success in practice; and this I think must ever be the most effectual method to arrive at truth.

I am sensible of the force of prejudice; and likewise of the many difficulties attending an attempt to eradicate long established errors, especially when supported by men of fame: Yet I have ventured on the task; and in obedience to duty and truth, have pointed out many absurdities, which must appear to the conviction of every candid and judicious reader,

But it is of little benefit to mankind to point out their faults, without endeavouring to amend them; this has been the principal object in view: And if speaking what we think strictly true in our own behalf, is not a breach of modesty, I firmly believe, that this treatise will, if attended to, contribute more to the welfare of my fellow
a creatures,

creatures, than any book whatever that I have seen on the subject.

I have consulted various authors on venereal diseases, and I own myself greatly indebted to them; their truths, as well as their errors, have afforded me benefit. Many I believe have written according to the dictates of their judgments; and every man who does so, I esteem, though we should differ ever so widely in opinion: If others have not been so candid, perhaps an insatiable thirst for fame was the cause; a weakness which has made many men, even of great parts, appear very ridiculous; and often proved the very means of losing, what they were so eagerly in pursuit of.

Be this as it may, I have aimed at truth and utility; if I have deviated from these, it was not designedly; and I shall always be equally ardent to listen to truth, as I wish to point it out to others.

The method I have pursued throughout this treatise, is materially different from any other of the kind that I know of; but this method I thought requisite, in order to display my principles on the subject, which differed so widely from the doctrine commonly practised. But besides all this, I supposed it would be more agreeable to the generality of readers; for though the whole

is in a chain, yet there are such separations, as do not compel the reader to a perusal of more than what suits his inclination; particularly those who would fain think I have said more than what relates to the subject.

I own I have been circumstantial; but those who are desirous to understand the nature of the diseases as well as the cure thereof, (which in fact are inseparable) will find, I hope, their time well rewarded in reading attentively the whole; the learned as well as the unlearned. If the reader is led insensibly into important observations, regarding the animal œconomy, or unawares into a consideration of similar diseases, moral reflections or sentiments, without losing sight of the subject, but on the contrary, having it illustrated, I suppose he will sooner forgive me such a fault (if it should be thought one) where he will be surprized with things unexpected, than a disappointment of an opposite nature: For a variety of matter, though not foreign to the topic treated on, is requisite to prevent a subject, particularly of this nature, from becoming irksome: And I am apt to think, the neglect of this, is one principal reason, why physical subjects are not read so often, as I am inclined to believe they otherwise would. With

With regard to the language, though it is not according to the modern luxurious mode of writing, and in many places may not stand the test of the delicate critic, yet, I hope it will be found clear and concise enough to convey my meaning; as well to the respectable faculty, as to every sensible man of moderate education; and what I have been deficient in elegance of expression, I hope to have made amends for in utility and perspicuity; it is very seldom they are all found together.

On the whole, I flatter myself, that I have discharged my duty to the satisfaction of every lover of truth and of mankind. What reception it will meet with, among men of sinister views, gives me no manner of concern with regard to myself.

The principal part of my life I have spent in the pursuit of knowledge; the remainder I wish to spend for the good of mankind, as a dutiful return for the benefits I have received from society.

N. D. FALCK.

PREFACE

P R E F A C E
TO THE
S E C O N D E D I T I O N.

IN the school of life, I have learned to make great allowances for the prejudices and weaknesses of human nature; and therefore, although I was conscious, that I could write on the present subject as an experienced practitioner, and contribute to the improvement of medicine, I saw it requisite to arm myself with so much indifference, as not to let the vain hope of applause, or timid fear of censure influence me, before I could determine to put my plan in execution. Having thus conquered my own weaknesses, and quelled all silly apprehensions within myself, I set pen to paper, and wrote to the world with as much pleasure, as if I had been conversing and communicating my sentiments, in a circle of my most intimate friends. And I am happy, that this my first medical production has been rewarded with a reception, that confirms the justness of my sentiments.

In consequence of these reflections, and the success of the first edition, I offer the second with the greater cheerfulness; and have this only to observe, that I have endeavoured to the best of my judgment, to amend all its defects.

The first and second part of the book remain unaltered, with respect to the subject itself; but as it was the general opinion, that I had in various places in the third part been led into medical disquisitions, deeper than what the subject required, I readily complied in expunging what appeared to me superfluous; and believe, that though the book is somewhat less, it however is sufficiently compleat with respect to the subject.

The recipes in this edition I have written in Latin, and at full length. This may seem to deviate from my first intended plan, in extending its benefit universally; but from the forcible arguments of men of candour and experience, I am persuaded that the alteration cannot in the least obstruct its utility; but must have many advantages, particularly in a venereal subject, where there are so many illiterate pretenders.

To conclude, I return general thanks for the many testimonies of approbation I have been honoured with. Conscious, that I have, and wish to contribute to the welfare of mankind, I am happy in giving satisfaction to the worthy part of society and in following the dictates of my own conscience.

N. D. FALCK.

Queen's-Court, Great Queen-Street,
Lincoln's-Inn-Fields.

C O N-

C O N T E N T S.

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PART I.

A N

Anatomical and Physiological Description

O F

The Genital Parts of BOTH SEXES.

IN order to acquire a true knowledge of any disease, it is absolutely necessary to be acquainted with the parts afflicted: for without this, we must wander in the dark, and be liable to stumble at many inconveniencies, which by that knowledge, we are enabled to avoid. I shall therefore give the reader a faithful description of the parts generally first infected by the disease here treated on; whereby he will, not only easily understand the rationale, and be convinced of the conciseness and ease of the method of cure here offered, but likewise discover the dangerous rocks, on which so many unfortunate adventurers have split; either from their own neglect, or from their ill fortune of having fallen into the hands of the unskilful.

B

Of

C H A P. I.

Of the Genital Parts of a Man.

THE genital parts belonging to a man, may justly be considered under two heads; namely, that part which is appropriated for the secretion and excretion of urine; and that part, which the great Author of existence, has appointed for the propagating of the human species, and placed the quintessence of all sensual pleasure; namely, the feminal parts.

Nature is for ever most simple, and compendious in her works: and it was undeniably, for more wise ends than man can conceive, that these two, so very different functions, should meet in one member.

We cannot, without astonishment, observe, the various methods nature has taken to form the parts of generation, in the different species of animals; so that they differ not only in proportion to their various forms, but also according to the element they belong to. We may form what conjectures we please concerning these mysteries: but the best use we can make of our enquiries, is to trace the path of nature, and confine our examinations to such subjects, as may render us truly beneficial to society.

The urinary parts are, the kidneys, the ureters, the bladder, and the urethra in the penis. The urethra, however, as it is the common canal for
both

both urine and semen, is peculiarly subject to venereal infection, but of this more hereafter.

The kidneys are appropriated for secreting the urine from the blood; for which end they receive the blood from the descending trunk of the aorta, or great artery; from whence (much about the same part) all the genital parts receive their provision. From this artery goes out a branch on each side to the kidneys, termed, the emulgent arteries, which spread themselves into numberless ramifications in the glandulous part in the kidneys, and at length are taken up by ramifications of veins, which follow the arteries all along, and carry the blood back again out of the kidneys into the great vein, called vena cava, which returns the blood to the heart for a new rotation.

Whilst the blood is circulated in the kidneys, a number of small tendinous tubes, (interwoven with the arteries and veins) separate from the blood, by many little quantities, the urine, and carry it by their ducts (which gather as they go) into a receptacle, and from thence, it is carried by the ureters, into the bladder.

This receptacle, or pelvis in the kidneys, is of a very curious structure: its body is tendinous, and full of little papillæ, (in my opinion likewise very nervous) which are somewhat separated from the cavity of the kidneys wherein they are lodged, except the various tubes, which enter the body of the kidneys. How the secretion of the urine is formed, has employed the speculation of many; but I am afraid, all alike, equally fruitless: that it is so, is all we can ascertain; but in what manner, we are as much at a loss to account for, as all other surprising secretions; the pancreatic,

the salival, &c. but especially the feminal. In this pelvis is frequently a calculus formed, and found in subjects who have been afflicted with the gravel. This plainly convinces us that the calculous matter is carried along in the blood, coheres as soon as secreted, encreases with rest, and that diuretics must of course be beneficial. The body of the kidneys is composed of these three different kinds of vessels; the arteries, the veins, and the secreting channels: and there seems to me no doubt left, but that the kidneys must be in perpetual motion in a living subject; (perhaps, not unlike the peristaltic) as an action absolutely necessary, not only in this, but in all other glands. It is agreed on all hands, that nature designed the fat as a warmer; this no doubt was partly the design; and in gross people the kidneys are largely covered with fat, doubtless to keep them warm and in action.

The urine secreted in the kidneys, is carried in small tendinous tubes, to the bladder; these tubes are generally of the bigness of a very small goose quill; they open into the bladder in a manner so as to shut the door after them, that nothing can return: as they creep for a little while between the lamellæ of the bladder, and close, somewhat in the form of valves. Hence we see the reason, why we can blow up a bladder in its natural state; but if reversed, that it neither will be wind nor water tight.

The bladder, vesica urinaria, is of a muscular, tendinous, and nervous structure, will suffer a very great distention, and is capable of as great contraction. It is exquisitely sensible; witness those afflicted with the stone: the fibres are interwoven

terwoven with arteries and veins, which take their rise from the epigastric vessels. The teguments of the bladder are generally reckoned three; the first coat is muscular, in a longitudinal direction; the second of a spiral; and the third in all directions possible; they are, however, so closely connected with one another, as to make, properly speaking, but one.

The neck of the bladder is very muscular, and makes what is called the sphincter, by which the urine is retained. This part of the bladder is more nervous and stronger than the rest; hence it is liable to inflammations, and violent spasmodic contractions, from whence many ailments have taken their beginning, and from unskilful management have been made incurable; of which we shall say more in its proper place.

The whole bladder, and in particular the neck and the urethra, have a number of little mucous glands, which ooze out a slimy liquid, whereby the innermost coat and passage is protected against the sharpness of the urine.

These are the urinary organs. We shall leave them for a while, and take under our consideration, those ordained for more material uses, I mean the organs of generation.

The testicles are not only the principal instruments of generation, but there is something so sacred in them, that they seem to contain the whole soul and spirit of manhood. They are generally two in number; I say generally, for subjects have been found with three, and many with only one. And though it has been thought formerly, that one testicle would be insufficient

for generation, yet it is now sufficiently proved, both in men and brutes, that one is sufficient for the propagation of their species: and has no farther inconveniency than, that like the one eyed, there is but one to lose, since their office in the animal oeconomy is independent on each other.

The testicles receive their blood for secreting the seed, from the descending trunk of the aorta, a little below the emulgent vessels; and from these last mentioned, a few small branches also. These arteries run down a little while, and then meet with the veins, which carry the blood back from the testicles, and empty themselves in the ascending vena cava, which lies immediately behind the trunk of the aorta. These vessels, the arteries and veins, run along, variously contorted and interwoven with each other, down through the abdomen, inclosed with the peritonæum, into the scrotum, and penetrate into one end of the testicle: And as the arteries, in many turnings and windings, carry the blood to the testicles, the veins, in as many twistings, carry it back again from the testicles to the ascending trunk of the vena cava.

These are called the spermatic vessels, or vasa preparantia; and partly from their texture, and partly from their different turnings and windings, they are tender and delicate to a very great degree: hence a contusion of the testicles is of a most alarming nature, and a sphacelus in that organ, (if it is not immediately extirpated) will soon extinguish life. Part of these spermatic vessels split into different branches, just before they enter the testes; and by that, form, what is called, the corpus varicosum pampiniforme, or pyramidale;

pyramidale; round the body of the testes is a kind of a crown-like body, which is no more than these vessels interwoven with one another, accompanied by some seminal tubuli, apparently to prolong the secretory tubes. The size of the testicle is about that of a large pigeon's egg; in substance white and soft; consisting of the fore-mentioned vessels spread into capillary tubes; intermixed with the secreting channels, which all collect into one general duct, called, the vas deferens, or ejaculans; by this duct the seed is carried from the testicle as it is formed, to the vesiculæ feminales,

The testicles are contained in three teguments; the first is the albuginea; a membrane peculiar to the testicle, and adheres inside to the substance itself, but on the outside it is smooth, white, tendinous, of a delicate and very sensible texture. The second is, the elytroides; this membrane is a processus of the peritonæum, which, encompassing the seminal vessels closely, whilst yet in the abdomen, runs along with them through the foramina of the oblique and transverse muscles of the abdomen, and enpurfes them till the commencement of the testicle, where then it strictly adheres; then separate again, and form a new capsula round the testicle, apparently as if it was a returning of the albuginea, being inside of a perfect smooth surface. Where the spermatic chord perforates the abdomen, the ruptures of the belly have their commencement, to which the upright walking animal, man, is particularly subject, distinctly from the quadrupede: as that orifice of the peritonæum is liable, by a strain in an upright posture, to dilate or give

way, and thus admit part of the intestines to slip through, along-side the spermatic chord into the scrotum. The third is, the scrotum; this is a natural purse, continued from the common skin, with this difference, that instead of the *membrana adiposa*, a thin muscular skin is continued and forms the cremaster muscle. These two last skins adhere closely in a natural state, but it is here most generally, between these two last teguments, where the seat of the hydrocele is to be looked for, and very seldom within the *processus vaginales*, or *elytroides*.

The first skin, or membrane, is an immediate guard to the testicle, and feminal vessels; in order to keep those tender parts in the first formed situation, that they uninterruptedly may continue their function with firmness. The second seems like a suspensorium, to retain them as parts which in the foetus properly belong to the bowels; and I have often observed in very young infants, that sometimes one, (particularly the left) and sometimes both testicles have been drawn up in the very bowels, and disappeared: sometimes I have observed this in grown persons; though it is natural to suppose, that such dilations must be subject to ruptures. The scrotum appears plainly to be the external purse of these organs; and chiefly suspended by the muscular membrane from the cremaster muscle: externally the scrotum is suspended by the dartos; which is the natural suspensorium of the scrotum itself.

The *vasa deferentia* are tubes, which in a person of health and vigour, are about the bigness of a middling goose quill: they apparently come out where the feminal vessels enter, and make
various

various convolutions about the before-mentioned vessels : they rise with them, enclosed in the peritonæum, enter the abdomen, where they separate from their accompanying vessels, and march along towards the back part of the neck of the bladder, where they join and empty themselves into the *vesiculæ seminales* ; which are two little bladders appropriated to contain the seed, till it is wanted for use. These *vasa deferentia* rise, as I said before, apparently with the *vasa preparantia* ; but if strictly examined, they rather come out at one end, and creep slowly along to the place where they rise ; and their lower ramificating endings intermingle wonderfully with the other vessels, which compose the testicles.

The *vesiculæ seminales*, or seed bladders, are two irregular formed bladders, placed about the neck of the bladder of urine, near the *intestinum rectum*, a little above the prostate gland, and is the receptacle of the seed till it is wanted. They have many cells, which all have a communication with one another. Its tegument is of a very delicate and nervous substance. The two *vasa deferentia* before-mentioned, join together just at the bottom, and at the place where they have a communication with the *vesiculæ seminales* ; so that the openings into the neck of the bladder of urine, and the openings into the seed bladders, are at one and the same time, but in so curious a manner, that they do not interfere with each other : for the *vasa deferentia* empty themselves into the *vesiculæ seminales*, and those again empty themselves with a rapturous pleasing force, into the neck of the *vesica urinaria* ; from whence the seed is instantaneously transported, and with

a pulse-like contraction, ejected, when at the height and crisis of coition.

The opening of these ducts into the neck of the bladder, is very singular in its mechanism: the mouths are muscular, and very nervous; within the neck of the bladder are a number of small mucous glands, which yield a lubricating mucus, which sheaths that part from the sharpness of the salts contained in the urine; but especially about the head in the middle of these openings, they are in more plenty. And besides these common glands, there are the openings from two other considerably larger glands, near the prostate, in order to lubricate it more plentifully.

The openings of the *vesiculæ feminales* are two; between these is a caruncle, called *caput gallinaginis*; this caruncle shuts both orifices at once; and it is from the weakness of this caruncle chiefly, that the feminal gleet has its existence, sometimes a malady of a very obstinate nature.

The prostate, is a gland situated a little below the *vesiculæ feminales*; so that part of the ducts, which carry the seed from the *vesiculæ feminales* into the urethra, pass partly through this gland. This very gland has given rise to much controversy; from strict examination it appears plain, however, that it is a conglomerate gland, of many small ones; and I am fully persuaded, that besides, from this gland, the inward part of the neck of the urinary bladder, and the *caput gallinaginis* are lubricated, that it also has a considerable share in rendering the semen virile potent; for in the first place, it has been found shrivelled away considerably in castrated subjects; so that
from

from the size of a walnut, (its natural bigness) it has been quite flat, and withered. And secondly, if the prostate gland is ulcerated, I appeal to the skilful and experienced in venereal cases, whether a grievous gleet, and a sterility of the seed are not the unavoidable fatal consequences? Indeed, I know scarce a worse ailment, with which a patient can be afflicted, and is more baffling to a surgeon; but of this more hereafter.

We should come next to the urethra; but we will leave it for a while, and first examine the penis in a general way, and take the urethra as it follows in the course of this examination.

Of the P E N I S.

HYPOCRATES was pleased to call the penis a head-strong, obstinate and unruly animal. In many respects he was certainly right; for, when Venus inspires it with a passion of desire, it is furiously inclined to sacrifice every thing that lays the least obstruction in its way. But we will leave its ungovernable temper for a future speculation, and at present content ourselves with the examination of its most wonderful and curious structure.

The penis is partly covered with a skin, which continues from the common tegument; from which it differs in nothing, except in the cellulæ adiposæ: for in the fattest people, this part is always excluded from fat. It has been supposed that frequent erections have prevented this fatness, as from a continual exercise of that part; but

but this, as it seems to me, can scarce be the case: be this however as it may, fat is here preternatural. This skin covers the penis till behind the glans, or balanus, where it is fastened; the glans, or balanus, however, has no other covering than a very thin membrane, barely the cuticula, by which it is rendered exquisitely sensible. The fore-mentioned skin, however, has a peculiar slackness, and particularly at the end of the yard, where nature designed, that that tender part should be covered from external injuries, whilst it is, either not in action, or till it becomes stronger and more robust, by frequent exercise. This is evident; since children have their glans covered, which is continued till they grow up; and by frequent venery this skin becomes more dilated, and the glans more robust.

This seemingly superfluous skin, is called the præpuce. Nature never varied more in any one thing, than in this; for in some subjects it covers the glans to a degree beyond what is necessary; from whence they have acquired the name of filberts, and sometimes, even with art, cannot be dilated so as constantly to uncap the glans in coition. These narrownesses are liable to many inconveniencies, as the mucus behind the crown is apt to become rancid, and cause foulnesses and ulcers, where even nothing venereal is in the case. This perhaps was one reason of the ancient Mosaical law of circumcision: and many I have observed, particularly of the Israelitish, have still occasion for such an operation, though more effectually, than their superstitious rabbies perform it. Others again, in the early state of
puberty,

puberty, will have the glans uncovered, and seem scarce to have skin enough when the penis is erect: in this case, the glans is generally very robust, whilst in the former, it is of such delicacy, that it would be painful even to touch it with the bare finger.

This præpuce is tied underneath by a ligature, which is just under the end of the glans, called frænum. It seems sometimes very much straitened, but frequent coition makes that and the præpuce easy enough. But it is remarkable, that, in very old people, as their passions subside, and consequently the erection of their penis, and coition less frequent, the præpuce will grow strait, and the frænum tight, so, that from this inconveniency, (if they are not very cleanly and careful) ulcers will arise, which have much the appearance of shankers in venereal cases.

At the inside of the præpuce are a number of little glands, like small pin-heads, which yield a very delicate lubricating mucus; but as the glans becomes frequently uncovered, the ducts of these glands often dry up.

All along, variously disposed in the skin, are plenty of lymphatic vessels; from these, and from the above-mentioned little glands, this part of the penis is as subject to the infection, and retains it as much as any other part, since the flaccidity and distention is equally as sudden, as I shall hereafter farther illustrate.

The inner body of the penis is composed of the corpora cavernosa penis, and the corpus cavernosum urethræ; the first are two bodies enveloped in their peculiar teguments joined together, and make the back and the greatest part of
of

of the penis itself: their texture is spongy, full of cavities, and all these cavities are in connection with each other. Each of these bodies takes its origin, in conjunction with the muscoli erectores, from the os pubis, from whence they go on till they meet with the cavernous body of the urethra, and continue with that to the glans. Through the middle of each of these bodies go an artery and a nerve. The artery takes its rise from the epigastric, or umbilical branch; and the nerves take their rise partly from the great crural, and partly from the third of the sacrum. These nerves accompany the arteries, all which spread themselves into innumerable branches in and about the cells and cavities of all the cavernous bodies.

All these ramifications of this artery are taken up at their extremities by equally small ramifications of veins, which carry the blood from the cells of the cavernous bodies of the penis, into the large vein, which runs along the back of the penis. This vein is called the vena penis; and it is from its compression, at the root of the penis, whereby the blood is forced into the cells of the cavernous bodies of the penis, and the reflux of the blood hindered, that the penis becomes erect, and remains so, till the blood has found its course, then leaves and slackens all the cells as they were before.

The corpus cavernosum urethræ, includes that part which stretches from the bulb, all along under the other bodies, to the end of the penis, including the glans. This is, properly speaking, the material and principal part of that member;

member; the whole of it is spongy, and full of cavities, like the fore-mentioned.

The glans is peculiarly tender and delicate, being chiefly the seat of pleasure, and from the titillating irritation of this, the rest of the organs are summoned and stimulated to exert their functions in the act of coition. The whole of it is curiously interwoven with nerves, arteries and veins, and the cells are here smaller, and consequently more numerous in proportion than in the other cavernous bodies.

Underneath the glans is the frænum, mentioned before, fastened to the præputium; but it has also a very strong communication with the inner coat of the urethra, where it seems to be tightened like a chord; this is very perceivable, and agreeably so in a natural erection, but in a priapism it is very painful; and from the contraction of this in the virulent gonorrhœa, it is called chordee, as will follow hereafter. The rest of the cavernous body of the urethra is cellular, till it comes to the neck of the bladder, being muscular and more tendinous, which part we have observed before. Next to the prostate gland the cavernous body is more bulky, and ends in a fleshy protuberance, and therefore by Mr. Cowper, called the bulb. Till this part, the substance is much alike, and equally interspersed with arteries, veins, and nerves; by which it has an immediate communication and continuation, with the other cavernous bodies, and with them at one and the same time distended in erection, and slackened in the flaccidity.

The urethra, or meatus urinarius, through which the urine and seed is thrown, extends itself

self from the bladder, from which it is a continuation, and terminates in the end of the glans; the standard of its length, in erection, entire from the neck of the bladder to the glans, is twelve inches; but this varies greatly in different subjects. Its tegument is of a tendinous and nervous structure, and is plentifully provided every where with excretory glands, which yield a lubricating mucus, with which it is lined, and protects the inner coat from the acrimony, which is more or less in the urine.

These glands, as I have observed, are plentiful; but more so, towards the neck of the bladder, and there most of all. It is these glands which frequently are infected, or, more properly speaking where the virus of the infection makes its first appearance in the gonorrhœa, and very seldom in the seminal vesicles, and the prostate gland. As these glands increase in number, they increase in bulk also, being considerably larger about the neck; and it is there the mouths of Cowper's excretory glands are visible. They no doubt are designed to feed and lubricate the caput gallinaginis, or verumontanum, which, as the porter of the seed vesicles, is very delicate, and as a consequent member to generation, is more intitled to, and stands in greater need of this lubricating mucus.

The penis is allowed to have two pair and a single muscle. For my part, in dissections, I could always make six out; but there is no branch in anatomy which gives so much room for disputation as myology. An over-nice anatomist may easily make out a list of muscles, amounting to double the number commonly given;

given; for in fact, most muscles seem to be composed of a variety of other small ones: I shall therefore keep the customary standard, particularly, as the difference in this cannot amount to any thing of real benefit.

The first pair then, is the *erectores*, which take their origin from the fleshy protuberances of the *ischium*, and lose themselves in the cavernous bodies of the penis. These two muscles, one on each side, are chiefly instrumental to the erection of the penis; which by the influx of the animal spirits, contract themselves, and draw the penis nearer to the *ossa pubis*; and partly by compressing the *vena ipsius penis* to the pubis, and partly from an immediate contraction of the *vena* itself, or other unknown causes, the blood being hindered from a reflux, enters into the cells of the cavernous bodies, swells them up, and thus makes the penis erect: this function is greatly assisted by the rest of the muscles.

The second pair is the *transversales*, which take their origin from the *ischium*, near the *erectores*, and adhere near the *accelerator*, about the bulb of the penis; these muscles in conjunction with the before-mentioned and the following, help towards keeping the penis in its natural erect position. Their magnitude is variable; in some subjects they are bulky, in others but small, and in some, it has been observed, they have been wanting; the latter I am apt to think, must be a mistake: be this as it may, from their situation, they seem to be designed by nature as well for the contraction of the *vena penis*, as also to assist to open the cavernous bodies of the penis, and part of the *urethra* too.

The accelerator is the odd muscle; one might however, with great propriety call it two, since it is very distinctly divided in the middle: however, it is immaterial as to the use of it, whether one or two. This muscle takes a tendinous commencement from the cavernous body of the urethra, soon becomes fleshy, and encompasses the whole penis; leaves it again, for a part, and confines itself chiefly to the bulb; where it straitens the veins, and helps to compress the whole root of the penis: it enters with the penis under the os pubis, and soon joins to the sphincter ani; where it leaves two little laps of flesh, and which are sometimes called the third pair of muscles.

This muscle I look upon most material, as well in erection, as in ejaculation; for in grasping, (as it were) the penis, it compresses the vena ipsius, and the neighbouring returning veins, more than the erectores do by pressing it to the pubis: for was this last mentioned pressure the material object, an artificial pressure with the hand, (and which is even more powerful) would have the same effect; but this we find is not the case: Still, that the erectores are necessary towards the compression of the vena-penis, and the erection, is beyond all dispute.

When the penis is erect, there appears evidently a greater pressure and contraction at the bulb of the penis, (that is in the perinæum) than at the pubis: and in a priapism, this part is sometimes actually inflamed, as I observed remarkably in a man, who from a lascivious wantonness, had taken Tr. Cantharid. and from this frolick narrowly

rowly escaped death, by the immediate assistance of plentiful bleeding, and emollient clysters.

That the accelerator, is the principal actor in ejaculation, is universally agreed on; for by its contraction, it very perceptibly communicates to the whole urethra, a pulsive pressure: and as a farther proof of the above assertion, it is evident also, that by these contractions (for example those we are wont to make after letting urine) these very contractions repeated, will soon cause an erection; moreover, it is these contractions in a chordee, or violent priapism, (which then for the most part are involuntary,) that give the throbbing pain.

These are the acting muscles of the penis; and it is plain, that by the assistance of them, the penis becomes erect, and adds considerably to the pleasure in coition. But it is wonderful, that sometimes they should be so alert and ready, nay, even at times without desire or will, and at other times as sluggish in their function: I know, to this it may be answered, that it is a universal cause with almost all muscles, from the influx of the animal spirits; I could wish to give my fancy and opinion some scope here, but as this would perhaps lead me into an argument too extensive for this work, and be of very little use to my present design, I shall preserve this indulgence to another opportunity. Suffice it therefore to observe, that a stimulus on the nerves will irritate these muscles to contraction, as soon, or even sooner, than any other.

All convulsions are attended, more or less, with erections; and those of the epilepsy, with a profuse ejection of the seed. A priapism, adds

not a little to the pain of criminals when they are whipt, and is always the attendant of those unfortunate wretches who suffer on the rack. When a malefactor has hanged till he is cold, he is generally found with the penis erect.

These are violent and unnatural erections, and always followed by flaccidities, even to a lameness in these parts. I cannot help pitying here these unfortunate half men, who are under a necessity of being whipt with a rod, till they, with tears in their eyes, are made capable to perform venereal functions; but as for those diabolical lascivious fools, who do it merely out of wantonness, I would only remind them, that besides, from such an unnatural stimulus, they will in a short time be rendered feeble and perfectly impotent, but also, that it drives or hurries them, not only to the grave, but to that place, where Lucifer, the author of these inventions, will exercise whipping on them, to their eternal misery.

The natural irritation scarce needs description; instinct is the spring in brutes, and that with reason guides the rational being. Both are naturally satiated when their desires are gratified.

Men love a mistress, as they love a feast,
How grateful this the touch! and that the taste;
Yet sure there is a certain time of day,
We wish our mistress and our meat away.
Again the staid appetite returns,
Again our stomach craves, our bosom burns.

In short, when the vesiculæ feminales are provided with seed, there is a propensity and inclination

nation for coition; the mind is filled with desire, and all the organs before described are ready to assist each other for enjoying that bliss, which great as it is, still at that juncture by far excels the real, in the raptured imagination. If the enjoyment is mutual, and agreeable to nature and conscience, the satisfaction after enjoyment is equally pleasing to the preceding bliss itself. And in that moment perhaps, is the ultimate limit of human felicity; but if against the laws of nature, remorse and self-reproach follow as natural consequences. However, when the vesicles have emitted, the constriction of the muscles ceases, and the mind begins to loath. From this it is evident, that these parts are in the strictest conjunction with each other, and that the irritation of the semen in the vesiculæ feminales must be a powerful stimulus, also that that stimulus is unversally throughout all the genital parts, even in the spermatic vessels, and these again with the urinary parts; from this connexion diuretics generally become stimulants to venery.

In fine, the structure of our wondrous fabric, is so amazingly curious, that all the fibres, let them be ever so remote asunder, have almost an instantaneous communication with each other; of this we are every moment to our astonishment convinced, and most so to ocular demonstration, by the circulation of the blood. Who can behold without amazement, that the blood which is now in our little finger, will in a few moments have made its course through our body, and be transported and dispersed into our foot! But this amazement must still be encreased, when we reflect on the instantaneous connexions between

body and soul; that our external senses, (like so many watchful and faithful centinels) at the least sensation, like lightning itself, gives notice to the mind of pain and pleasure!

The inguinal glands cannot be strictly reckoned with the genital parts, since there is no distinct, or rather remarkable connexion between them and the fore-mentioned parts: but as they are of the greatest consequence in the venereal disease, it becomes absolutely necessary to understand something of their structure.

The doctrine of glands is the most intricate in anatomy; as a universal knowledge thereof, we know only, that they consist of an immense multitude of small convoluted and contortedly interwoven vessels; that they secrete different humours from the blood; that they are always in action; that they are very delicate and very liable to be obstructed: Large essays have been written on the subject; for my part, I never saw one yet, that amounted to any thing more at the end of the chapter, than that there were a great many glands, which *secundum artem*, were distinguished into a great many classes, and as I observed above, very curiously formed.

The comparison I am about to make may seem odd, though perhaps not improper; the glands in the animal œconomy, I compare to so many different manufacturers; the workmen are alike, but their professions differ; each class work in their own trade, but all for the benefit and support of one another; the one can not do well without the other, yet some have a nearer connexion amongst themselves than others; and they still differ in appearance more or less.

I should be glad to be rationally informed, why mercury brings on a salivation; why it affects the salivary glands, the gums, the tongue, and the throat? And why not all the glands in common? Methinks, I see the young spark who has just begun to walk the hospital, smile at my ignorance; I must beg leave to tell him, I was once as wise as himself, but alas! the more I learn, the less I know. But to return to the glands.

Those in the groins are to all appearance of the lymphatic, and of the conglobate kind; I observed before, that they were not remarkably connected with the genital parts; but if we have recourse to minute anatomy, we shall soon be undeceived to the contrary, and experience (the greatest teacher) leaves no doubt of their immediate and universal correspondence.

But, over and above all this, there is something in the inguinal glands which is peculiarly subject to the venereal poison; I say, peculiarly, for why will the infection not communicate equally as soon at contact to the neighbouring glands? But this question is rather needless, since it is beyond all doubt, that peculiar glands, are more or less liable to peculiar diseases.

Let it suffice therefore to observe, that the tegument of the penis and the scrotum, abound with lymphatic vessels, and these have all an immediate communication with the inguinal glands. It is certain, that when a patient is infected with the venereal virus, that it will go between the various parts, from a swelled testicle to the groin; from thence again to the uretha, &c. We know also from experience, that the miasm will lay concealed in the inguinal glands

for a long time; but it ought to be known too, that of all the glands in the human body, there are none more tractable and compliable, than these very glands.

A bubo will easily disappear root and branch, if properly managed; and I am sorry to say, but must insist upon it, that whoever has suffered much from this complaint, under attendance, has been ill treated; and I will add, if these glands were not of an uncommon good kind, nine out of ten of those who have escaped from being ruined by caustics, would have added to those, who have fallen a sacrifice to that injudicious practice.

I shall here conclude my description of the genitals of the masculine gender, and proceed to the organs from whence we took our entrance into life.

C H A P. II.

Of the Genital Parts of the Female Sex.

LEST I should be censured, as being too communicative in what I am going to describe, permit me reader, here to premise.

Modesty is that ornament of the female sex which doubly endears them to our love and esteem. It is a faithful monitor to chastity, and illuminates with a celestial beam of light, every other virtue of the beloved object of our bosom. It is that inestimable jewel which entitles them to our respect. It aids them instead of strength against the assassin of their virtue, and strikes an
awe

awe into the beastly wretch, who would dare to sacrifice their reputation and happiness to his lust.

But the woman who has lost the sense of modesty, and abandoned herself to prostitution, becomes an object of disgust and contempt; and branded with the infamous epithet of whore, she is excluded from every mark of esteem and friendship, as well from the opposite sex as her own, even from the wretches in her own unhappy condition.

But is this virtue confined to females only? Surely not; even man as the superior, is less excusable. There is nothing more contemptible in the eye of every female, than an immodest man, either in actions or words: lasciviousness gives not only an unpardonable offence to virtuous females, but is disgusting even to the most abandoned of that sex; discovering to them, not only a baseness of heart, but a deficiency of understanding, which will ever sink into universal contempt.

This digression I hope will be understood in its proper light; and I beg leave to add, I write to the faculty and men of sense; but not for the abuse of fools. And now to the subject.

The genital organs of the female sex, are joined with the urinary parts, as well as those in men, but materially different. In regard to the urinary organs there is no difference, with respect to the ureters and the structure of the bladder, except that the vesica urinaria is generally larger and more pliable for extension; but this quality is universally peculiar to the sex. Throughout the animal œconomy, the fibres as well as the disposition are more delicate and soft in the feminine gender than in the masculine; no doubt
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to yield the more to the roughness and robustness of the superior sex, ordained by nature for the government, support, and protection of the weaker. The supposition that this difference of delicacy proceeds from habit, is evidently erroneous, and repugnant to nature itself.

The neck of the bladder and the urethra is very short, yet considerably wider than in men, on which account they have many advantages over men: They are not so subject to the gravel and many other complaints as men; and a catheter is much more easily applied. From the same conveniency also, they urinate with more facility.

The organs of generation we shall examine under these two parts, namely, those which offer to our view and senses without dissection; and those parts which are immediately concerned in gestation, and to be examined only anatomically.

The first, is the pudendum muliebre in the general term, and includes every part which offers to the sight and touch from the mons veneris to the anus. (viz.) The mons veneris, rima magna, labia, clitoris, nymphæ, meatus urinarius and the vagina, all which we shall take under our consideration in their turn.

The pudenda in males as well as females, are naturally covered with hair; and though men have greatly the superiority of hair over their bodies, to the females, (which adds not a little to the manly robustness) yet on these parts they are equally well provided. This, as well as many other trifling subjects, have caused controversies, whether nature designed that provision for ornament or use: for my part, I shall always believe, that nature meant nothing ornamental but

but what is useful. It is however, quite otherwise with fancied ornaments; antiently the Spaniards shaved their wives, and this in our times is even a practice amongst some of the eastern nations.

Be this however as it may, it is certain that in general, when they begin to sprout out, it is a sign that maturity commences, and to add vigour was doubtless nature's intention.

The mons veneris is the protuberance on the brink of the pubis, and appears agreeably covered with fat, and most provided with hair. This mount alters much in the same subject; in general it is proportionally plump with the breasts: and at the time when the innocent maid is surpris'd with hair, and strangely alarmed with the approach of the catamenia, it is then, that this mount is in its meridian plumpness, accompanied with the swelled bosom; nature ripens, and it is then, the expressive eye, though innocent, proclaims, the maid stands in need of a guardian friend. This is the crisis of womanhood; whilst the passions are lively, this mons continues plump even in thin habits, different from a fat plumpness, and with the passions it subsides again, so as to be entirely flat in old age.

The rima, is the external gate of these organs, and is that slit, or aperture which opens immediately under the mons veneris, and continues till near the anus.

The part between this and the anus itself, is called the perinæum. The parts on each side of the rima, is a continuation of the common skin, and membrana adiposa; which terminates somewhat thicker there than common, and forms the labia or lips.

These

These lips, though a continuation of the membrana adiposa, don't contain fat, as is generally supposed; for observation teaches us, that they remain of one size, let the woman be fat or lean: nay, the pudendum is even larger in lean subjects than in fat, (I mean, apparently) and from the same reason too. They abound with lymphatic vessels, which have an immediate communication with the inguinal glands; hence they are as often afflicted, and liable to buboes, as men.

The inside of the labia, all within the rima, is very delicate and thin, and hence in venereal infections, these parts are very subject to shankerous ulcerations, and sometimes swell up and are inflamed to a great degree, from the same cause, and in the same manner, as the phimosis, and paraphimosis in men; but neither with so much pain or danger, nor near with so many difficulties in the cure.

Women have naturally many discharges from their pudenda, to which men are strangers; it becomes therefore necessary for them to be more cleanly; for by neglect, they are not only subject to become in those parts disagreeable, but form sebaceous humours, which lodged in the crevices, and becoming rancid, are subject to generate sores and ulcerations; and it has often happened, that chaste matrons from such circumstances have been stigmatized with crimes, or else suspected their husbands, though both innocent; which has taken its rise from nothing else than uncleanness; particularly at a time of an acute fluor albus, in an acrimonious habit of body.

The

The clitoris is seated at the upper part in the rima, immediately under the mons veneris. It is the principal seat of sensual pleasure in coitu in woman, like the glans penis in men, and which it resembles very much in miniature, except that it has no perforation: in size it differs much in various subjects; tho' the standard bigness is like that of a natural uvula. But it has been found sometimes so large, in new born infants that the good women have been at a loss to judge the child a boy or a girl; and to err on the right side of the question, they have called it both; which has given birth to those monsters called hermaphrodites; but in the strict sense of the word, I cannot think there ever was a perfect hermaphrodite; it seems to me impossible, that nature should wander so much astray, as to form an imperfection, so very perfect in itself; though we have instances of absolute mixtures, however, neither sex perfect.

The clitoris is a principal member towards generation, and its connexions are more extensive than has been generally taken notice of.

It takes its rise from the ossa pubis on each side, with two tendinous and muscular bodies, like the elevator penis in men, and terminates in a cavernous body; and which is in the middle divided by a membranous septum. This, with part of the forementioned, is the crura clitoridis: the muscular bodies however, continue to the ossa coxendicis and these are the muscoli erectores clitoridis.

At the other end of the clitoris it divides itself and runs all round the vagina, and makes a cavernous body; so that when the clitoris is titillated

lated with a sense of pleasure, and in an amorous inclination, its arteries become compressed by its muscular parts, the reflux of the blood is hindered, and thereby it becomes erect; the cavernous body of itself, with its continuation all round the vagina, and the labia swell up, and grasp the penis with a rapturous ardour whilst in action, and thereby not only heightens the pleasure to both parties, but also excludes the air, so that the semen virile may warmly, and in immediate contact, be injected into the fundus uteri.

There is not a part in all the organs of generation, but what this ruling little animal has an immediate connexion with; and at the command of this, every other part is ready and desirous of venereal embraces. This is too well known to the lewd, and carried by them to the grossest abuse.

Round the clitoris is the præpuce, which is foldings of skin in continuation with the clitoris: this serves not only as a protection, but in coitu has its use. Besides the muscles beforementioned, there are two others, which take their rise from the sphincter ani, though one might with as much propriety, and even more, call them proper to the vagina.

The arteries of the clitoris and the cavernous body, take their rise from the same part as in the male penis; distribute themselves into the various cavernosities, are taken up by the small ramifications of veins, and carried back again into the hypogastriks. Its nerves it receives from the intercostals, and these are very numerous distributed in this part; but besides these, it receives branches

ches also from the ligamentum rotundum, but of this I shall say more presently. The nerves and arteries leave the clitoris again, and spread themselves all round the pudendum, within the labia, the nymphæ, &c. and this is the plexus reticulares; and by swelling these parts in coitu, it adds considerably to the embrace and friction of the penis, for the warming of the parts, and exclusion of the external air.

Immediately under the clitoris, is the meatus urinarius; this passage into the bladder is very short, and surrounded with a tolerably substantial muscle, called the sphincter urinaria.

It is lined within, the same as the masculine urethra, and consequently as sensible. About the orifice it has a little intumescence, and which is covered with a continuation of that within; partly glandulous, and partly tendinous. This part is generally strongly infected in the venereal disease, though seldom the immediate seat thereof. Child-bed women often suffer greatly in these parts from hard labours; but in fact, rather from ill usage: And these parts sometimes become so relaxed, from the above reasons too, that the sphincter has lost the power of retaining the urine, which is no small grievance. But in general they are not so subject to dysuries and ischuries as men, and are more easily helped; and we have instances where large stones have been extracted out of the bladder, without cutting or lacerations.

The nymphæ, or alæ, take their rise from the præpuce of the clitoris, and extend themselves all round the vagina, so however, as gradually to lose themselves in appearance, and be-

become very small indeed, towards the perinæum. Their substance is soft, red, and spongy, and somewhat of a half-moon form. These are the real lips to the vagina, and in coitu are swelled up, which agreeably squeeze the penis for the exclusion of all external air: But this seems not all the use nature designed them for; they appear to be spare folds, that in parturition the parts may gather substance sufficient to extend without laceration.

It sometimes happens that children are born with the nymphæ larger than common, so as to have them hang below the pudendum, and which has given rise to another kind of hermaphrodites; but this, as well as the clitoris, will bear being shortened with a good bistoury, or scissars, without the least inconvenience. The nymphæ are smallest and plumpest in maids; but they become however larger and more flabby by frequent embraces, but most so, after bearing of children.

Between the nymphæ, just under the meatus urinarius, is the vagina. This is the organ destined by nature to render the propagation of our species, a moment of the greatest transport of pleasure in our lives; but from the abuse of this pleasure is liable to occasion us the greatest misfortune. My task is not here to moralize; it must however, give pain to every thinking being, to reflect, on the many absurd debaucheries which fools of either sex hurry into, at the expence of their health and peace; when they with more ease and safety might enjoy the extatic bliss of mutual embrace, accompanied with sincere friendship and real love, as the ultimate human

human felicity, agreeable to the bountiful Author's design.

The Vagina is the canal from the pudendum to the mouth of the uterus; and ordinarily from six to eight inches in length, (about the same dimension as the penis) situated between the intestinum rectum, and the vesica urinaria; to the first it is strongly and intimately fastened by muscular fibres, but not to the vesica.

It is of a texture capable to be extended to a very great width, and even in length too; and of so elastic a nature, as to suit itself to any narrowness required; full of wrinkles, and narrowest at the entrance.

At the entrance we observe that part, which has exercised the curiosity of anatomists in all ages, namely, the virginity; they have not only differed in the form, but even in the existence itself: and from the mistake of some of these sages, many innocent virgins have been cruelly condemned, whilst common prostitutes have passed for innocent.

The greatest faculty of the internal senses of man is judgment; and which should ever be nourished and protected by uncontrolled reason. For when once tyrannical prejudice gets the sway, judgment becomes a venal slave, and man loses his charter as a rational being: It is then he is blown with the wind from one extreme to another, and, with all his learning, forms the conclusion of an idiot.

The opinion concerning virginity, is certainly of no small moment; and as it is a point yet unsettled amongst the learned, I shall beg the indulgence of giving my opinion, amongst the many who have written on the subject; and by the

above, I mean only to claim attention, and then leave the reader to judge for himself.

The Mosaical law of circumcision, took its rise from the inconveniency of too long a præpuce. Population was encouraged as much as possible, consequently they married very young, and frequently before the vigour of manhood had gained its proper period. The law was put in execution as a religious rite, universally to all; though no one will suppose that it was alike to all absolutely useful: for men differ in general not more in any part of their body, than in this member; and in particular in the præpuce. Infants have always their glans covered: but as they grow up to the state of puberty, it becomes sooner or later uncovered; in that state their passions are like touch-wood, the least spark of fire sets them all in a blaze. No one ever described that period better than the incomparable Rousseau, in his *Emilius*. They have a languid desire by nature, they know not for what. If kept in innocence, this fire will only add to their vigour of manhood; but if vitiated, which is almost unavoidable, particularly in great schools and in large cities, the consequences are too obvious. I say their glans become sooner or later uncovered; either by private trials and handling, or by coition itself; some with difficulty, others with much ease.

Now this tightness of the præpuce I compare to the virginity in women; for since they married very young before the passions came to their proper maturity, the maidenhead would have been as troublesome to the male virgin as the female, which by circumcision was intended to

to be prevented ; and the females being married very young, even before they had had their menses, were of course very delicate. And this gave rise to the Mosaical test of virginity.

The experienced in amorous matters, will readily grant with me, that women differ as much in narrowness and wideness, as men can do in their members ; without regard to either bulk or stature in other respects. Girls, when they commence women, are as much of tinder as boys ; nature is as much at work to perfect them for generation, as the opposite sex ; and their passions are as easily put in a fermentation. Fortunately for them, their different mode of education excludes them from the opportunity of being so soon vitiated as men ; but sooner or later they discover something, which inclines them to the other sex ; which together with mysterious terms they hear from others, cannot fail of exciting their natural curiosity. And how should it be otherwise ? except they are void of all passions, and that cannot be without some infirmity.

Children are naturally narrow in the vagina, but not more so, than that a wax taper the bigness of a goose quill may easily be introduced. If the vagina is unperforated, it is certainly unnatural ; I own this is sometimes the case ; but it is also the case sometimes with the anus, and sometimes the penis ; and the one requires to be opened by art as much as the other ; all which I have done with equally good success, with a lancet properly armed : and this is an object no skilful midwife should omit to take notice of.

It is this unnatural closure which has been taken for the hymen ; and I am inclined to think, that this unfortunate virginity, has cost many a

pretty maid her life. For how should the menses be discharged? Mr. Cowper has given us a most extraordinary case of a married woman, whose husband with (we may well suppose) the greatest difficulty, gained a tolerable admission into the meatus urinarius in coition; the suppression of the menses, had drove an appearance, beyond the pudendum, like a prolapsus of the uterus; which on examination, Mr. Cowper found to be the impervious hymen; which when opened, at least a gallon of crumous blood came forth: this obstruction had diverted her husband's admission the other way: however, within a year she was delivered of a healthful child.

When the clitoris is erect, or swelled up, the whole part is affected, and there is at that time an actual dilation and contraction of the vagina: If a woman is embraced in that juncture of natural inclination, the parts yield very easily; and I will answer for it, there must be a very great disproportion of parts and roughness used, if there is blood-shed, or violation. But this is not always the case at the first embrace; for, the tender virgin is generally intimidated, which adds naturally to the contraction of these parts; and then on the other hand, the man being absent, from eagerness, regards not tenderness so much as he would do in cooler blood; no wonder then, that these delicate parts suffer more than they otherwise would.

Besides, there is another thing to be considered; it is not only the different habits that are naturally more or less narrow or wide in those parts; the time of the monthly period, makes no small alteration. But even other complaints, to which every

every innocent woman is subject, has a great effect.

I grant you however, a delicateness in a virgin; and I believe the maidenhead consists as much in this, as in any thing else, if not more.

If a woman has had her menses, (before that time nature did not design her for marriage) and she is actually inclined for coition, she will embrace it with pleasure, without pain or flooding; unless roughly handled, or a great disproportion of parts.

If a woman however is naturally narrow, (for some are so, and never will be otherwise) and particularly, cohabited against her inclination, she may pass more than once for a maid; and there are instances of this very often, as well by nature as by art; for the latter, I appeal to the good mother abbesses about Covent Garden.

When this is properly considered, I think it will plainly prove, that the Mosaical test of virginity, is not always a test of innocence. A man of understanding however, will soon judge right about these matters. True modesty, delicacy and tenderness, both in person and behaviour, will confirm innocence, whether there be any other signs or not. True innocence cannot be feigned, and differs widely from prudery and pretended ignorance.

This is my opinion on this subject, and drawn from repeated observations; and I thought proper to mention it on this occasion, as a duty due to the objects of our greatest concern. It is better ten guilty should escape, than one innocent person be condemned.

The entrance of the vagina in children is narrow, and somewhat smooth, and this is called the
D 3 hymen,

hymen, as mentioned before; but, when they commence women, and have had the catamenia, the parts become somewhat wider, and consequently as the vagina becomes contracted, they become folded, and in themselves encrease by age; and from inclination to embrace, they become little caruncles, about the bigness of myrtle-berries, and always four in number. These myrtle-forms, have been thought the lacerations of the remaining hymen, and may sometimes be the case, but, as I observed before, it is in general a mistake. I have had the opportunity of examining many women, and found them always of as much a standard-uniform as any other part, (though in fact they very little resemble myrtle or their leaves either): had they been lacerations, they could not possibly have been exactly alike in all subjects.

In maids they are least, but by coition the vagina being widened, they must of course become more wrinkly. Besides they have their absolute use; for they appear to me, beyond all doubt, formed, to close up the vagina, from the external air; and seem to be spare foldings, in order to assist the vagina, in parturitious extension.

The vagina within is very nervous, and exquisitely sensible: it is full of wrinkles, which are largest in young subjects, become less so by frequent venery, but are almost obliterated by repeated parturitions. The whole is chiefly of a muscular texture, strongly interwoven with veins, arteries, and in particular nerves. All within, between the rugæ, are little excretory glands, called lacunæ; which in the act of coition yield a mucous liquid, which lubricates the friction of
both

both parts in coition. The ducts of these glands are found all about in the pudendum more or less; and particularly about the orifice of the meatus urinarius, as also near the perinæum, called Cowper's Glands. It is in these ducts where the gonorrhæa is seated in women. This liquor has been mistaken for seed; but this mistake, is now pretty well known.

The vagina has a constrictory muscle, which takes its rise from the clitoris, and expands itself all round the vagina. Indeed, the whole vagina is a perfect muscle; for in coition it is as active as any in the whole body: it is firmly adherent to the rectum, and from the sphincter ani, another muscle arises, which intermixes with the forementioned, and communicates itself to the clitoris; and therefore generally is reckoned to belong to the clitoris.

The perinæum in women is but a partition between the pudendum and anus, and consists merely of the vagina, the anus, and the intermediate muscles. In women who have not suffered the extension of parturition, it appears to have a thin edge lapt a little over, towards the pudendum; but in child-bearing, it is apt to get lacerated, particularly by the unskilfulness of midwives; and often becomes troublesome by the cicatrification, in future parturitions. From the close connexion of the vagina with the rectum, and in particular the constrictores with the sphincter ani, the venereal virus frequently infects the fundament with shankerous ulcers.

Of the Uterus, and its Appendages.

WE now proceed to the internal organs ; the principal of which is the uterus, where we first commenced our existence. The uterus takes its beginning from the vagina, with which it is connected by a continuation of the same substance partly, and distinguished from it by its mouth, or opening from the vagina.

Its figure (in unpregnant women) is much like an inverted flat flask, and is situated between the urinary bladder and the intestinum rectum.

As to its bigness, it has a quality which is the most astonishing of any one thing in nature. Before conception it is naturally about three fingers in length, two in breadth and one in thickness ; and yet after conception, as it gradually extends to such a magnitude, as to contain a full foetus, and its surrounding appendages, its teguments will even encrease with its bulk ; so, that when unimpregnated, it will be about half a finger thick, and when dilated to such a great magnitude, it will be near two fingers thick, and even of a compact texture ; but what is yet more amazing, is, that after the delivery, in a few days it contracts nearly, to its natural smallness. This wonderful texture was absolutely requisite for so great a function, as gestation.

It is allowed to have three tunics ; the first is a continuation from the peritonæum, and covers it together with the vesica urinaria : this tegument cannot properly be said to belong however,
to

to the uterus itself, since it leaves that part again, and communicates itself to the continuing part of the peritonæum, which includes the rest of the bowels. It forms however, by appendages coming from the uterus, the broad ligaments; by which the uterus is properly sustained and supported in its just situation: These ligaments contain the ovaria, tubæ fallopianæ and other consequent vessels, which they embrace and support. The second tunic however, is proper to the uterus itself. This is very strong, and the fibres which are to all appearance muscular and tendinous, in the unimpregnated uterus, are variously interwoven and disposed.

It is these fibres, and particularly the tendinous ones, which in my opinion, are only apparently so in the empty uterus, and become absolutely vessels in the impregnated state; all which are supported and strengthened by the muscular fibres with which they are interwoven.

The inner tunic is nervous; about the fundus or upper part, it is smoother than at other places. All about, it is filled with small orifices, or openings of blood-vessels, but most so about the neck; and from these openings ooze out the catamenia: but not any thing for sealing up the mouth of the uterus in gestation, as is by some supposed, for which there is no manner of occasion.

The mouth of the uterus is the porter to this grand viscus and organ of propagation; this part of the uterus, is more remarkable than any other part, for its contraction and distention. Immediately after conception, it is shut up quite close, and even so, as to all appearance impossible

fible to dilate; but notwithstanding such strict closure, it opens gradually towards delivery, becomes soft, and excludes the foetus without laceration.

Towards the vagina, this os uteri protuberates, not much unlike the glans of the penis; and in coitu, particularly at the juncture of ejaculation, it meets the glans somewhat opened, and with a suction receives the semen virile, by which it is more effectually injected into the fundus uteri.

Its texture is of a wondrous network, of arteries, veins, tendons, nerves and glands; the vessels are very small but numerous; and most part within the uterus are the glands. From the immediate contact in coitu, this part is liable to be the seat of the gonorrhæa, and must of course be grievous. To the relaxed state of this mouth of the uterus, many ailments of imbecility take their commencement; which ailments are seldom properly understood.

On each side of the uterus, are the ovaria; each of these is a cluster of small glands enveloped in their proper teguments, and likewise wrapt up in the broad ligament, or the process of the peritonæum. These ovaria may justly be considered as female testicles; having spermatic vessels, coming from the aorta and the emulgents, and the veins returning back again to the vena cava, the same as in men. They are about half the size of the male testicles, and somewhat of an oval form. Their size varies according to the flower of youth, and condition of the subject; being always plumpest in a woman mature for generation, and withered away in old age.

Each

Each ovarium has more or less, about twenty glands resembling little eggs; which are each about the bigness of a pea; containing a pellucid lymph like the white of an egg; which when boiled, coagulates, and has in every respect the same consistence. This is the true female feed, of which we shall have an opportunity of saying more in another place.

On each side of the fundus of the womb go out two tubes, called from their discoverer *Tubæ Fallopianæ*. These are continuations of the vesiculous coat of the uterus, enveloped in the *ligamenta lata*, near the ovaria, which they somewhat encompass, and have an immediate communication with them, by vessels from every egg, commonly called *vasa deferentia*. Each of these tubes is about three inches long, somewhat curved; the entrance into the womb very small, and entracted, so as scarce to admit a very small probe, grows wider towards the end, even to admit a little finger, and then contracts again. At the end it spreads into ragged flaps, and which are called the *morfus diaboli*; but how it came to be called the devil's bit, the inventor of that name can best account for. Fallopius compared it to the spreading of a trumpet, and that it resembles somewhat when injected, though very raggedly so; its *fimbria* resemble much the indentation of the pink.

This member, among all the others ordained for generation, has afforded the speculative mind the most employment; but after all the learned and ingenious hypotheses given us, we are, alas! still in the dark. Yet it becomes us, as men, to communicate to each other, such opinions as
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shall appear to us most reasonable; at the sametime however, it becomes us likewise, to do it with modesty and a just diffidence, suitable to the weakness of the foundation of our conjectures.

Ocular demonstration proves to us, that they are conveyers of the female seed into the uterus; since the testes muliebres, or ovaria, have an immediate communication with them, and they again with the uterus. Their structure upon examination, and particularly on injection, appears of a reticular nature, and not unlike the cavernous body of the clitoris and that part which furrounds the pudendum: it is therefore reasonably conjectured, that they are swelled up and distended in coitu: moreover, when a tube is injected, it is curved, even so, that the *morsus diaboli* is observed over the ovaria. Now, may it not be reasonably supposed, that that part, namely, the *morsus diaboli*, grasps the ovaria as with a hand, and thus squeezes the semen muliebres, through the tube into the uterus at the crisis of coition? I cannot hold with those who maintain that the foetus is formed in the tubes, and remains there sometime before it is fixed in the uterus; it seems to me inconsistent with the nature of gestation: On the contrary, I am fully persuaded, that immediately upon conception, the intermixture of the two seeds, the male and female, adheres to the fundus of the uterus, and thus forms the placenta and foetus in its different gradations. I will not deny, but that conception, and the semen virile have been found in subjects, who have died suddenly either in sickness, or by the execution of the law: but quere, whether such a transposition may not be effected from the strong convulsions,
which

which always precede more or less sudden deaths and from which we often find things out of the natural course? this however, I can affirm, that I have had opportunities to observe very young embryos adhere to the uterus; and till I am convinced to the contrary by ocular demonstration, I shall believe that it was formed there from the first moment of conception. Opportunities of this nature seldom occur; but still seldomer are we allowed, or inclined to embrace them.

From the fundus of the uterus, go down the two round ligaments, one on each side. They are broad at the fundus, but soon become round and somewhat firm; they go down surrounded with the peritonæum through the foramen of the abdominal muscle in the groins, then spread their fibres, and end in the clitoris and its appendages.

As in men, the peritonæum surrounds the spermatic vessels, and carries them through the foramina of the oblique and transverse muscle of the abdomen into the scrotum, by which, they become subject to ruptures: so in women, the round ligaments taking the same course, make them liable to the same ailment in the groins; but not so frequently as men, and are more easily cured.

These ligaments consist of muscular and tendinous fibres, interwoven with arteries and veins, and are universally allowed to be supporters of the uterus. But here again, I must beg leave to make some observations, which I cannot find any author has done, or taken notice of; and that is, on the manifold uses of these ligaments; not only to keep the uterus in its proper position at all times, but in time of coition, conception, gestation and parturition.

In

In time of coition the uterus is actually in motion; and just at the juncture of ejaculation (if both parties coincide) these ligaments draw the uterus downwards in order to receive the ejection of the male seed with more force. But in parturition, it must be obvious I think, to every judicious midwife, that great assistance towards the exclusion of the foetus is given by these ligaments (at least, so it appears to me.) If this was properly taken notice of, and the pains gently favoured, instead of being violently forced, I am persuaded it would be the saving of many a woman's life. We have a number of profound learned pieces of midwifery; how to use a number of very curious instruments; how to turn children, and extract them by piece meals. But with humble submission to these very learned and over wise men, it has been a blessings of many womens, that they have lived too far distant, from having the assistance of these officious gentlemen, and their tools too. Many a worthy woman has been massacred, secundum artem, who if it had been their good fortune to have been poor, and of course must have depended upon kind nature's assistance, might have been healthy mothers of a numerous offspring.—Nature delights in ease and simplicity; and he is the most skilful, who has learned to be most subservient to her ways; he who thinks to control her by art, deceives himself and those who depend on his wisdom. But enough of this at present: I hope to clear this up to satisfaction, in a more pertinent subject.

The ligamenta rotunda, I look upon to be perfect muscles, and I cannot see how any one can doubt it; besides the uses I have already mentioned

ed, I apprehend, they have a great share in hysteric passions. And from their spreading themselves in the clitoris, I am inclined to think, that these muscles, in the furor uterinus, are the most outrageous of all the uterine organs.

The uterus and all its appendages receive arteries and veins, partly from the aorta and vena cava, about where the spermatic vessels go off; and partly from the hypogastrics and hæmorrhoids.

Those arteries which spring from the aorta, go partly to the ovaria, and from the vasa preparantia the same as in men, though somewhat shorter; they furnish also, the tubæ fallopianæ with arteries, which are wound and convoluted in a most wonderful manner. And they partly spread themselves all about the uterus; send some into the ligament a rotunda; others proceed to the vagina; and some few ramifications distribute themselves all about the pudenda.

The branches from the aorta, which go to the ovaria and tubæ, are always of the same magnitude, and but small; but those which spread themselves in the uterus and vagina, are larger: but particularly those in the uterus, increase considerably in pregnancy, yet not so much as those we shall mention presently: the reason of which I conceive thus; because these arteries are intended for the support and nourishment of the organs themselves, whilst the other kind bring provision for the productions of gestation.

The hypogastric arteries however, spread themselves, in greater number about the uterus and vagina, accompanied in a bifurcation with the veins, which in an unimpregnated uterus lose themselves, and

and become to all appearance fibres; but these apparent fibres become by gestation gradually arteries and veins, and distend themselves both in length and width: hence it is accounted for, why the uterus will increase both in magnitude and thickness of substance, in the state of pregnancy: and after delivery, by the separation of the placenta, the mouth of these ramifications discharge and ooze out the lochia, and so contract in their natural smallness and become apparently fibres again; and thus the uterus shrinks into its natural smallness.

With the fore-mentioned arteries and veins are variously scattered and interwoven the hæmorrhoids, and in a manner not to be met with any where else in anatomy, except in the mesentery; for arteries with arteries, and veins with veins, seem by anastomoses perfectly to have a communication, though the latter are considerably smaller and fewer than the former.

To these two kinds of vessels, namely the hypogastrics and hæmorrhoids, we have undoubted authority to ascribe the catamenia; but which of them has the greatest share, is not yet determined: for my part, I am inclined to think the hæmorrhoids have; but as my opinion on this head would perhaps lead me too far out of the road of this subject, to which it is rather immaterial, I shall indulge myself with this argument at a more seasonable opportunity. Suffice it, that from these vessels chiefly the fœtus receives its nourishment, from the first moment of conception; and from these, the menstrual discharges flow regularly in unimpregnated women.

The nerves, which spread themselves all about the parts now spoken of, take their rise for the
most

most part from the par vagum, and the cauda equina: the par vagum is very extensive indeed; and there is perhaps not a part in the bowels, but what receives a branch from this pair of nerves; hence it is no wonder, that there is so great a sympathy in the abdominal viscera, and particularly in the female sex. The horse-tail nerves were named so, doubtless, from their numerous ramifications, which spring from the os sacrum; and hence we see the reason why women, particularly in time of pregnancy, and in parturition, complain so heavily at times of the loins.

From this description it plainly follows, that the female organs of generation, are not only of a more complicated construction, than those of men; but also from their peculiar delicacy and entirely different structure, are subject to ailments, which men, in regard to the sensation thereof, must consequently be totally strangers to.

This consideration, will naturally inspire every reasonable man with a sense of tenderness, and compassion, for the many weaknesses, and complaints they labour under; at the same time, it will excite in his breast, an ardent desire, to aid and protect them, on all occasions, as the objects of his felicity; and tenderly preserve them as the plantations of mankind.

Here I shall end this chapter, and proceed to that, where I propose to draw the outlines of the most sacred function of man, namely, the propagation of his species.

C H A P. III.

Of Generation.

AMONGST all the innumerable benefactions, which the great author of our existence has given us, in order to promote our felicity, that of generating our species, is surely the greatest, and is truly sacred in itself. The blessings springing from this fountain of happiness, are not confined to the purchase of gold, to power, dominion, title, or honour. It brings mankind upon a level, and shews to all in common, the true distinction betwixt the substance and the shade, of what they are in pursuit of; namely, to be happy. It is the tender nurse of the celestial plants, love and friendship; the plants of all other virtues which most ornament the human breast, and make us happy!

Let us seriously propose these three questions to ourselves: For what end are we born? How long may we expect to live? And how shall we best employ that time to our advantage? There is nothing so mysterious in these questions, but what conscience (that divine monitor) which is ingrafted in every man's heart, will be capable to answer, without the aid of any one. Perhaps I shall be censured by some, for wandering from my subject; be it so; I say in my defence, those are far more blameable, who despise, and act in opposition to these reflections, which are dictated by nature to all mankind.

The

The word generation is very extensive in itself ; since every corporeal being has its existence by that act : And which again one time or other, according to the prescribed period, degenerates ; or, in other words, (which is the same theory in fact) is created and annihilated : but not in the sense of something to nothing, or nothing to something ; but the act of transposing corpuscles, from one corporal being, into another : For whilst we reason as naturalists, we must have a something for our foundation, and give up all chimerical nothings, for the benefit of labour-in-vain metaphysics.

The generation of the human species, the noblest of all, we shall here endeavour to give some faint outlines of : to which the principal, and the first of our examination, is the male seed.

The semen virile is a semi-transparent, greyish white, and somewhat coagulated liquid ; which is by means of the spermatic vessels, and the testicles, separated from the blood, and from the testicles carried to the vesiculæ feminales, where it is kept for use.

As men of learning ever had, and ever will have, something to differ about, so this, as a principal object, could not of course escape their disputes : However, there was no one dreamt about this liquid being animals, till the ingenious Mr. Leevenhock gained the reputation of discovering little tadpoles in the seed, by the help of a microscope ; which notion was so far improved by him and his followers, that they gradually discovered these animalcula, to be actual man in miniature ; nay more amazing, they pretended to distinguish the different sexes too. This puts me

mind of a little fable applicable to this, which I have met with somewhere, and shall beg leave here to insert.

A fox, who was a young astronomer, once observing the moon, exclaimed in an extasy, that he actually saw there a ship under full sail; at which the generallity of beasts set up a loud laugh, (particularly the ass) at the observer's expence; but an old elephant, renown'd for his sagacity, who as soon as he could be heard, adressed them gravely; gentlemen, said he, you are rather too hasty in your censure: I myself see something in the moon, though I know not precisely what to make of it; but the fox's eyes are younger than mine, consequently may see keener: You had better look again, gentlemen, perhaps he is just enough, it may be a ship for ought we know. They took the alarm, and all stared up eagerly at the moon; The doubts now vanished, and one saw the ship plainer than the other. At length the mole came forth, and giving a peep, declared, that he not only saw the ship, masts, sails, and rigging, as plain as at noon-day, but even saw distinctly too, that the man at the helm had a short pipe in his mouth; by which he was sure therefore, it must be a Dutchman.

But to make this notion more extravagant, I present the readers with a true poetical description of this fanciful doctrine, from Baker.

Each seed includes a plant; that plant again
Has other seeds, which other plants contain:
Those other plants have all their seeds, and those
More plants again, successively enclose.

Thus every single berry, that we find,
Has really in itself whole forests of its kind;
Empire

Empire and wealth, one acorn may dispense,
By fleets to sail a thousand ages hence.

Each myrtle seed includes a thousand groves,
Where future bards may warble forth their loves.

So Adam's loins, contain'd his large posterity,
All people that have been, and all that e'er
shall be.

Amazing thought! what mortal can conceive,
Such wond'rous smallness!—yet we must believe,
What reason tells; for reason's piercing eye,
Discerns those truths our senses can't deny.

I will not now detain the reader with contradicting these pretty extravagancies of fancy; those who are peculiarly fond of the marvellous, have my consent to believe them: I will therefore proceed immediately to the formation of the seed, and its peculiar qualities; and examine wherein it differs from the rest of the humours secreted in the body.

The organs for secreting the semen virile, has been described in the first chapter, which should be remembered, in order to form some idea of their action. First then, the spermatic arteries receive the blood from the aorta, and from the emulgent arteries, and carry it down to the testicles for secretion: These vessels are narrower at the places where they go off, than elsewhere; because the blood should go but slowly in them. When they come down to the varicosum, the secretion begins, the subtiler parts of the blood penetrate into the contorted windings of the tubulæ in the testicles, whilst the grosser parts are taken up by the spermatic veins, and carried back to the blood again. Whilst it is in the testicles it seems almost stagnated, and there it receives its greyish hue:

However it creeps slowly from thence through the ductus highmorianus, and epididimidas, where it is still farther prepared; and when it has gone through the whole testicles, it rises slowly in the vasa deferentia; (which passes partly through the prostate) and at length gathers by little and little, into the vesiculæ seminales, where it is kept in its mature state for use.

That it receives some farther concoction towards its perfection, from the prostate, is undeniable; in what it consists however, I own myself wholly ignorant: But I believe, that all these organs, the spermatic vessels, the testicles, the deferentia, the prostate, and the vesiculæ seminales, contribute towards the fertility of it.

Of all secretions in the animal œconomy, there are none so elaborate as this; and we may justly add, none more delicate: But still, setting aside all forced fancy, and copied notions, the seed is nothing more than a humour, like every other secretion, gathered fresh and fresh, as it is wanted. As for the notion of animalcula, I think it highly absurd. I do not deny the existence of animalcula in the human body, far from it; for in pediculous apothumes, I have seen that vermin follow the incision lancet in large clusters; and I make no doubt, but that most cutaneous eruptions, and many other diseases, abound in animalcula; nay, some perhaps, consist of nothing else: But for the very same reason, I deny their existence in the seed, blood, and all other animal fluids, whilst in a sound state, and in a living subject. Whosoever has observed nature, will find, that animalcula take
their

their existence from corruption only; that is, the one is created, at the annihilation of the other.

The limits I have prescribed myself for this subject, will not admit of a confutation of every chimerical conjecture said in favour of that absurd doctrine; nor do I think it needful; since the following will easily prove, there is no such animalcula required for generation; and that animalation (if I may be allowed such a term) together with animation of the *fœtus*, may be conceived in a much more easy and more rational manner, when put in comparison with vegetation.

It is immaterial, I apprehend, how much salt, how much oil, &c. the male seed will yield by a chymical analysis: These are trifling experiments; and I question much, whether there be any difference in this, or the same quantity of any other lymphatic secretion. But, our enquiries must be of another nature; for chymistry is lost in tracing the animal œconomy, and has been the *ignis fatuus* of many a grave doctor, and too often at the expence of the patient. We must in the first place observe, that when we have an opportunity of examining the seed, it has lost the power by which it acts. We have before observed its colour and substance, but this is no true criterion; for it may have quite different qualities when injected in the uterus; (*viz.*) be quite transparent, and of a very volatile liquidity; add to this, a subtile animal and nervous spirit, by the intestine motion of which, in conjunction with the female seed, it strikes root in the uterus; and from that moment begins to sprout out, grows, and gathers its nutriment from the uterus, (form-

ed for that function) till its periodical maturity, and then drops off: This animalation may perhaps be somewhat similar to the vegetation performed by inoculation of plants.

Fluids appear, and are in fact, quite different, from what they are when out of the animal, in circulation; for in the latter case, they may with the greatest propriety be deemed actually alive, and have positively, (in my opinion) a share of sensation: This is not at all surprising, when we duly consider the near relation between solids and fluids, in the animal œconomy: And who will deny that life itself is included in the blood? that is to say, that the action or stagnation of one, is the action or stagnation of the other.

The axungia, fat, blood, seed, and other humours, are actually liquified in the body; nay even perfectly transparent too; but the moment they take air, they alter, and die, before the wisest of us can make any thing of them. There will indeed appear filaments from the quick coagulation; and these may appear as much like tadpoles or any other strange animal, as the spots in the moon may appear like a ship: But if they needs must be alive; then, a day or two in the summer season, and open air, keeping them liquified, will make diversion for the eyes, and the nose too; and we shall then be convinced, that each state of putrefaction will have its peculiar species of animalcula, or even animals.

The seed differs much in different habits; and even varies greatly in one and the same subject, according to the state the body is in. Agreeable to the natural course, it is plentifullest after the commencement of puberty, most vigorous at
thirty,

thirty, and least and weakest in old age : but there are circumstances, whereby this may be quite otherwise.

In the general run of nature, vigour in generation, is the surest mark of health ; and when the body is out of sorts, the organs of generation fail for the most part the first of any ; yet in this there are some exceptions, though but few.

There is nothing will enfeeble a man so much as an obstinate gleet ; and the younger the patient is, the more there is to be feared, and the more difficult to be cured ; because, too, often there is a latent vice at the bottom, which nature has taught all men to be ashamed of, and therefore not only with the greatest reluctance confessed, but even then, too much secretly practised, at the expence both of peace of mind and of health. But of this, more at another time. In this state the seed is thin, and of a bluish cast ; because it is secreted in too great plenty, and wants concoction to give it consistence and vigour.

In the beginning of the first symptom of a virulent gonorrhœa, the patient is greatly stimulated to venery, and will sometimes have nocturnal emissions, even profusely so ; in that state the seed will have a remarkably yellow hue, even so as to stain the linen : If he is plagued with a chordee, this is generally oftener repeated than he likes it should ; which adds not a little to his pain, and will often make him take particular notice of the heat it occasions : This seed differs greatly from the former, because the first proceeds from weakness, while this is from an acrid stimulus ; and I hold them both impotent ; the first from want of proper concoction, and the last from the fire and
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the virus that must be contained in it; though it should proceed from no other effects, than by the virus it must have washed away from the urethra whilst it was ejected. We have, however, instances of conceptions in both these blemishes; the result however is too obvious.

The best semen, and from which we may expect a good healthy offspring, (if planted in good ground) is that which is at least twenty-four hours in collecting in a sound man; who has not abused his constitution in repeated debaucheries of any kind, and which must be ejaculated with fervency, love and pleasure.

The female seed differs something from that of the male; and that particularly which we properly distinguish by the name of seed, is less in proportion than that of the male. Namely the seed oozed out from the ovaria, through the tubæ fallopianæ into the uterus. This is of a clear transparent lymphatic consistence, much like the white of an egg, and will, when put near the fire, or boiled, coagulate in the same manner. This examination has led philosophers astray; for from thence they have concluded, that the ovaria, since they resembled eggs, must be actual eggs; and must be impregnated the same as in the oviparous kind. But the grand difficulty is, how these eggs should come into the tubæ fallopianæ; since from the whole cluster we find but small tubulæ, which go from every egg to the tube.

However there is one observation, I think will clear this up without much difficulty; and that is, in old women, who have had many children, we find these eggs, equally as numerous as in young women, who have had no children at all; with
this

this difference only, that in the former they are withered away, and in the latter they are plump. It is true they resemble eggs, but then these eggs are actually glands, and are fastened between two strings, by which they are incapable to move either forwards or backwards: For one way they are fastened to the spermatic vessels, from whence they receive, or secrete their contents; and the other way, they are fastened to the deferentia, or small vessels, which open themselves exceedingly narrow in the fallopian tube: Add to this, they adhere to the tegument which contains them; so that without breaking and laceration, they could not be separated; and then, how are they to come into the tube where there is no opening for them?

Nature deals neither in mischief nor witchcraft; and all these things could not be effected without either the one or the other: We shall therefore conceive the act of conception in an easier way, which I hope will appear more compatible with reason, and clearer to the understanding.

We now come to the grand act of nature, coition; that function, in which nature has levelled the whole animal creation, in rendering the propagating of their species pleasing; however with this difference, that to all, except man, she has prescribed periods of desire; but man, as a rational being, she has left at full liberty to exercise these blissful moments with discretion.

As long as that liberty is not wilfully abused, so long is it agreeable to the laws of God and man; but the moment it is perverted into debauchery, the abuser sinks beneath the level of

a brute ; and remorse, disease, and self contempt, become the fruits of his labour.

Love is engrafted by nature in the human breast, the mother plant of every other virtue, by which we are rendered pleasing to God, happy in ourselves, and useful members to society. It is by this celestial fire the sexes beget an ardent desire to give and receive something essentially pleasing ; which creates in them an idea of felicity, not to be described, nor to be compared, to any thing, except to heaven itself. If the love is pure, the bliss is the greatest man can wish for : But beware, O youth, beware ! let this noble passion be guided by reason, lest it should hurry thee headlong into lust ; for, if that be thy misfortune, farewell to love, and every other social virtue ; thou art ruined for ever !

Sacred instinct, first kindles this æthereal fire : And when that pair meet, whose inclinations come in unison, they proclaim to each other, with palpitating endearments, that there is a secret anxiety for becoming united into one. If this is not repugnant to the laws of chastity, and agreeable to the laws of nations, there now remains nothing but the embrace to complete their felicity, agreeable to the dictates of instinct.

If this is concluded and the period arrives, nature then prepares ; and the ideas center in this act only : the blood increases in velocity ; and like the attractive power of magnetism, they cement as they approach in contact.

The members of generation, by the influx of the animal spirit, are eager to unite : The erectors penis contract themselves, and draw the penis nearer the os pubis, and those with the transverfales,

transversales, and the accelerator, help to compress the vena ipsius penis, whereby the blood is hindered a reflux, and thus is forced into the corpus cavernosum urethræ, and corpora cavernosa penis; whereby the member becomes erect.

In the same manner (if there is no intimidation) the muscoli erectores clitoridis, contract the vena ipsius clitoridis, whereby the blood is forced into the cavernosities of that, and the crura, all round the pudendum; whereby the parts agreeably swell, and acquire a florid colour; the muscular part of the crura round the vagina, and the alæ, become in an obscure alternate motion, which is communicated to the vagina; whereby the lacunar glands are squeezed, and lubricate with a soft mucous humour the whole pudendum.

When the glans reaches the entrance of the vagina, the carunculæ myrtyformes gently give way; and by the mucus pressed from the lacunæ, the penis becomes lubricated, by which, for the most part, it soon gains its way. The sense of this is exquisite, and sets as it were the whole muscular fabric in agitation, almost involuntarily. The sartorius, pectineus, vastus externus, vastus internus, rectus femoris, the rectus and obliquis abdominis, &c. act in concert, and in opposition with, and to the latissimus dorsi, glutæus, biceps femoris, gastrocnemius, &c. in order to agitate the penis to friction. This is greatly assisted on the woman's side, by obscure motions of the same nature: But in particular, it is heightened by the vagina, the alæ, and whole pudendum; the labia being swelled up, softly compresses the penis, as do also the alæ; but in particular the vagina, being

ing titillated by the friction, contracts and dilates agreeably, by which the pleasure greatly encreases to both parties. In the mean time the clitoris partakes not a little of this pleasing sensation; communicates the tickling to the rotunda, which by the alternate motion sets the uterus, the fallopian tubes, and the ovaria also in action. The whole together with the abdominal muscles seem to be in a constriction: The fallopian tubes are (as we may say) erect or distended with blood, and are bent in a curve, so that the *morsus diaboli* are as it were, grasping the ovaria.

The action now begins its crisis; the penis swells somewhat suddenly, and the vibrating motions become quick, strong, and almost spasmodic; this encreases the sensations of the female organs; both move together with rapture, the parties sink into *extasy*, and the *ejaculation* takes place. The muscles of the penis, the sphincter urinaria, the sphincter ani, and particularly the *vesiculæ feminales*, receive a sudden spasmodic contraction; and which is partly communicated to all the forementioned muscles: by this constriction the seed is injected with considerable velocity into the uterus, where it is received with a kind of suction, which adds not a little to this force.

In the moment of ejaculation the uterus is drawn strongly downwards by the *ligamenta rotunda*, the mouth of the uterus opens, whilst the vagina constricts; the *morsus diaboli* squeeze forcibly the ovaria, which by their small *vasa* yield the female seed into the tubes, from whence it is somewhat forcibly injected along with, and

to the male seed in the uterus; and thus instantaneously cohere as a conception.

When this moment of extasy is ended, the parties wake up as from a trance, and seem to be smothered in blifs. The muscles now slacken, the veins which just before were distended, with rarified blood, contract; the membrum virile becomes flaccid, the scrotum contracts itself, and the whole body feels a sensation of lassitude, accompanied with a satiety, perhaps, not unlike that we feel after a good dinner, when the finest sauce has lost for a while its favour. The female after such a successful coition, (where a conception is the result) generally feels a gentle chill, and that from the same consequences, though in many respects, in a more forcible manner.

I shall finally proceed to the different periods prescribed for man by nature, for his entering into the world: The lines of this, the reader must expect to be but very faint indeed; yet I hope satisfactory, considering the space I have limited for it.

We will then in the first place suppose, that the female has conceived. Here begins the first rudiments of man.

I have somewhere before given my opinion in that mysterious function of nature, but must here add; that the colateral officula of the hypogastrics and hæmorrhoidals, probably are the channels in which the semen virile, enveloped with the semen muliebre, strikes root: And this I shall take for granted; for as to its entering the tubæ fallopianæ, I think it as absurd as the animalcula. Admit then, that this is the case, (for
reason

reason will not dictate to me any other,) we will then conceive, that the semen masculinum, is by a momentary pulfive transportation removed from the vesiculæ feminales, whilst yet animated by its own peculiar intestine motion, into the uterus, and instantaneously received by the above osticula; and from that moment commences its anastomafation with these vessels; and receives by them a conjunction of circulation with the whole animal œconomy.

Now plastic nature begins to mould; first by tender fibres to form the chorion which furrounds the whole; and from the root or placenta, sprouts out the young zoophyte; first, the umbilical funiculus; the little something at the end, gradually becomes the brains, the medulla oblongata; and next the viscera, very obscurely. The whole for the first month, is not perhaps of two drachms weight. Hence we may learn, that very probably, the first drop of the semen in ejaculation, is sufficient.

The inoculated animal bud, farther continues its animalation; the eyes, the mouth, and nostrils, make their appearance, and the whole body (not near so big as the head) begins to form, and shew the difference of the sex; at length the arms and legs, sprout out of the trunk like little branches, and gradually the little zoophyte becomes animated.

This is the first period of existence; from the moment of conception, till some time between the third and fourth month; and till it is animated it is called an embryo. In this time the woman is altered strangely, and feels herself a different kind of being; she has no menses, she is frequently

frequently troubled with nausea, especially in the morning; and her ideas become more than ordinarily fanciful and remarkably timorous. It is then she is the touchstone of affection, and the object of care, of her guardian friend and protector.

From this time the foetus discovers life; and this is called quickning. The foetus has now actually commenced a circulation, its little heart is put in motion, and there is a rotation of its own animal fluids; it grows apace, not only in bulk, but also in due proportion: Towards the seventh month it gets nails and hair; grows remarkably lively; at length becomes restless; and seems discontented with its confinement.

This is the second state; and our human plant is now animated with a soul, or life. The mother, now feels somewhat more lively; she thrives sensibly; and her appearance, commands, not only the innate love and esteem of her protecting friend, but also the respect and aid, of all who behold her. In the eighth, and towards the ninth month, she becomes at times anxious, and her dear pledge of love, becomes gradually a burden. At length nature proclaims to her to prepare for a change in her situation. The foetus sinks gradually lower in the pelvis; the pudendum becomes somewhat gently tumefied; the os internum gradually opens, and becomes sensibly soft and lubricated; the vagina becomes more than ordinarily mucilated.

The organs then make preparation for an exclusion, and at length the critical moment arrives, to the relief of the little stranger, and its happy mother. The groins, the loins, and the os uteri, have intermitting sensations of pain; but in a manner, so as to summon all the muscular fabric

to their aid. The pains increase and become quicker; the os sacrum, coxygis, and pubis, greatly partake of the pain with each other; the ligamenta rotunda contract together, with the uterus; the throws increase; the chorion and amnia break; and now the stranger works for his liberty, with the strongest part about him, his head. At length a strong effort excludes him, and gives his mother such a moment of happiness, in the delivery, which can only be judged by those, who have felt the preceding excruciating pain.

Thus we are launched into life; the garden of good and evil, wisdom and folly, virtue and vice, happiness and misery. And just, when we begin to learn in the school of experience, the true estimate of human life, alas! we sink into the grave.

P A R T II.

O N

The Origin, Formation, Nature, Infection,
and Progress

O F

The VENEREAL DISEASE in General.

IN the first part of this work, we have examined the organs of generation, of both sexes, in their natural state; as also, their functions, as ordained by the author of our being: This was absolutely requisite, in order to understand a disease, or rather, a train of diseases, which are the fruits of the abuse of these organs.

It is said, that knowing a disease is half the cure; which is partly true; at least it is rational to enquire into a malady, before we attempt to remedy it: To do this therefore, is my design in this part; and which I intend to pursue, by dint of reason and experience only, and by an impartial and unprejudiced enquiry.

C H A P I.

On the Origin of the Venereal Disease.

THERE is perhaps no ailment incident to the human species, that has caused so much altercation amongst modern physicians, as the Origin of the Venereal Disease: And yet, if we give ourselves a little time to reflect, and dare think for ourselves, I believe, we shall not find it so difficult a question to solve.

In all ages, men have been led away into the greatest absurdities, either from a too easy compliance with the opinion of others; or else, from some flighty conjecture, which they have been determined, obstinately to maintain, because they have once advanced it. And this pride has been the universal disturber of harmony, as well amongst divines, as philosophers in general; though these sages have most exclaimed against that weakness of human nature.

Of all ambition, that of being thought learned, has proved the greatest ignis fatuus, of real knowledge; for it has driven sometimes, even men of abilities, to such lengths, as must have made them blush at their own doctrine: Yet so great is the dread of being thought in the wrong, that even at the expence of integrity, they have persisted in the support of their errors.

It is not my intention to descend to personal criticism; for I wish to be in friendship with all mankind,

mankind, as a true philanthrop : At the same time, I must beg leave to observe, that I cannot simply comply with the opinion of any one, unless it coincides with my own judgment. I am in search of truth, and wish to embrace it, wherever I shall be so happy as to find it.

The question is, whether the venereal disease, is ancient or modern? It is strange, that this question, which in fact, is of little signification to the patient's recovery, should have caused amongst the sons of Æsculapius, so much altercation ; even, so as to descend to opprobrious language, and personal abuse : But, whilst they were eagerly engaged to support their arguments, by playing upon words, they became diverted from the subject itself. However, as the result of unprejudiced speculation, and conclusions drawn from experience, I venture to assert, that the venereal disease, is as old as the vice of promiscuous copulation.

Every state, as it has arrived at popularity, has also sunk more or less into debauchery ; and nothing has contributed more to their ruin, than this very vice. As the children of Israel increased, so likewise, they grew in vice ; and as they became more vicious, they also began to be loaded with the foulest diseases. Whoever reads the books of Moses, cannot reasonably doubt, but that there must have been the most criminal vices amongst them, and in consequence, horrid evils : for else, why should there have been a necessity of providing the requisite laws and regulations of that kind? If we impartially examine the different kinds of leprosy, boils, rotten bones, &c. described in the various parts of the bible, we shall find their commence-

ment, progress, and symptoms, in many respects, exactly corresponding with those of the confirmed lues venerea.

The names of gonorrhæa, phymoses, paraphymoses, &c. are of Greek extraction; and what shocking diseases of that kind, do we not read of, amongst them and the Egyptians? And when the Romans sunk into lasciviousness, they fared no better; though their baths were for a long time a great preservative to them. But we need not go out of London, to prove this disease, at least more ancient, than the importation from the West-Indies: In the ancient records of 1375. and 1390. we find that public stews and brothels of common wenches, (after the Italian custom) were publickly tolerated, under certain regulations, in Southwark; and we find amongst the many regulations made, that such wenches as had the burning, were to be separated from the rest, and forbid to lie with any man, whilst she had it: Similar to the regulations in the stews at Avignon, in Italy, ordered by the good queen Jane, 1347.

Some authors have laboured very hard, to prove, that none of the diseases, now mentioned, were venereal; but the more they have laboured, to overthrow, the more they have confirmed the very opinion which they have opposed: For after all, they were obliged to acknowledge, that they were diseases, proceeding from debaucheries; and that their consequences were at times equally bad, as those of the modern infection; and now let me ask, where is the difference?

I have no manner of objection, to allow that the Spaniards brought it over from the West-Indies,

in their return with Columbus ; neither, that the malady was then, and is perhaps still very frequent amongst the Indians : If these blood-thirsty robbers, had kept it to themselves, and perished thereby, it would have been a punishment, scarce adequate, to the unheard of barbarity, which they exercised on that poor race of people. And admit they brought it over ; I am even in that case inclined to think, that these vagabonds traffick'd only with the Indians in that kind of commodity.

Other authors will have it brought from the Coast of Guinea, and that it owes its origin to the yaws : I grant this too ; nay, I'll even go so far as to say, that the yaws is frequently the real venereal disease ; and differs in nothing, but in the species of people, and in the manner, in which it is contracted. I think, there is nothing confirms more a relation between diseases, than that the same method will cure them : If this be the case, then I say the Yaws, the Venereal Disease, and the ancient Leprosy, have for the most part one nature ; and only differ in the various names, and the manner of their being contracted.

But how came it to be supposed of French extraction ? To answer this, I shall here beg leave to give a short detail of the rise of this false alarm ; and then proceed to the more material causes of the disease itself.

Christopher Columbus, set sail from Spain with three ships, and an hundred and twenty men, on the third of August, 1492. and arrived the sixth of December the same year, at the island then Hispaniola, now St. Domingo : He

there built a garrison; left thirty eight of his men; set sail again for Spain the 6th of January, 1493; and after much fatigue, arrived on the coast of Spain, the 6th of March the same year, with eighty two of his men, and nine Indians.

His success made him welcome to the king and queen of Spain: In consequence of which he set out again, the second time, on the 5th of September following, with seventeen ships, and fifteen hundred men; and arrived in the West-Indies, the 27th of November the same year.

Now the thirst of gold intoxicated and converted those adventurers into very devils; they were not satisfied with plunder only, but wantonly invented unheard of tortures, for the poor objects of their barbarity: lust blackened their cruelty; bands of these villains would satisfy their lascivious appetites, upon one poor female victim, and then let their dogs tear her to pieces! By these diabolical practices, was it possible to escape infection?

The following year Columbus sent fourteen ships back again to Spain, richly laden.

At their return, all Spain was agitated with the news of their success: The bawdy houses became filled with that lascivious crew; and nothing was talked of but gold from the new world, and the number of Indian infidels massacred. From this time, ships were sent to the West-Indies, every month; a continual intercourse between the two remote parts took place; and history tells us, that at every return, the ships were loaded with riches, and the men with the venereal disease.

About this time, there were disturbances in Naples; Ferdinand, king of Spain, sent privately

forces thither, in which were many of the veterans, who had been in America; Charles VIII. then king of France, urging an hereditary right in Naples, sent forces also, to recover his claim. An open rupture, between France and Spain then broke out; and the French, who at first seemed successful, and for some time had possession of various places, were at length worsted, and compelled precipitately to retire: Naples was the seat of war; and their prostitutes were obliged to be alternately common to both.

It was at the end of the year 1496, when the French army came home, and was found greatly injured by the venereal disease: This gave the first universal alarm in Paris; and the doctors, to shake off a slander of ignorance, gave it out as a new plague, of a peculiar nature, contracted by coition.

This notion being taken for granted, a decree of parliament was immediately issued out, and proclaimed by sound of trumpet, throughout the streets of Paris, concerning the new plague, which they called the great pox; (viz.) That all strangers who were in the least infected, should retire from Paris within twenty-four hours, on pain of death; that hospitals were erected, to receive all the infected belonging to Paris; and where every body was immediately to go, on pain of death. Taxes were raised for the support of, and officers created for regulating these hospitals, &c. &c.

This bustle and noise gave the alarm all over Europe; nothing was talked of but the French pox; and every body shun'd a Frenchman, for fear of being infected by him; even so, that at
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some places in Germany, they were forbid the territories. Soon however, this plague, of the great pox, was observed in its various degrees, in all parts, even the remotest from France and Spain: notwithstanding which, it had acquired the name of French disease, and that nation bore the blame only.

The French being piqued, at last, at the odium thrown on them, of being the propagators, of this filthy disease, endeavoured to shake it off, by tracing it back to Naples; and called it in their turn, the Neapolitan Disease: But the Neapolitans again, laid it to the Spaniards; and the Spaniards upon the Indians.

At that time of rumour, it became fashionable for doctors, of all persuasions, to speculate, but more on the first origin of this wonderful plague, than how to remedy it: all who could set pen to paper, wrote in search of the mystery of this affair; Astrologers traced it from some strange conjunction of peculiar stars; divines from the vengeance of God; philosophers from the foulness of the air; historians from canibals, or the eating of some peculiar animal by the Indians, &c. &c. However, gradually they began to be ashamed of their neglect, in the cure; and at length, unanimously agreed on a method, which they were pleased to call rational; though unfortunately for the poor patients, it happened to prove irrational; for it made the evil worse. In process of time, they came nearer and nearer the true method; and mercury was at last found by experience, the only specific to be depended on.

Amongst the many idle conjectures, concerning the first origin of this disease, that of the sting
of

of a scorpion, seems to carry some share of plausibility with it : When a person is stung by a scorpion, the first symptoms (it is said) are, that the patient breaths nothing but rage and lust : Coition gives him immediate ease ; but the woman with whom he copulates, becomes greatly injured, and will injure others again : I cannot aver this for fact, having not come in the course of my practice ; yet, when we consider, the surprising effects of a tarantula, and the bite of a mad dog, it will not appear so very strange.—I remember being once in company with a master of a ship, then returned from the bay of Honduras ; who assured me, he had an infallible and experienced remedy against the sting of the scorpion ; which on request he honestly related to me, (viz.) that the touch of the glans of the penis would instantaneously draw out the poison, without the least ill effect to that member, whether it was done by the patient himself, or, in case the place stung, rendered this impracticable, performed by another. This he affirmed to have personally experienced.

With regard to this disease taking its origin from eating the guana, an animal of the lizard kind, common in the West-Indies, I can see no other sense, than that the flesh of all carnivorous animals, are unwholesome food ; the hog not excepted : Which I am apt to think, was chiefly the reason, why Moses prohibited all carnivorous food to the Israelites ; and why it is reckoned unclean in most countries. And as to the canibals, I reckon that equally fictitious, with all other idle conjectures.

I will not detain the reader any longer with notions, which I have so very little faith in myself; but proceed to such causes, as are built upon experience and reason.

In the first place then, I will refer the reader to the bible, Leviticus the 13th, 15th, and 20th chapters, and the 5th of Numbers: Where it appears evidently, that the children of Israel, have not only been a lascivious and debauched tribe, but, that from these irregularities, they became loaded with the most shocking diseases: It appears evident likewise, from the many wholesome laws, and regulations in these disorders, that uncleanness, and promiscuous venery gave rise to it. And that this is actually the case, I think must appear very plain, to every impartial observer.

The catamenia in women, (though in the sound state) is nothing remarkably different from pure blood itself; yet from its being liable to become acrimonious and sharp, it has attracted the observation of physicians, and naturalists, in all ages. I shall only beg leave to quote a paragraph from the great Pliny; in his seventh book of his natural history, chap. 13. “ There are
 “ few things more surprising (says he) than the
 “ monthly discharge of women; At their approach, new wines grow sour; grain touched
 “ by them, becomes barren; grass dies, young
 “ sprouts wither, and fruits fall off the trees on
 “ which they grow; the lustre of mirrors grows
 “ dull upon their viewing them, steel loses its
 “ edge, and ivory its polish; the bees die in
 “ whole hives, brass and iron immediately rust,
 “ and the air is foetid. Upon tasting it, dogs
 “ grow

“ grow mad, and their bite is infected with an
“ incurable poison. Nay farther, the bitumen
“ swimming at a certain season in the Indian
“ lake, called Asfaltitis, which otherwise is
“ gentle and pliable in its nature, can only be
“ separated by means of a thread dipped in
“ that poison. Even that very small animal, the
“ ant, they say is sensible of its effects; throws
“ away the grain after tasting it, and will have
“ no more to do with it.”

This description is certainly very extravagant; but, if we consider the climate where he formed these notions, and particularly, if the woman was of an acrimonious habit of body, we shall find sundry particulars of it to be strictly true; though from other causes than he seems to have understood.

Women differ greatly in this respect; and the menstrual discharges will have different qualities in the same subject; so, as at times, not only to be highly offensive, but even to have a corroding and poisonous effect.

I need not mention the many disagreeable consequences attending an uncleanly woman; and I believe, few will contradict, that a common whore in general is so. All women are subject more or less to the fluor albus; but prostitutes most so. Now, need we wonder, that in the time when such a discharge is upon her, and copulated by a variety of men, some larger, and some more tedious, or violent than others, that the vagina should become inflamed, the lacunæ strained, and the mucus oozing out from them, together with a puffy discharge of the fluor albus, become

become sharp and acrimonious; and is this not enough to generate a venereal virus?

Some have added the intermixture of the different feeds; though this, may contribute, yet I believe, they retain but very little of it. I think we may here venture to compare such lasciviousness to a bitch, and a parcel of dogs; and there we see the same effects. For that dogs will have a gonorrhœa, has been frequently taken notice of; and that it will sometimes make them scabby, or even mad, has been affirmed frequently upon strict observation: Though they often perform wonders with that universal healer, their tongue.

There are two kinds of animal corruptions of humours; the first is, when a corruption is in a living subject, and the second, in a dead, or cadaverous: but the first differs evidently from the latter, and this is confirmed by experience; (viz) that the ichor from a phagedænic ulcer, or from a sphacelus, is not only more offensive in smell, but sharper than any thing from the most putrid cadaver: But this is not all; there is a particular effluvia, or volatility, which has a peculiar propensity to infection; this effect however it loses more or less, as soon as separated from a body indued with circulation. Now this holds good in the venereal disease, and all infectious distempers (which we shall have occasion farther to illustrate.)

This infectious acrimony, is not unlike leaven or yeast, which will, as it were, set the whole mass of blood in a ferment, and generate more of its own kind, and so, ad infinitum, wherever it finds a proper matter to work upon.

When

When we consider the surprising phenomenon in a dog becoming mad, without the actual infection from the bite of another, but from some other cause or disorder within himself; and then, from that very malady, an infection may be spread, ad infinitum; I think we may easily be convinced, that a venereal disease may be kindled by debauchery only. However, this is no conjecture; but a fact supported by actual experience.

It is a custom too frequent among the honest tars, to go in parties to a prostitute, (particularly in places where there are but few of them) to have a bit of fresh meat as they term it. Jack will next come to the doctor, and damn the whore's eyes and limbs, that she has given him the glim: But can't think as how Frank and Tom should escape, as they both boarded her before him. In like manner, when a firen is let loose amongst a parcel of good stomachs, either on board a man of war, or in a camp; though she at first appears ever so dainty and clean a bit, she will soon prove a fire-ship.

This has come under my observation frequently: and I am persuaded, that surgeons, who have had much practice in that disease, must (if they will lay all prejudice and conjecture aside) have met instances, from whence they could not but draw conclusions of the same nature.

This was the opinion likewise of the ancients, before the false alarm: though they were certainly less acquainted with the disorder than we are: And if we carefully examine the progress (laying all prejudice aside I say again) of the ancient leprosy, and the different symptoms, under
which

which it is described, we shall plainly be convinced they proceeded from the same causes ; and were the very same degrees of a malady, which is now understood by a confirmed lues.

However, in this last observation, I think it requisite to make an exception ; I do not mean that all leprogies related to us, actually took their rise from venery ; but that the various species were confounded with one another : and the same distinction will ever hold good.

There are disorders which take their rise from chronical humours, (if I may so express myself) which will increase, if not prevented, and at length take on an aspect of a confirmed lues : from which it differs very little, except in the different method by which it was contracted. This we shall find verified among the indigent ; particularly vagabonds ; who frequently are as filthy in their ways, as they are miserable and irregular in their living : from whence they often become itchy, scabby, full of stinking ulcers, and exhibit at times, objects of horror. There is hardly a nation exempt from these examples : But filthiness was always a characteristic of the Jews ; especially among the lower class, where actually, vermin feed upon vermin.

Among these promiscuous kinds of disorders, which have one aspect, and much the same nature, though their first causes are different, we may with propriety reckon the yaws amongst the negroes. We know very little of Africa beyond the coasts ; however somewhat up from the shore, they are certainly a horrid race ; and it is now actually beyond all doubt, that they are in many places real canibals ; and abound in shocking diseases,

diseases, as well from abuse of venery, as other savage absurdities and irregularities. Notwithstanding this, it is well known, that the yaws has been contracted amongst negroes in the West-Indian plantations, without a previous infection from their native country.

The yaws has baffled the West-India doctors very much; but this could scarce be otherwise, since they rather indicated their method of cure, according to the name of the disorder, than the nature thereof; and at last, when they have tortured the poor wretches in vain, they have pronounced them incurable, and turned them adrift upon some desolate island; where kind nature sometimes has restored them to perfect health again. Hence arose another absurdity; namely, that some of these small islands had a peculiar charm, or something unknown, for curing the yaws. Now these diseases, (as I have observed) may be venereal or not; if the genitals are infected, as is for the most part the case, in the yaws, the infection will, by coition, be communicated to the genitals again, the same as in the venereal; and then, in fact, there is no difference in the progress.

I would not be understood, by what I have said, to contradict the infection from the Indians: No, it could scarce be possible, amongst such a numerous body of people as they were when the Spaniards arrived there, to be free from this disorder. It is a known fact too, that this distemper is more sharp in the hotter climates, than in the more northern; and I make not the least doubt, but that the Spanish soldiers helped to spread it abroad in Europe too.

But, I am also firmly of opinion, that the greatest evil arose (at that time, when it made such a noise) from the wrong methods taken for the cure; and of the two, those who had the least physic, were the best off.

It is probable too, that the infection imported may have been sharper than that of our own manufactory: Be it so; but I will answer for it, it will never grow milder, unless it proceeds from a more judicious method of cure. Let us look around us, and we shall find as miserable objects in that disease now, as ever; whether from wrong proceeding, or from self neglect.

In plain English; as long as whoring has been practised, and as long as it will remain in practice, so long has the pox, in its various degrees, been, and so long will it continue to be the consequence; whether in Europe, Asia, Africa, or in America. As to any other epidemic infections, or marvellous causes, they are (in my opinion) nothing but chimerical jargons, and gross mistakes.

If this be true (which appears to me evidently so) then it is plain, nature designed not, that men and women should promiscuously copulate; since this wanton intercourse, not only tends to depopulation, but has ever been the bane to health, love, friendship, and every other social virtue.

C H A P.

C H A P. II.

Of the Formation, of the Venereal Virus.

WE now advance gradually nearer to the point itself. From my preceding chapter, it will be expected of me, to demonstrate, how the venereal virus may become generated. This I will venture to attempt : Though before I begin this task, I see difficulties, which attend inquiries, somewhat out of the high beaten road of general opinion.

It is one thing to select a good set of ideas ; but it is another quite different, to communicate them properly to others : Ideas are the productions of nature ; and though they are extended ad infinitum, yet, they'll appear very distinct in a momentary view to the mind ; but languages are cultivated by art, and quite the reverse with the former ; they are limited, tedious, imperfect, and subject to the various caprices of custom.

I have advanced, that promiscuous copulation generates the venereal disease ; this I not only firmly believe to be true, but think I shall be capable to prove it so. I see it requisite however, at the same time, to make a proper distinction between the two kinds of promiscuous copulation ; namely, that of one woman with a variety of men ; and

that of one man with a variety of women. Both are certainly highly immoral, and contrary to the design of nature : Though something may be said in favour of male incontinency, by the pursuers of sensual pleasure ; but female incontinency, according to the laws of nature, is point blank criminal.

Here is a field for moralizing ; but, our inquiries are physical ; and wherein, we shall discover evils, enough to rouse the lethargic mind, if there is as yet, the least glimmering hopes of reformation left. But to return to the subject :

There is a wide difference in a man and a woman, in regard to the duties of nature : Man as the protector, woman as the friend : Man to generate, woman to bring forth : Man to provide, woman to nurse. Thus, love kindled within themselves, centers with mutual pleasure and satisfaction in their off-spring : To which end, man was made brave and robust, both in body and mind ; but woman on the contrary, tender and delicate, as well in the texture of her fibres, as in the faculty of her understanding.

Man, loves his off-spring, because of the mother, as he thinks her chaste, and believes them to be his : But woman, loves the father, because of the child, as part of herself, in which she cannot be mistaken. These simple truths, are the cement of love and duty, in either sex ; and constitute their separate characteristics : Man, as the brave, judicious, healthy, and industrious father ; woman, as the affectionate, chaste, prudent, and tender mother. Thus, nature shines in its primitive divine will ; surrounded with rays of heaven ! But, the more to keep man, in these simple tracts of felicity, she made every other by-road difficult

difficult and disagreeable to pursue; in order to convince mankind, how easy it is to be good and happy, and that none but fools are vicious.

Woman was not made merely for the gratification of lust; nor in fact, destined by the laws of nature for farther embrace, than that by which she conceives. This is evident from two causes. First, from the delicateness of the fibres in general, but in particular, the vagina; where the cuticula is the thinnest of any part, and therefore very subject to become galled and sore, on repeated friction: Secondly, that excess of venery causes sterility both in men and women; and to this it is owing in general, that common prostitutes are so very seldom pregnant; the reason is plain, namely, that the agitation of coition prevents the coherence of the conceived embryo.

Woman is by nature the passive, but man the acting object. Woman may therefore be cohabited with, without pleasure, inclination, or even consent; but man, on the contrary, has his will bridled by nature, in order to render him capable of power, in proportion only to the efficacy of his venereal functions. Hence, we shall with propriety learn, to make proper distinctions of venereal excesses. For that excess, which is between one man and one woman, though hurtful, yet cannot have such tendencies, as that criminal abuse of venery, which wenches exercise with various men: For a man cannot repeat coitions with equal activity, because the vigour must gradually lessen, and he will be cloyed; by which he gives time for reparation on the female's side; whilst a variety of men, equally fired with lust, but considerably various in their mode of exer-

cising it, must doubtless cause different, and more evil consequences.

Love and chastity are hand in hand companions. The woman who loves is chaste. She cannot love more than one man; and whilst she is chaste, she will never consent to any other. But the moment she has broken through this pride of virtue, love ceases; and having lost her reputation, she falls into self-contempt. She loves no more, but hates the whole sex, for the sake of him by whom she was made miserable; and as she becomes abandoned, she sinks in wretchedness. Conscious of being excluded from friendship and protection, she breathes in despair, nothing but malice and revenge. If to this, indigent want steps in, then vicious prostitution compleats her misfortune.

Can such a wretch foster a carcase, which she tenders to every purchaser for satiating a foul and lustful appetite; and after which she is treated with scorn and contempt? No; she loaths her body like carrion, and despises the dupe, who stoops so low as to caress her: Art, cunning, deceit, treachery, and mischief, become her refuges; with these, like a spider's web, she catches the imprudent profligate, and entangles him 'till he is ruined of worth, health, peace, and even life itself. This is the wretched condition of a common whore, to which we must add, irregularities both in life and conduct: Sometimes in extreme want for the necessaries of life; sometimes wretched by cold, hunger, thirst, and grief; from which she may suddenly be transported into gluttony, and debauchery of the grossest excess; which, together with the natural infirmities of the sex, must make her a vassal of vice, wretchedness and disease.

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Such an unhappy woman, I am persuaded, is capable of generating a virulent infection. Suppose she catches a man, with whom she drinks and lies; coition is probably repeated, and for the hire she receives, induced to exert herself; and perhaps from a forced wantonness in the action thereof, she ejaculates, and exhausts all the pleasing sensations it may afford her: If she retired to rest after this, in order to recruit, she might certainly repeat this practice; and whether it was with the same gallant, or any other, could not have any ill consequence as to an infection: But instead of this, we will suppose (as is frequently the case) her lustful prey leaves her, as soon as his appetite is satiated, and that she immediately catches another, equally fresh and lustful as the former; with whom, for the sake of what she can get, repeats the debaucherous exercises, though not without a disagreeableness to her sensation: By this time she will become sensibly sore, as the *nymphæ*, the *carunculæ myrti-formes*, and the *rugæ* within the vagina, are galled, by the repeated frictions; but in particular the clitoris, which has been strained by this excess; from whence the *ligamenta rotunda*, and consequently the uterus, has been set in a violent agitation, by which all the organs have been greatly stimulated and injured.

If she stopt here, it might pass, particularly if she be not an abandoned veteran; but this is seldom the case, if any thing farther offers; for by this time we may venture to pronounce her intoxicated with liquor; and that, with the irritation from the excessive venery begins to operate, as a stimulus for more lasciviousness; prob-

bably she meets with a set of debauchees, with whom she spends the remaining night, in drinking, riot, and the grossest licentiousness.

Behold now the next day, this emaciated creature: Universal fatigue, pain, and a guilty conscience, make her curse her very existence. But in particular, concerning our inquiries; the genital parts are swelled and inflamed; this soreness is not only in the pudendum, but is even within the uterus itself; from whence will flow a sharp, puffy and stinking matter, in abundance: this is not all, the bawd, under whose wings she is, "will have no idle hussy in her house, —these are but trifles; and that she'll like this sport better when she becomes more used to it," &c. by which comfort, together with a glass of gin, she is encouraged for further engagements and spirited up to emulation, not to be out done by her sisters in iniquity.

The reader I apprehend will ask, whether this woman is now infected with a venereal virus? I don't know; but this I will venture to affirm, that whoever copulates with her, whilst she is thus situated, will find the effects of it; and lay a foundation for as good, and substantial a pox, as the best ever imported from the West-Indies, by Columbus.

I am not ignorant of the many things supposed in opposition to this; But I must beg for patience somewhat longer; for I have not yet done.

If it should be further ask'd, whether excess of venery with a single pair, suppose a tender woman, and a robust man, might not have the same effect? I answer, perhaps it may, though
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I am rather apt to think to the contrary; not only from the before-mentioned reasons, of the natural inability on the male part to such an excess of friction, add to this, the mutual harmony, sincerity, and cleanliness in such a case, particularly where love lays the foundation; but also, from another cause, of a more peculiar nature; namely, an agreement of humours, to which both parties are gradually become naturalized, and rendered perfectly agreeable to each other; from whence neither the solids, nor fluids are so apt to irritate each other to irregularities and acrimony. This may at first seem a strange conjecture; but if we reflect somewhat more seriously, we shall find it to carry a great share of probability with it; for nature acts the same in miniature as in greater things. I will not, however, insist further upon this, than what the chain of observations in general may seem to confirm; only here take notice, for instance; our stomach, is such a wonderful organ, which by a gradual aptitude, will perfectly become reconciled to such things, as would prove an immediate and mortal poison, to another unaccustomed to the same.

Whatever may be supposed of the peculiarity of the venereal virus, I am more and more confirmed in my opinion; that its first origin is from simple ulcerations; but in particular, from a corruption of humours in the genital parts; and indeed enough too. I own very readily, that the venereal virus is different from the pus or ichor, in any other common ulceration; especially if the infection and the disease is local: And this is reasonable; since their rise was in peculiar humours; as the humours in the pudenda in either
 sex,

fex, have something remarkable from every other : For neither nature, nor art, ever made any other humour, smell so peculiar, as that within the pudendum muliebre ; which from a clean and sound female, will prove to the amorous, not disagreeable before the embrace ; but becomes nauseous immediately after enjoyment. This is pure nature ; and intended to promote instinct : For which reason, we find, that this governs the brute species, more than man. It is this peculiarity, by which the female, of the brute creation, for the most part, invites the male to generation ; and by which, when that duty of nature is completed, dismisses them again : particularly of the promiscuous kind. This the notorious vagabond Bampfylde Moore Carew knew how to use as an artifice for dog stealing. The remarkableness of this no doubt is in the lacuneous mucus ; and to that humour, I ascribe principally the first formation of the venereal virus. There is perhaps, not a fluid in the animal œconomy, which is so liable to decay, and sooner to become rancid ; and thence we see the great necessity of cleanliness in the female fex ; which, even by instinct, makes us so very sensible of the difference, and so remarkably disgusts us against an unclean woman.

From this too, there offers a great reason, why nature chose to place the genital, and urinary organs, so contiguous to each other. May we not suppose, that this wise forecast was intended to wash away the rancidness of these humours, that they might always exist fresh ? Indeed, by this provision, we have it greatly in our power to prevent many disagreeable and evil consequences.

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By this opportunity, I cannot help observing, that there is more virtue in urine, than we are aware of; poor people, from necessity, sometimes make it a successful remedy, particularly in cutaneous eruptions, when often more delicate applications have failed: Nay, it has been proposed as a specific application to the bite of a mad dog, and other infectious distempers; and I think with some propriety too. Amongst the various observations in the book of nature, it is worth notice, that dogs are so ready to urinate at every post, or corner, where they smell something so peculiar, by which they are induced to this officiousness.

There is nothing more conducive to health in general, than cleanliness, but particularly in this respect we now speak of. Cleanliness in a woman, is one of her principle virtues and ornaments. It is greatly productive of modesty, and chastity; for by this amiable quality, she is forever precious of her person; and freed from irritations occasioned by rancid humours, whereby the mind sometimes becomes stimulated to lustful desires: But, it is quite the contrary with uncleanness; of which we shall generally find that incontinency and diseases, are the accompanying consequences. So that from the care of the body, we may with safety judge the disposition of the mind.

Amongst the many voluptuousnesses of the ancients, their baths were certainly both laudable, and salutary; and though they were to the full as licentious in every kind of debauchery as in the present age, yet they oftener escaped from falling sacrifices to these vices than we, on account

count of their habitual cleanliness by bathing : And it is not unlikely, that from the same reason, they were more healthy and robust, than in our days ; particularly the Romans. It is a matter of surprise, that this salutary custom is so little regarded, in this refined age ; since nature and reason, say every thing that is good, in favour of it.

Hitherto I have mentioned the causes of the venereal virus, though not strictly speaking, the poison itself ; for in these particulars, there is a material difference. Agreeable to the preceding, I have described a humour which is the result of actual ulceration in the vagina, and in the pudendum in general, from excessive friction and promiscuous venery only ; without a previous infection.

In this situation, I am inclined to think, a woman would infect the man who copulates with her, particularly if he is young and fiery ; and especially if he ejaculates, though she herself, may not strictly be said to have the disorder, which she communicates. This I am apt to think is very often the case. And from this it appears very evident, why young lads in the hottest passion of youth, are more easily infected, than men in more advanced years ; and this clears up likewise, the mystery, why a wench shall infect, one, more than another ; a thing very frequent with debauched rakes ; which often breeds wrangles amongst them ; as there are various opinions, concerning Fanny's honesty.

How this infection may be perfected, will clearly be understood, when we duly consider the act of coition. A man cannot exercise that

that function, without his member being erect; now this erection, is nothing but a distention of blood, in the various corpora cavernosa; and which is the more so, as he is vigorous and the vesiculæ feminales are filled with the semen. The eagerness, the desire, pleasure, and violent motions of his body, agitate greatly to the rarefaction of the whole sanguiferous mechanism: And every part of the fabric is distended and exerted to its utmost at the crisis of the act. In this state, it is plain, that every pore is opened, as much as may be; that is to say, the osticula, of the finer ramifications of arteries, veins and lymphatic vessels, are all distended to their greatest possibility; and at that time, even in a gentle perspiration, but more in particular every part of the genital organs.

But the moment the seed is ejaculated, the scene is changed, and there is not a part of the whole man the same as before; every part, which before was distended, now shrinks, and contracts, and that even in proportion to the effort of the former expansion; but this sudden transition, is most so in the penis, the chief member concerned.

At this time of universal contraction, it is natural to suppose, that the member must absorb part of the surrounding humours; and if these are of the corruptive and acrimonious kind, how is it possible that they should not compleat an infection? But this infection disposes itself variously; not so much by chance, as one might be apt to suppose; but perhaps partly from a correspondence of humours; or else chiefly as the parts are most exposed, and by the friction become

come tender ; by which, the immediate contact is the closer, and the poison more readily imbibed.

If the absorption is externally, in the præpuce, frænum, glans, or its corona, &c. a phymosis, paraphymosis, shankers, &c. will gradually make their appearance : But if the miasm is suck'd up into the urethra, (which is for the most part the case, if there be an ejaculation) a gonorrhœa will be the result.

Thus the virus is truly compleated ; and from that time, becomes positively infectious ; whilst before, it was merely accidental or rather conditionally so, principally by its corruptive quality ; wherein it differed only from other ulcerous matter, in regard to the close immediate contact, and coincidence with similar humours.

This is the consequence of wenching, and the abuse of the gifts of nature ; but there are other causes of infection, namely, from debaucheries, of the most heinous, unnatural, and diabolical nature. Sum up all the vices which human ideas can possibly conceive of Satan, and they are all comprised in that unnatural monster, and scandal to human nature, a Sodomite. ¶ What a deplorable wretch ! However, I have an effectual remedy in reserve, for this poor devil, before I close the book ; we will therefore proceed to the chain of our subject.

The sodomites have at times made it their plea, that they were not subject to the venereal disease ; but they have been grievously mistaken ; for of all infections, theirs is the most shocking, and the most obstinate kind of any ; and as to the catamites, they have at times exhibited most horrible spectacles. I am ashamed to describe

cribe the ideas, I have of such an unnatural and horrid act; nor can I conceive, what can induce these monsters to a passion, for such a filthy pleasure. Be this as it may; the intestinum rectum abounds with mucous glands, particularly about the anus; and these glands are frequently somewhat disordered, according as the excrements are loaded with acrimonious humours; but in particular the hæmorrhoids, whether the fluentes, or cœcæ, are ailments, whose humours have a peculiar acrimony, and likewise more or less infectious; so that in this part, besides the natural infirmities, that it is subject to, if we add the violent friction in this diabolical act, we need not wonder, that the most pernicious virus may become generated. Nay, if we should even object to the production of a venereal virus from excess of venery the natural way, from this now mentioned, it cannot be objected to; and that the first infection has been owing to this crime, and that of copulation with brutes, many judicious authors have (and with much propriety) advanced.

How far however I have reasoned, and how justly, I leave to the judgment of the experienced reader; who, I apprehend, (if prejudice is laid aside) will coincide with my opinion. There are various other causes, by which a venereal virus may be generated; which will, however, appear gradually in the series of our examination. I shall therefore, now proceed to an inquiry into the nature of this subtle and pernicious poison.

C H A P III.

Of the Nature of the Venereal Virus.

WHATEVER first gave birth to the venereal virus, whether from a promiscuous venery, excess of venery, unnatural venery, uncleanness, or common ulcerations; or whether proceeding from an actual importation, either from the West-Indies, Coast of Guinea, or any other part of the world, we will leave to a judgment from the preceding; since I have there given it as my opinion that each may produce, and has produced, this pernicious distemper. We will therefore turn our speculation to an examination of the nature of this disease; and wherein it peculiarizes itself from other infections.

Previously, I would be understood to make a proper distinction betwixt the cause and effect, of the venereal virus; that is, between the acrimony, from which the disease may be produced, and the disease itself; as the infection from the first is only accidental, but the latter absolute.

In speculations, we ought ever to be on our guard, not to launch out beyond experience, and observations evident to our senses; for we know not, nor can we know any thing beyond these bounds: And no sooner do we presume to stray beyond such limits, but we become like a helpless bark

bark in a boundless ocean, without pilot or compass.

What the particles of the venereal virus are, with regard to substance, figure, form, or magnitude, is a mystery hid from human ideas; such speculations are as idle, as they are useless.

Whatever is said of their angular, and pricking points, and that they must be blunted, made square, round, or oblong, &c. is, in my opinion, nothing but unintelligible jargon.

There is a manifest difference between mineral, vegetable and animal substances; and in consequence of which, the manner of their generation, as well as their corruption, are equally as different. When this is duly considered, we shall find a great distinction, between the acrimony of animal corruption, from an animal virus, and that from a mineral production.

It is allowed on all hands, that the venereal virus, is of a sharp and acrimonious nature; this is wholly true, demonstrated from sad experience. But we have (in my opinion) no right at all, to particularize it with either the appellation of salts or acids; for it is evidently opposite to both; since it will be checked by either, as we shall have occasion to prove farther by and by.

The vesicatorial acrimony in cantharides, to which the venereal virus has a near resemblance, we are likewise wont to derive from saline particles; but in fact, a chymical process, will not produce more salt from these insects, than from the same quantity of any other kind.

All infective miasms, have in common an acrimony, which sooner or later, discovers a corruptive quality; and indeed have likewise some resemblance to the destroying qualities of mineral corrosives; however, they are so opposite in their different natures, that we cannot, with the least propriety, give the same appellation to them both.

It is a truth universally known, that salts and acids of whatever kind, are the greatest preservatives against putrefaction, and consequently the generating of animalcula; but at the same time it is known too, that a virus will have the contrary effect. A phagedænic ulcer, is not only of a corruptive quality, but is likewise foetid, and if neglected, will abound with animalcula: A mineral phagedænic preparation however, will prove an immediate antidote to this.

A quantity of cantharides when left to themselves in the open air, particularly if they can attract some moisture, will soon swarm with little animals of the mite species, into which they will almost wholly degenerate; but if they be intermixed with camphor, salts, or other anti-putrifying ingredients, this animal transmutation will be prevented, the same as the preserving of any other animal substance; but it is at the same time worth observing, that such preservatives will lessen the epispastic quality of them.

The more we speculate on the many maladies, to which the animal œconomy is liable, and the many destructive ways in which they act, the more we find ourselves incapable to account properly for any single one of them: A man shall
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either from luxury, bad digestion, or passion of anger, get a bilious and putrid fever, and breed a contagion; another shall from a bad habit of body, get the itch, and spread it to all who cohabit with him; a dog shall become mad, and by his bite, spread this deplorable malady to any animal without distinction; and a man shall become poxed, and communicate this disease, to all who come within the chain of an immediate contact with him. All are pernicious, though each in a different way; and all the conclusions we can form, are, that the miasm of each kind of infection, is of a peculiar nature, and attacks such parts of the animal œconomy, as first generated it, over which it has the greatest power, and consequently that part least able to resist its corruptive quality.

One infection will attack the viscera, and nature will attempt an expulsion of the enemy by copious evacuations, without any external eruptions: Another shall leave these organs without the least molestation, and make a horrid havock all over the external parts: One disease will attack the glands; another the nerves; one the fluids; whilst another the solids, &c.

But what a virulent infection must that be, which attacks every part, and reduces the whole fabric into a mass of corruption! The venereal disease will gradually be this horrible malady. But this we must represent in its proper light; for there ought to be a proper distinction of the various infections; and likewise, whether it is recent, latent, local, or universal; which we will farther discuss. The infection by immediate con-

tact of coition, is however the original; and the fountain of all the rest; but particularly that we are now speaking of, and, which is primarily of an ulcerous quality. Every particular part of our body, has a peculiar manner of corrupting; and hence, when the venereal disease becomes universal, there is then, properly speaking, as many different diseases, as there are peculiar humours infected and corrupted; for which reason, there is a wide difference between a recent and local infection, and that which is secondary, and becomes universal: As the first is confined to the parts where the infection was received; but the latter, a production of a variety of other new ones.

All infections have this in common, that they discover themselves with inflammation and ulceration of the parts which first received the poison; whether the contagion struck root externally, or internally; (few excepted) Thus in the small-pox, if by inoculation, the part infected will inflame and ulcerate; and so in the bite of a mad dog. If, however, the infection of the small-pox was contracted the natural way, (as it is termed) drawn in by inspiration, the contagion taking root in the throat or lungs, as is frequently the case, we then find, that a hoarseness, cough, &c. attend the first symptoms; but if it was imbibed by the pores, as sometimes happens, an erysipelatous inflammation first makes its appearance.

There is one thing more to be observed of infection, and wherein it distinguishes itself, from such kinds of corruptions, as proceed from mineral corrosives; and that is, the venom from infection will lie concealed, and appear dormant for
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some time before it operates; whilst mineral corrosives will attack the particles immediately upon contact. The first will operate slowly in an increasing state, and gradually become violent; whilst the latter, on the contrary, will attack violently, and gradually lose their effect.

From all these observations, I think it appears plain, that the miasm of the venereal virus, can neither be termed saline nor acid; and that it has other effects and operations in the animal oeconomy, than hitherto the terms of art have been capable to convey a proper idea of. The doctrine of animalcula has been received at times with applause; and carries yet a great sway at present with many: The celebrated Boile, (whom Dr. Astruc salutes with the appellation of Quack) very ingeniously endeavoured to establish a doctrine, that all diseases, of whatever kind, proceeded from animalcula; in which, by the help of a stratagem, he was almost as successful as the ingenious Mr. Leewenhock: Be this however as it may, there appears more excuse for the first, than for the latter, though both evidently wrong.

It cannot be denied, that almost all cutaneous and ulcerous distempers (if left to themselves) will abound with animalcula of various kinds; which are not only observable with microscopes, but even at times with the naked eye. But here animalcula, on due reflection, are the production of the corrupted particles, separated by the miasm of the virus; and therefore, neither this, nor the appearance of the pus, ichor, or foetid matter, can characterize the contagious miasm; as the

one is a subtile peculiar spirit (if we may so term it) whilst the others are the grosser corrupted dregs.

But not to make these enquiries too tedious, I shall only observe, that (to my ideas) the miasm of the venereal virus, is an animal acrimony, different from either saline or acid particles, or animalcula; but of an effect different from either; namely, an intestine animalatious aptitude, to unite intimately with particular humours, or solids; whereby it, from a propensity of converting the order of nature in those parts, which it attacks, irritates and inflames them; tears loose the particles, and thereby destroys the stamina of the substance, and thence causes exulcerations. Now this quality of the venereal virus, I can express by no other term, than an inflammable animalatious acrimony, primatively peculiar to lymphatic humours, and glandulous substances: And the infection and progress, of this acrimonious miasm, in the animal acrimony, I conceive to operate somewhat similar to peculiar seed sowed in a fertile soil; where it will vegetate, and generate more of its own species; though with this difference, that both parties in the animal vegetation, or animalation concerned in the infection, will have a peculiar animation; whereby they will ever be in pain and opposition to each other; so that the sharpness of the acrimony consists more in the vivacity and activeness of the miasm, than in any pointed particles that it can possibly have in common with salts or acidities, peculiar to any mineral corrosive substances.

C H A P IV.

Of the Infection of the Venereal Disease.

IT now follows in course to describe the various infections to which this malady makes us subject. It will not be improper, first, to consider the nature of an infection in general. Throughout nature, there is a struggle between self-preservation and decay; both are ordained by the incomprehensible FIRST CAUSE, as absolutely requisite to support the universal chain of existence;

Thus, “ All subsist, by elemental strife;
 “ And passions, are the elements of life.”

Whatever body, whether mineral, vegetable, or animal, which continues its proper course prescribed by nature, is sound; but if that course is disturbed, (by whatever cause) a decay, immediately takes place; and would naturally communicate itself to every thing of the same kind, if connected by the immediate contact into one body; unless the progress of this corruption was interrupted.

This aptitude or communication of decay is infection, in the general sense; of which there are as many kinds, as substances, and diseases. In regard however to the animal œconomy, there are two species of infection; namely, the primary, and the secondary. The primary is again of two kinds; either by close contact of parts, or by the effluvia of the miasm suspended in the air contracted at some distance. These definitions are not however so arbitrary, as some have seemed to understand them; for every distemper which is actually contagious at close contact, is liable to become more or less so, at some distance. This is very natural to suppose, as the circumambient air, or the atmosphere of diseased persons, must be more or less filled with the miasmatic contagion of the disease they labour under. But the aptitude of the sound person, to contract this contagious miasm, varies, not only in proportion to the state he then is in, but according as those parts are exposed to the infection, which have a peculiar propensity to become injured and affected by the contagious poison. From these natural conclusions we shall be able, clearly to comprehend, the many peculiar phenomena of the various infections of the different degrees of the lues venerea.

The first kind of infection, (and indeed, in my humble opinion, the primitive cause of this disease) is that which is contracted from an ulceration; but more particularly in the lacunary glands, in the pudenda, in both sexes: For example, a woman, whose vagina, or pudendum in general is ulcerated, either from uncleanness, whereby
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the mucous humours are become acrimonious; a sharp fluor albus; phagedænic catamenia; or excess of promiscuous venery. A woman in such a state, is liable to infect, though she is not herself positively infected: but then this infection is conditional; she may not perhaps infect one who is accustomed to copulate with her, for reasons I have mentioned before; but if she is eagerly embraced, by a young, fiery, and delicate man, or even a stranger to her person, I think there can be no room left to doubt an infection; at least I shall always think so. In the same manner, a man may infect a woman; for example, when the small glands about the corona glandis penis, and within the præpuce are become ulcerated, and form a kind of shankers, which have had no previous infection, and only take their rise either from neglect of washing the penis, in those subjects, who have filberd præpuces; or which is for the most part the case, proceeding from onanious frictions; in which case the acrimony may be equally as soon introduced into the lacuna glands of the vagina; and the more so, as the woman is delicate, and the embrace ardent: But this latter infection, is not so often as the first, from two reasons; first, men are not so subject to these original ulcers, as women; and secondly, at such a time, they are rendered more unable for coition, than women in the same state.

The second kind of infection is more absolute; and that is the infection of the venereal virus itself, by coition. No one doubts of the truth of this; yet there are questions under this head, which

which it may not be improper here rationally to enquire into.

First, Why one, who is very slightly affected with the disease, shall infect another very virulently; and vice versa, why one most virulently affected, shall infect another very slightly; and even another shall escape? These are facts known both to patients and surgeons. In answer to this, I shall only observe, the infection depends not so much on the quantity of the virus, as on the aptitude, and constitution of the person who contracts the miasm of the virus; This we find likewise verified in the small-pox; where various subjects shall be infected from one patient, even having the distinct kind; and each who is become infected, with the same contagion, shall undergo a different fate: One shall have a mild distinct kind; whilst another shall die a horrible spectacle in the confluent.

Secondly, Why a person shall infect another, most virulently, whilst at the time of infection, there is not the least symptom of the disease? We must here observe, that the person was previously infected, and copulated with another, before the symptoms had made their appearance; and therefore, notwithstanding its not appearing externally, may communicate the miasm to the sound person; and this has been too often the case. Or else, the copulation was, when the affected person was just getting well, and the disease so mild, as not to cause symptoms of virulency: for in either case, it is as much infectious, as in the greatest virulency, to a sound subject; whose pores are open, and who, from a delicate irritability, has an aptitude to contract the infection.

Thirdly,

Thirdly, At what period of coition the infection takes place? To answer this, we must observe, there are two kinds of coition; a true, and spurious. In both, there is a close contact of parts; but in the real, there is an actual union; and in that moment, a continued circulation of the fluids. Besides this, the ejaculation on both parties, is the crisis of this united contact, and inverts the course of the united circulation; so, that before, there was an actual excretion of humours in these parts; but afterwards a manifest secretion, or rather an absorption, from the universal contraction of the parts, in the act of flaccidity. Hence it appears, that the whole time is infectious; but in particular, after the time of ejaculation.

Fourthly, Whether there are any preservatives? Most certainly there are; but so far only, as to destroy the miasm, already imbibed: But for the common method in practice, (viz.) washing; either, before, or after coition, can have but very little effect; since, the seat of the miasm is rooted deeper, both in the person affected with the disease, and the parts infected, than what any simple lotion, may reach, or come at: Yet, the practice is commendable; and may perhaps contribute towards preservation. Here, I cannot help taking notice, of that foolish practice, to call it no worse, of machinery.

If it was an actual preservative against infection, which there is some appearance of, there might be some excuse, though then but very little; for it differs, in my opinion, but few degrees, either from onanism or sodomy itself; and can most certainly

certainly, neither give pleasure, nor satisfaction; but to their grief, they have found themselves mistaken very frequently: For the real miasm, is an effluvia; and whilst, after the ejaculation, there is a reversion of all the fluids, particularly about the genital parts, the miasm may be contracted in more places, than the penis or vagina: And hence, those diabolical debauchees, have, by this disgusting and unnatural practice, been lulled asleep, 'till buboes, shankers, porri, vevrucæ, condylomata, &c. have awaked them; and given them notice, that they were over head and ears in the pox.

The third kind of infection, is that which is contracted by other means than coition. Of this there is likewise no doubt. But in that case the patient must be more than locally diseased; and the malady, is then become universal: For in that state, there are so many different parts, and humours injured, that there can be no contact of any parts of the body, but what some humour, must coincide with others of the same affected. This kind of infection, may be effected two ways; either by close contact, or by the effluvia of the miasm in the air.

In regard to the close contact of parts, such, we find effected; first, by lascivious osculation; in which case, the lips, the tongue, and throat, will be infected, and become sore and ulcerated. Secondly, wet-nursing; either an infected nurse to a sucking child, or an infected child to infect the nurse; in either case the breasts or the mouth will first discover the infection. Thirdly, by sleeping in the same bed; particularly where there is

a close contact of parts; and especially, if the patient has venereal ulcers, a venereal itch, or a profuse sweat: In such cases there is great probability of, and room for, infection. Fourthly, by a kind of accidental inoculation of the virus; either by an accidental cut, (as has been disagreeably experienced by surgeons, and proved a troublesome affair) or otherwise introduced, from a venereal ulcer, to that of an ordinary kind; which likewise has been experienced.

When however, the very atmosphere, of the venereal patient becomes infectious, his condition must be deplorable indeed; for then he has not only the confirmed lues, but the fluids, as well as the solids, are then actually in a state of corruption. This is the condition which the Antients called the leprosy; as well amongst the Israelites, as other nations, even of a more modern date. Which shall be more fully treated of hereafter.

Under this head, it may not be amiss to solve the question, Why a person, who is afraid of any contagious distemper, shall be more apt to be infected, than another, who has no dread nor apprehension of it? The truth of this assertion has been sufficiently experienced; particularly with the small-pox, to admit of any farther doubt; though some have denied it, but injudiciously. Throughout the animal oeconomy, there is a spirit of self-preservation implanted by natural instinct; from which every part in the whole animal fabric retreats (as it were) at the approach of danger; and all the external vessels, combine with an universal contraction, to shelter the
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grand provision of life, the fluids. Hence, we see in the emotions of fear and terror, that the blood forsakes the external parts, and takes shelter within; which is visible from the paleness of the cheeks and lips, and other emotions pictured on the countenance. Now it follows plainly, that whilst the body is in this state, there must, from this retreat of the fluids, be an aptitude to absorb the circumambient air, in the pores; and consequently, the contagion which the atmosphere may contain. But on the contrary; if a person is not intimidated, the fluids continue their due regular course; in which state the body is in a gentle perspiration, and therefore, not so apt to imbibe the miasm of the contagion. From this, we see likewise, the propriety of taking something aromatic and cardiac as a preservative, at the visiting contagious patients; since thereby our fluids may preserve their due circulation, and our body a perspiration; and thus become more enabled to resist an infection.

But to return to the confirmed lues. When this deplorable malady has made its way universally through the whole fabric, and commenced a corruption, the patient becomes absolutely contagious by his atmosphere: If however, under a proper course of cure, the evaporation of the medicines, (if they are truly in opposition to the distemper) will likewise destroy the miasm of the contagion: This we have happily experienced from the use of mercury; (as the only antidote against this malady, that can be depended on, yet discovered) which from its volatility, so perfectly destroys the venereal contagion, as to pre-

vent all infection this way. From whence, such infection has not been admitted of by some writers; but were they to try the experiment, in a confirmed lues, without mercury, they would soon find themselves grievously mistaken.

Hitherto I have treated only of the primitive infections, and the various ways this disease may be first contracted: It is easily concluded from thence, that the progress and aspect thereof, must vary accordingly. I shall therefore in course, mention the secondary or continued infection. This is what happens within the patient himself; and may come to pass many different ways.

Of all the infections before-mentioned, that contracted by coition, is the most common, and certain; and from which, the distemper is always local; (that is) confined to particular parts, and a propensity to an external discharge. Whilst it is in this state, nature is forever guarding against the enemy's encroachment, and continually busied, to expel more and more, the morbid matter. When however, this effort of nature, is disturbed or repulsed, either by the virus becoming too powerful, by neglect, and irregularity of the patient, or improper method of cure, the virulent particles gain admission into the blood; with which it circulates, and in fact, breeds as many infections, as there are different fluids, and solids, which the virus corrupts and attacks. And thus generate such a multiplicity of diseases, as is scarce credible to suppose, should take their commencement from this foundation.

There are a number of ways about the privates where the infection by coition makes its first appearance;

pearance; but that, most common, is the gonorrhoea. The rest of this disorder, is seldom at first so deep, as to affect the feminal or other parts; yet by whatever causes that this course is disturbed, the neighbouring parts become tainted, and the virus will cause different disturbances besides those first contracted: Hence, bubos, swelled testicles, &c. When the poison is expelled from these parts again, without either returning to its former channel, or being destroyed, it cannot fail of falling on some other parts; or else be introduced into the whole mass of blood, and be liable to become universal. The many different causes, by which such a secondary, or continued, and universal infection, may be effected, I shall explain more at large, in my succeeding chapters; only here observe, that the progress of such spreading, acts as different as the subjects, labouring under the malady, vary: Namely, in some, very rapidly and virulent; while in others, slow and latent; in some they are tractable and easily removed; in others stubborn and deeply rooted in the very stamina of their whole composition.

It would be too tedious, I fear, here, to enquire strictly, into the reason of the different proceedings of this poison; however, the general cause thereof, results from the disposition, of the fluids and solids in the subject affected.

There are diseases, which are in their nature, in opposition to each other, and will, like antidotes, destroy each other's power and rapidity; whilst others again, will join, and aid each other's destructive quality. A person will one time, be in a habit of body, to repel, and reject a disease,
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which at another time, he shall fall a sacrifice to; though at the time of the infection, apparently in an equal state of health. But in the general course, (though not without exception) young, hot, active, and tense fibred constitutions, suffer more in the venereal disease, and are more liable to severe, and rapid continued infection, than laxer, and more phlegmatic subjects. Hence it is evident, and this is confirmed by experience, that women in general, suffer not so much by the infection, as men; for, besides the laxness of their fibres, their fluids are more mild and plentiful, the whole body more tractable, and of course easier cured.

On the whole however, every thing inflammable, whether passionate emotions, drinking, or other irregularities of life, must always be considered as fuel to this pernicious fire; and will ever promote a virulent conflagration of the whole fabric.

There is a manifest difference in the progress of the secondary, or continued infection, regarding the contagion, as it was first contracted: The infection visible from a gonorrhœa, is the most evident; but at the same time, the easiest to get rid of; since the enemy makes an open attack, and alarms the patient, to apply proper remedies: But when the infection is immediately conveyed to the blood, and there lurks about slyly, it then acts the part of an assassin, under the cloak of innocence, and gives the patient, unawares, the mortal stab; whereby he is roused, but too late from his lethargic security: And this has too often been experienced by the diabolical practice of machinery.

But it is a pity, that the most innocent should undergo this hard fate, equal with the deserving : Such as the infant from its nurse ; or a nurse from suckling an infected infant : What mischief, such an infection has occasioned, is well known to many suffering families, and the experienced faculty. Evils have arisen from such undeserved infection, by which not only health, but peace and confidence, have been driven from the conjugal bed ! Namely, that nurses who have suckled infected children, have communicated the infection most virulently again to their husbands by coition. The truth of this has been much doubted ; though on mature consideration, there is nothing surprising in it ; for as it is a disease that chiefly attacks the genital parts, why should the continued infection not affect, and vent itself in the various parts of the pudendum, as well as any other part of the body ? For in the confirmed lues, when the miasmatic virus has contaminated the whole body with an ulcerous corruption, the genitals generally open the tragic scene ; next all the glands, and at length the most indurated solids of the animal fabric : Though this progress is by no means a general rule.

But of all infections, that which is hereditary, is certainly the most stubborn ; and I fear it is beyond the art of man, to eradicate those miasmatic particles, which have been ingrafted in the very rudiments of their generation. It is seldom such children grow up ; as that seed of poison, which is so universally sowed in their composition, generally ends their short, though miserable stay, in a manner too visible to doubt the cause
of

of the pitiable end they make ; dying sometimes a meer mass of external and internal corruption. And if they, by perpetual struggles, even gather years, it is but then dragging a life of infirmity, and innumerable diseases ; forever strangers to the blessed enjoyment of health. What such parents, who thus have entailed misery on their off-spring, have to answer for, must be left to their own consciences to consider.

On the whole, there is not an infection which becomes so universally destructive to every part of the human body, as the venereal virus ; there are miasms of other species, which act upon the animal œconomy at times, with greater rashness than this, though more confined in their destructive quality ; but it is scarce possible to mention any one ailment, but what the progress of this malady will produce, or at least make a resemblance of ; so that like Pandora's box, it contains all the diseases incident to human nature.

To conclude, I shall beg leave to remind the pursuers of licentiousness, that this is not the greatest corruption debauchery produces ; the mind is at the same time, yet more perniciously contaminated. As the venereal virus gives birth to the most malignant and horrid diseases, that the body can be afflicted with ; so lascivious gratifications and debauchery, are that pernicious virus, which corrupts and converts every good quality, into the most heinous vices : Whereby those slaves to false pleasure, become not only completely wretched within themselves, but a pestilence and nuisance to society.

C H A P. V.

Of the First Infection.

HAVING thus prepared the way, let us now enter upon an enquiry into the progress and consequences of the malady itself. What is meant by the first infection has been explained in the preceding chapter; we will therefore now consider the various consequences and effects thereof.

There are four ways by which the first infection may be communicated: The first, and most absolute, is by coition; the second, by close contact of parts, (or inoculation); the third, by an infected atmosphere; and the fourth, hereditary. I shall trace each in turn; and examine into the many trains of diseases, which each separate infection is liable to give birth to.

The infection from coition is the most certain and absolute; and I'll venture to say, it is not only the venereal disease, which by this contact becomes transplanted, but any other malady that has got an epidemic miasm: But this in general life, we take but little notice of; for few miasms have such a powerful insinuating effect, as the venereal virus; and many things escape our
notice,

notice, because their consequences are not forcible and general enough to command our strict attention.

The first ailment in general after impure coition, is a virulent gonorrhœa; and from this disorder, for the most part proceed all the venereal evils, if improperly treated, or otherwise neglected: On the understanding therefore the nature of a gonorrhœa properly, and of treating it judiciously, depends almost the success of the cure of the whole train of the various venereal diseases.

Of the GONORRHOEA.

THAT the term gonorrhœa is of Greek extraction, and originally signifies a feminal flux, we find sufficiently explained in all dictionaries: How far however, it is feminal or not, we shall consider in the sequel of this discourse.

There are two kinds of the gonorrhœa; the virulent, and simple: the first is that from an infected coition; where some parts within the urethra is corroded, and discharges a purulent matter: The second, is an absolute feminal discharge; proceeding from a weakness of the feminal parts. The virulent is venereal; but the simple may proceed from other causes.

The virulent gonorrhœa, is that which we understand by the clap: This has at times been distinguished into the malignant, and benign: That is otherwise, a clap, and a gleet. Though this distinction holds pretty good with respect to the patient, particularly in regard to the symptoms; yet

yet this difference in the terms, has too frequently done much mischief; as we shall soon perceive. A distinction of the different stages of this disorder, the same as of all other distempers, will however, give us a better idea of it; and convince us, that the only security against an enemy, is to get entirely rid of him. I shall examine the gonorrhœa from its first commencement, the increase, height, and decline, till it is no more.

Though both sexes are equally liable to this malady, yet the symptoms, diagnostics, and prognostics, differ greatly; and this difference is requisite to be known, in order to indicate the best method of cure: For it is plain, since the structure of the genital parts in the sexes differ, that the symptoms must also; likewise, that some symptoms are common to both, and others peculiar to each sex; it is easy to conceive also, that, as the parts affected, are more or less exposed, that therefore the remedies become more or less easy to be applied. First then of the gonorrhœa in the masculine gender.

Of the GONORRHOEA in MEN.

The gonorrhœa, takes some time before it makes its appearance, after the infection; being sometimes quicker, sometimes slower; seldom so early as within twenty-four hours, and very rarely so late as after twelve days: But in general, four, or six days, completes the confirmation thereof.

The symptoms come on at first with an agreeable sensation, in the genital parts, in general; he

he feels an uncommon inclination to venery; the testicles have a vermicular and a creeping motion; which sensation, is not at all disagreeable, but helps to irritate and stimulate to venery; coition is executed with extraordinary vigour, and exquisite pleasure. This pleasure however is but of short durance; for that titillation, by degrees, degenerates into pain; the urethra begins gradually to discharge, first, a thin lymphatic humour; which increases apace, and degenerates into a sharp, stinking, purulent matter; the orifice of the urethra opens; becomes red, and inflamed; the urine at first, occasions a sharp titillation; but soon grows more and more hot, stinging, and cuts the urethra like so many daggers: And now there is no room left to doubt a virulent gonorrhœa; that is, a downright clap. This is the commencement only, and meer childrens play, to what follows; particularly if the patient is young, fiery, of a delicate constitution; and especially, if it is the first time.

Now the glans begin to be inflamed; the urine is discharged oftener than usual; and burns like a coal of fire in the urethra, particularly, immediately after the discharge thereof; this acute burning and cutting pain, becomes so intolerable, that it forces in the patient's physiognomy at that time, many unfavourable, and unfashionable features. This acuteness, prevents him letting the urine in a continual stream, so that it will come away in squirt meals, which adds not a little to the pain. This dysuria generally excites a fever; which (if the habit is otherwise inclined to acrimony) often occasions an ischuria.

At

At this time the misery is augmented with a chordee; the penis becomes frequently erect, not only involuntarily, but in a most disagreeable manner; curved downwards, with an exquisite pain underneath, from the glans, all along to the perinæum; especially near and about the frænum.

A phimosis, or paraphimosis, and shankers, generally pay their attendance to the catastrophe. A phimosis, in those who have a long præpuce, becomes so inflamed, as not only prevents the glans from being uncapped, but sometimes, scarcely gives opening enough for the emission of the urine; and swells up the member sometimes to a great bulk. A paraphimosis, in those who have but a short præpuce, which shrinks back, inflames, and swells up behind the glans, contracts by the inflammation, and frequently conceals behind the corona glandis, a portion of the corroding virus; which, together with the inflammation of the glans, gives not only the greatest pain, but even sometimes becomes so mischievous, as to put the member, and even the patient's life in danger. And as to the shankers, they are generally, the sharp phagedænic ulcers resulting from these inflammations.

Now the gonorrhœa flourishes in its full bloom; and what, with the sharp fœtid and virulent running, the scalding of the urine, the priapism, chordee, inflammation, shankers, &c. the patient is fairly seated on the stool of repentance.

In this state the gonorrhœa is termed recent; and whilst it runs freely, not deep seated, and nature is not disturbed, so as to check the flux of the

the virus, without correcting it, the inflammation and other symptoms, will gradually abate; at least, the disease will become milder: But if the virus is propelled into other channels, or obstructed in its course, it is plain, that it will spread its malignity to the neighbouring parts; as is too frequently the case, either from getting cold, &c. or wrong treatment. The fore-mentioned complaints are generally accompanied with a bubo, swelled testicle, or both together; and then it is high time, to guard the blood against an universal infection: But in all this, there are many exceptions, which shall be farther explained hereafter.

When the acute symptoms have abated somewhat, either sooner or later, according to the constitution of the patient, or proper application, the seat of the gonorrhœa becomes more plain; and prognosticates either an easy, difficult, or tedious cure; this case is even so slight sometimes, as to disappear, without the help of any thing: This, though true, I am scarce allowed to say; however, I must not forget to say this too, that whilst we can have proper remedies, nature ought not entirely to be depended on, in this respect; as there is no disease, more sly and deceitful than this.

If the decline of the virulent gonorrhœa is successful, the patient will not be long in being restored to perfect health again. The fever, inflammation, and dysuria, gradually subside; the patient makes urine with more freedom, and less pain; the purulent matter, which was before sharp, foetid, and intermixed with blood and ichor, becomes now regular pus; loses the watery

tery, bloody, greenish and deep yellow aspect, and becomes of a more pale yellow hue, and a regular thick consistence; next it begins to rope; at length it becomes clear, lymphatic, stringy, and gradually disappears.

But this fortunate conclusion, is seldom the case, than it might be, if care, prudence, and proper treatment, were applied. Irregularity, debauchery, anger, fear, labour, cold, &c. make a great difference; but nothing near so pernicious, as unskilful treatment. When the dysuria, priapism, chordee, &c. continue, the case is troublesome indeed; the dysuria will become a strangury; and the patient sometimes, neither can make, nor retain his urine; and as it drops away, every drop burns like a coal of fire: The chordee is accompanied with an inflamed priapism, particularly at night after being warm in bed, and at times occasions most excruciating pain; which is not a little increased, by nocturnal emissions of the semen.

In these complaints, the whole perinaeum will sometimes be inflamed and sore; and frequently exulcerate; the thangers will increase and corrode; particularly about the præpuce, corona, and glans, and especially about the frænum; the præpuce becomes sometimes hard and callous, so that the glans will not bear to be uncapped, and expose the set of these preying ulcers. In short, the whole penis will sometimes be in a perfect state of ulceration; and we have examples, both ancient and modern, that the penis has dropt off, in a sphacelus; and sometimes even extinguished the miserable life of the patient. Those calamities, however, are not indeed,
so

so frequent now ; but in lieu thereof, we find too often, many, with a continued running ; and though 'tis called a gleet, yet it is, in fact, an old virulent clap ; which is not only troublesome to the patient, if slighted and neglected, but entails misery on his innocent off-spring.

Let us now make an ætiological examination of the causes of these symptoms. How the gonorrhœa first forms itself, has ever afforded matter for much speculation ; I have before given my opinion on this head ; namely, that the misasm of the virus, is suck'd up in the urethra, in the time of flaccidity after ejaculation. This, however, is far from being the general received opinion ; for it has been argued, that the infection is always received externally, and makes its way into the urethra ; but I cannot well believe it to be general ; for (though it may sometimes be the case) I never met with any one, who had a gonorrhœa, but had first ejaculated. I have indeed, been told of a debauchee, who, for fear that he should be caught, as he had a suspicion of the person he was concerned with, withdrew the member at the juncture of ejaculation, and emitted, even at some distance, from the pudendum ; yet, notwithstanding, contracted a most virulent gonorrhœa : I will not take upon me to contradict this ; yet, cannot help thinking, that he must have given the first ejection within the vagina ; which was sufficient to do the business ; and that then the member all besmear'd with the virus, was even enough to confirm the infection.

Be, however, the contraction as it may, whether from an actual suction, or, whether it finds
its

its way through the tegument, through the corpora cavernosa penis, into the corpus cavernosum urethræ, and in the urethra itself; evident it is, that wherever it fixes within the urethra, the gonorrhœa takes its commencement; and according to the seat of it, becomes more or less difficult of cure.

In general, the seat of the malady, is not above a couple of inches from the glans; and for the most part, on the under surface of the urethra: Yet sometimes, it is seated a great deal higher; though but seldom. But how comes it, that at times the whole urethra is ulcerated? This is seldom, or perhaps never the case from the first infection, or at the commencement of the gonorrhœa; but generally proceeds, either from the spreading of the virus itself, by the frequent erections, emissions, and flaccidities, or from pernicious injections.

Here again, it will not be amiss to mention something concerning the nature of the virus. It has been compared to the saline particles of cantharides: How far such a comparison holds good, I have mentioned before; and will here add, that it has equally as much resemblance to the acridness of Cayan pepper; Though I cannot see, how either the virus, or cantharides, came to be ranked amongst the appellations of salts; unless we could find no other name to convey an idea of sharpness: Indeed, languages are rather defective in conveying various ideas.

Onions and horse-radish, will remarkably affect the olfactory nerves; and draw tears into the eyes, by the pure effluvia, and likewise, have a peculiar biting stimulus in a fresh wound; yet,
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let us most diligently examine into the sharp, and stimulating particles in general; salts, acids, alkalies, caustics, corrosives, epispastics, apodacritics, sternutatories, &c. &c. we shall find, that all distinguish themselves singularly in this particular, that they act momentarily, on the nerves at the first contact, and gradually abate; whilst the virus, on the contrary, begins gently, but encreases, and multiplies in its stimulating qualities. However, if we needs must make a comparison, I think the most rational is to that effect, which mercury has on the salivary glands,* and from this, there appears a great probability, that the infection received externally, may as well find its way to the glandulæ, within the urethra, by slow degrees, as the mercury, which by frictions, finds its way to the salivary glands. But to the progress.

From the sensation in the testicles, it has been supposed, that they, and the feminal parts, always were affected, from the first moment of infection; though this sometimes may be the case, yet I am far from thinking it general; but believe, that this sensation is rather symptomatical, from the immediate communication of all the parts. In like manner, happens the great stimulation to venery; and this is likewise easily accounted for; since the virus begins now to operate, with a greater force of irritation; consequently, the feminal parts, stimulated to a more copious secretion.

By this time, the miasm of the infection begins to prey upon the fibres; lacerates the small tubuli,

* I mean comparatively with respect to the mercurial circulation; for as to the stimulus, their causes are as opposite as possible.

buli, and from thence they are set in a more secreting action, discharging the mucus, more plentifully; and thus the urethra, begins gently to weep; at first, a lymphatic matter; and now the gonorrhœa commences indeed: The parts inflame, the vessels ulcerate, and the miasm increases, and spreads itself to the neighbouring parts; in this state, the progress is comparable to an exulceration, caused by fire, cantharides, or caustics. For the inflammation spreading, and the farther continuation of exulceration, is not so much from the quantity of the injury received, as the irritation and consequent stimulus it occasions; and hence from the various obstructions that it is liable to effect, the inflammation will extend to other parts; this is frequently the case, in the first state of the gonorrhœa: Hence the glans swells; the musculi erectores become irritated, and cause an erection; and from the contraction of these muscles, a priapism takes place; of which more hereafter.

There is throughout the whole animal œconomy, a peculiar sensation, attending the first stimulation, which gradually loses itself in the continuation thereof; and from this it is evident, why young people suffer more pain, in a recent gonorrhœa, than old experienced veterans; it is not unlikely, that the spring of the fibres are stronger in this natural and sound state, and not so apt to give way to a relaxation, as in those who have undergone the same violation before.

When the gonorrhœa is seated but a little way, up the urethra, 'tis easy to imagine, that the case must be slighter, than when it is deeper; for the nearer the neck of the bladder, this malady is,
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the more it is of consequence ; not only on account of the more principal parts then affected, but likewise, that the parts are more remote, and hide themselves, as it were, from relief, particularly by topical application : Hence, the gonorrhœa, which is near the prostate gland, the sphincter of the vesica urinaria, is generally more tedious, and subject to many painful symptoms ; and particularly, about the caput Gallinaginis ; which seldom fails of leaving a troublesome feminal weakness behind. But as I have observed before, it is seldom that the first infection is seated deep up ; but from a spreading of the exulceration, sometimes the whole urethra will be even full of ulcerations, which either fill the urethra with a variety of carnosities, or else generate sinuous, and callous cavities, by which perpetual fistulous issues are formed ; and occasion not only tedious and troublesome, but even incurable virulent runnings.

Whilst the seat of the gonorrhœa is in that part of the urethra, from the glans to the perinæum, and properly managed, so that it does not spread farther, the symptoms soon subside ; for nature is ever engaged to expel what is obnoxious ; hence, when the small lacunal glands in the urethra, have by suppuration discharged the virus, either by the force of that act itself, or by proper application of medicines, whereby the corruptive quality of the miasm is corrected, and the reparation of the lacerated tubuli of the violated little glandulæ takes place, nature is gradually restored again to its former tranquillity.

When, however the virus has penetrated into the nervous tegument of the urethra, inflaming the small tubuli of that delicate substance, swelling them up, and stimulating the stamina of the
nerves

nerves, it is easy to conceive, that the parts thereby become shortened; and thus, whilst it is more than ordinarily stretched, at the time when the penis is erect, must consequently give a contracted and spasmodic pain; and this is what is called a chordee. When the virus has found its way into the lymphatic vessels, in the external tegument of the penis, and stimulates the nervous and vesicular fibres in that part, we see the reason of the phimosis, and paraphimosis.

If the virus is propelled into the inguinal glands, through the numerous lymphatic ducts, which make the immediate connection between these parts, a bubo, either in one or both groins, must be the result. But if the virus takes another course, along the vasa deferentia, a hernia humoralis, or swelled testicle, must be the consequence. And lastly, if it finds its way into the blood, or is lodged on any other part, the consequences in proportion must be obvious.

In regard to the gonorrhœa however, the virus too frequently spreads its infection upwards, to the neck of the bladder of urine; and the organs more immediately concerned in generation, are attacked; which consequently makes the case more important. The Cowper's glands near the prostate, frequently are the sufferers; and which, as their secretion is somewhat more elaborate than the small lacunal glands, the matter which they yield, takes more time, and consequently becomes more corrupt. But the prostate, which is a most material part of the generating organs, is still more complex, and of greater consequence; and when the virus has taken there its destructive abode, then I fear the prolific virtue of the semen is in danger of being destroyed. For since the vasa de-
ferentia

ferentia strike part of their course through this important gland, and to all appearance, receive some assistance towards their function, it cannot fail of affecting them; and they of course, will again infect the vesiculæ feminales.

A gonorrhœa of this kind, requires judicious treatment; for it ends, not only too frequently in an obstinate running, which has at times baffled the most skilful, but sometimes has occasioned the so much dreaded imposthume in the perinæum; and of how precarious and difficult a cure this is, I leave to the determination of those surgeons who have had this troublesome task in hand: Yet, as I have been successful in this operation, I shall, in a proper place, communicate the method I have pursued.

A gonorrhœa, not less grievous than that now mentioned, is, when the virus has attacked the caput gallinaginis; the structure of this part I have described in my first part; and it is easy to conceive, that when these valves, the porters of the seed vesicles, are destroyed, an obstinate seminal gleet, must unavoidably be the consequence; even after the correction and discharge of the virus.

But when the virus has seated itself in the sphincter of the urinary bladder, it becomes very pernicious to that part; for it is then, that the most troublesome strangury is the result: But besides this, an exulceration of the sphincter, seldom fails of leaving an incontinency of urine behind; at least, for some time, 'till the proper tone of the fibres is again restored. There is scarcely a more acute pain, than an inflammation of the bladder; particularly that of the venereal kind.

I have been particular in the various progresses of the gonorrhœa, in order to communicate a proper idea thereof; but lest I should become tedious, will hasten towards a conclusion. We will therefore now consider the nature of a gleet.

Of the GLEET.

A GLEET, according to the meaning thereof, should only be a relic, or weakness left behind, after a virulent gonorrhœa. If so, it is not of a very evil tendency; as it is nothing more than the draining of the small tubuli, like that at the end of every ulceration, just before the cicatrification of the mouths of the vessels, which are just shutting up. If the seat of the virulent gonorrhœa is not deep, and only in the lacunal glands, a real gleet will not last very long; since the secretion in those parts is but sparing, unless stimulated; but it must consequently continue longer, if the seat of the disease is deeper in the urethra, in Cowper's glands, prostate, and in particular, about the caput gallinaginis; however, most remarkably so, if in the vesiculæ feminales, &c.

But was this the case, when a gleet is made mention of in the general term, there would not so many grievous consequences be the attendants thereof. I don't mean here the feminal gleet, (for of this I shall treat of by itself) but the continuation of the virulent gonorrhœa, without any sensible pain to the patient, which in fact, differs nothing from the recent, except the inflaming symptoms; and that the miasmatic particles have
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lost their stimulating quality, so as to become more naturalized to the parts. This is the true state, as long as the running has any thing remaining of the purulent nature.

And here it may naturally be asked, whether a gleet of this kind, without any virulent symptoms, that is, scalding of urine, pain in the urethra, bubo, &c. is infectious? Most undoubtedly it is: Yet, with this difference, that as the virus at that time is not of so acute and ardent a nature, it is not so liable to insinuate itself in general. When a man, however, labouring under such a gleet, copulates with a woman to whom he is not accustomed, and whose parts are delicate, and liable to become the least galled by coition, she will certainly receive a virulent gonorrhœa, with all its terrible consequences: A woman with whom he has an habitual cohabitation, is not quite so subject, on account of the agreement of parts. But on the whole, a gleet of this kind, that is, where there is the least appearance of purulency, is by no means to be trusted, neither as to the patient himself, nor in regard to infecting of others.

The real gleet, which may, whilst in that state, be pronounced innocent, as to infection, is, when the discharge is transparent, clear, glutinous and ropy; which then with good management may soon be cured; but if neglected, very easily relapses into a virulent gleet again.

There is one thing more to be observed in regard to gleets, particularly of the purulent kind, and that is, that they ought to be considered as an issue. Now, it is an observation, agreeable to

the true principles of phyfic, that, the drying up an issue, ought to be done with the greatest circumfpection; for whilst nature has made an habitual drain of that part, which is kept as an open ulcer, there is undoubtedly a difcharge of acrimony; which, if not corrected before the clofing of the drain, might do great mifchief in the blood, or be detrimental to other parts where it might be fubject to fall upon. I am far from being an advocate for iffues of any kind, or in any circumftance; as I am firmly of opinion, the body is by many odds better without them; but when they are actually there, whether by nature or art, particularly of any time ftanding, they had better, by all means continue, than be healed up; except the acrimony of their difcharge be firft corrected, and the blood guarded againft an infection from them. That this is a caution of moment to health and even life, I am convinced of, from the many dreadful confequences I have feen, owing to injudicious practices in that refpect.

There is fomewhat fo very gentle in the found of a gleet, that the patient is very little concerned at it; and too frequently, lefs fo, the practitioner he applies to: For my own part, I had rather cure ten recent virulent claps, than one old ftanding gleet. The fountain of the evil is fometimes deeper, than the beft of us is aware of: It may indeed be ftopped, but we ought to have a care, that the remedy proves not a much worfe evil than the difeafe.

Having thus made a definition of the nature of the malignant and benign gonorrhœa, or habitual gleet, I fhall now give my opinion on
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the question, which is still in debate amongst physiologists, Whether the virus acts upon the solids or fluids?

To discuss this question properly, it must be observed, that the fluids and solids are so intimately interwoven with each other, that they seem to be linked, as it were, in one continuation; and this is most perceivable in the leanness and fatness in the same subject. On the one hand, it is evident, that the virus is fixed sometimes in one place, and by its exulcerating quality, it is plain, that it acts upon the solids: On the other hand again, it is suddenly transported to some other part, where it will act with all its power. This transposition is naturally supposed to be effected by the lymphatic ducts or the blood: But to this, it is objected, that in the gout or rheumatism, the malignity of those diseases, will be transported from one member to another, quicker than possibly the circulation can do it: And this too is frequently the case in the confirmed lues. Now, that this sudden transposition, is by means of the nerves, I think, most evident. It is an observation highly useful in physic, that an acrimony will stimulate the solids, and that that agitation of the solids, will make their containing humours acrimonious; so that each has an equal power over the other, as their action and re-action are equal. From hence I deduce, that the virus may attack both; that each may infect the other; and that it is liable to be transplanted from one part of the body to another; not only by the fluids, but also by the solids; and particularly by the nerves.

Another question is, Whether the semen virile is infected in the gonorrhœa? In regard to this, it depends much on the state the disease is in: In the first state, when the inflammatory symptoms are in the height of action, I apprehend, not only the semen is affected, but more or less, the whole body: For from whence else should come the fever, dysuria, and other symptoms of the disorder? But as the gonorrhœa gets vent, the miasm gradually discharges itself, and the symptoms subside. It is most certain, that the semen virile has altered its hue, at the height of a virulent gonorrhœa, towards a yellow cast; and I make no doubt, but that it is so far contaminated, that, should it even retain its prolific virtue, and make the woman conceive, that then the foetus from such a conception, would have the confirmed lues in its composition. In like manner, if the gonorrhœa has its seat in the prostate gland, or in the seminal vesicles, the thing speaks evidently for itself. But except those circumstances, where the seat of the gonorrhœa is but a little way up the urethra, (as is for the most part the case) the seed remains generally untainted. And though it is an hazard, that no man or woman of reflection ought to run, yet we have instances of fathers, who for years laboured under a gleet, even of the purulent kind, who had healthy children: But we must remember this too, that such instances are but rare; and that those troublesome cases, bring diseases on their offspring, is too obvious, and almost an universal demonstrative consequence. For in the ejaculation, if the seed is ever so pure, it is scarce possible, but that it must take something

thing of the purulent matter, from the seat of the gonorrhœa along with it; and if the virus is acrimoniously active, the consequence is plain: But if more mild or less active, nature, which ever opposes and endeavours to expel what is obnoxious, may become superior, and protect itself against the invasion.

It is almost needless to mention, what natural prudence dictates, namely, that the urining before coition in that case, renders the semen more pure than otherwise; and if the gleet is mild, and the two habits, that of man and woman, are become naturalized to each other, there is certainly less to fear; but to abstain 'till nature is restored to its primitive health, is the only precaution; the true safe guard to health, and peace of mind.

On the whole, however, the opinion which has greatly prevailed among many great men, that the gonorrhœal discharge, and the gleet, were always contaminated seed, is, in my opinion, point blank erroneous; for unless, as I have demonstrated, the seat of the malady is in the seminal organs, that is the prostate, vasa deferentia, or the vesiculæ seminales, the seed has no more share in the gonorrhœal matter, than the saliva itself. That the discharge is plentiful, is neither surprising, nor difficult to conceive: The gonorrhœa is an ulcer, from the venereal miasm in the urethra; and every ulcer discharges more or less, according as the ulcer is stimulated, and the parts ulcerated are glandulous: In what manner this happens, I shall offer my consideration at another time.

There occurs to my memory, a circumstance yet, concerning the gleet, which, I think it requisite to mention in this place ; namely, that whereas, a young man in the bloom of youth, easily contracts the gonorrhœa, and suffers much more by the acute symptoms, than an old experienced veteran, (who is neither so easily infected, nor suffers so acutely) so likewise, there is a great difference in the cure of these two kinds ; namely, that the first gonorrhœa is easier cured, if properly managed, than that in an old offender ; and that, from the same reason, as all old sores, which are again renewed : For it is remarkable, that where the gonorrhœa has seated itself the first time, it will ever after place itself again ; and the oftener the sore is broke open, it follows plainly, the more difficult it will be in healing : Add to this, that a gonorrhœa may be contracted in a new place, besides the old, and consequently new and complicated symptoms arise. This, though general, is not however without exception ; for nothing (if proper means are applied) contributes to a speedy cure more, than the constitution itself.

Writers on the venereal disease, particularly Dr. Astruc, mention other kinds of gonorrhœas, as the spurious ; namely, an external discharge from the glans ; but this kind, I humbly conceive to be shankers, or little ulcers from the cristallines ; which shall be treated of in their proper place. There is also the dry gonorrhœa, that is, when the running has ceased, but the scalding of the urine remains ; however, this is plainly a dysuria. So far though, we may consider a species of a dry gonorrhœa just, as relates to a suppression ;

sion ; namely, when the virus has taken its flight, toward the groin, testicles, or other parts ; and some time after, by its return, sets the clap agoing again. In this suppressed gonorrhœa, it is not always a rule, nor necessary, that the running should return, though this has been strenuously recommended : but it is known from experience, that it could not always be effected, and frequently the patient has got well, without this return : for when the parts in the urethra are healed up, the virus is thereby shut out. A bubo in that case, is not so very bad to deal with ; but when the virus of the suppressed gonorrhœa, takes up its abode in the testicles, it behaves sometimes very incorrigibly. Nay, what is not a little surprising, the virus of a suppressed gonorrhœa will take its flight to the eyes : Had I not met with an instance of that kind, I should not have been without some doubt of this ; yet so it is : And I think, a plain proof, that the solids may be conveyers of the miasm, as well as the fluids.

When the suppressed gonorrhœa remains with a dysuria, a chordee, or priapism, it is plain the ulcers in the urethra are yet open ; but from the retroaction of the fluids, the virus has taken a reverse way ; and a return of the running, is by all means necessary ; but if this suppression is without acute symptoms, we may reasonably suppose it to be healed up, and the death of the poison must be aimed at another way,

I do not at present recollect any thing more of consequence concerning the gonorrhœa, or the gleet, proper to be taken notice of in this place ; as this is only meant as an ætiological description thereof,

thereof, I shall therefore proceed to give a description of the simple gonorrhœa; though, in reality, it is generally excluded from the inquisition of venereal ailments. Yet, as the venereal gonorrhœa may give birth to it, and that it is an ailment not less grievous than the former, I shall not only venture an examination, but also, in its proper place, give recipes of relief, founded on reason and success.

*Of the simple GONORRHŒA, or seminal
G L E E T.*

ACCORDING to the etymology of a gonorrhœa, one might be apt to suppose, that the feminal gleet was the original meaning of it; and this the supporters of the importation of the venereal disease, value themselves upon. But if the modern physicians, have pronounced the virulent gonorrhœal running, to be corrupted semen, which in itself is nothing but virulent pus, the same as from any other ulcer, (in general) we need not wonder that the ancients, who certainly knew less of the matter than we, should have thought so too.

A feminal gleet may proceed, either from a virulent gonorrhœa, from excess of venery, self-pollution, or other infirmities. Let the cause however be what it will, there is no drain, which steals the quintessence of life and strength so gradually, and effectually, from the animal œconomy, if continued, than this sort of gleet. In regard to the feminal gleet, occasioned from the venereal

venereal virus, we have somewhat largely considered this before, namely, the attack of the virus in the prostate, verumontanum, vasa deferentia, or vesiculæ seminales; but, besides these attacks, the hernia humoralis in the testicles, from the venereal virus, may also bring on this gleet. Be-
however what will the cause, the effect is either an ulceration of the parts, or else a kind of lameness; whereby the semen not only wants proper concoctions, but it is also, neither properly retained, nor forcibly ejected.

A real seminal gleet is easily distinguishable, from, either the virulent gonorrhœa, or the habitual purulent gleet; In this there is no symptom of real pain, except a disagreeable weakness, and a dull pain about the neck of the bladder, and in the loins; the semen comes away insensibly, continually a little, but particularly when going to stool, from the force requisite for the exclusion of the fæces. The penis is often inclined to erection, but not in a manner so forcibly, as usual; and the semen is easily ejected, but without that vigour which is requisite to procreation; which, in lieu of a white semi-transparent, and rich consistence, is humid, thin, and of a bluish cast.

At the beginning of the disease, there is great inclination to erections, and the emission of the semen seems attended with pleasure; but gradually the penis becomes lame, and as it were, neither flaccid nor erect, hanging lifeless down between the two sizes, of erectness and flaccidity; the testicles hang lower than usual, and unless they are
otherwise

otherwise suspended, become almost a burthen to the possessor; gradually a pain in the loins, about the os sacrum, begins to make its appearance, which soon extends all up the back; the calves of the legs fall remarkably away; the eyes look hollow and heavy; and the whole body begins to take on a tabid appearance; he begins to loath women, and every thing which afforded him pleasure before; a continual tabid fever comes on; first, with the *tabes dorsalis*, a continual pain in the back, which extends to the head, breast, and bowels, attended with a drought, and universal lassitude; and at length an hectic ends the tragedy.

If the patient on the first apprehension of this malady, seeks for timely remedy, and keeps a regimen of life, according to good sense and rational advice, the case is curable enough, and in general, far from a difficult task; but too often is, either from a mistaken modesty, or indeed from a guilty conscience, concealed, till frequently it is too late to repair the ruined constitution.

That it is a consequence sometimes of a virulent gonorrhoea, has been sufficiently mentioned; but most generally it is the attendant on excess of venery, whether nature is strained beyond its due elasticity, either by spermatopoetics; or from the forcing lascivious exercises. Excess of venery between the sexes, in the natural way, is not so much subject to produce this evil as private pollution: It is idle to make many invectives against this sin; the consciousness thereof is implanted in the human breast from the earliest

earliest time, the sinner knows what it means : The question is, how shall we remedy it? for, because it is a wrong against nature, it is kept a secret; and how shall we be able to help the evil, we can neither discover nor detect, or make the transgressor confess; but what is even worse, it will be in vain to persuade him to leave off this evil and habitual practice.

There are also accidental causes which may bring on this seminal gleet: A sudden lift or strain, a profuse sweat, hard straining in a constive stool, hot clysters, strong diuretics, stale malt liquors, convulsions, drunkenness; and most particularly when the seminal vesicles are filled with semen whereby they are liable to a spermatocoele, or seminal rupture. It likewise has been occasioned from nocturnal emissions, when the patient in his dream has had an imperfect coition; for a disappointment of ejaculation, whether in sleep, or in reality, is almost as powerful as any other cause mentioned, to occasion this gleet.

Why the seminal gleet should be attended with such evil consequences, I think may thus be accounted for: That, as the semen is the most nervous, and elaborated humour in the body, consequently it drains the blood, and nutriment, the more of the sustenance peculiar to the support of the nerves; and whilst it is wasted, it cannot but waste the nerves, consequently the main spring, or primum mobile, of the whole animal machine gradually decays. And as the genital organs suffer first, and they, receiving their nervous ramifications from the medulla spinalis, by the crural nerves, par vagum, and cauda equina,

equina, springing out from the sacrum, it is clearly conceived what occasions the pain and weakness of the loins; and from thence the tabes dorsalis takes its commencement: And at length, if the ailment is continued, that a consumption must, and always will be the consequence.

It is likewise of consequence to examine into the progress of this seminal flux. The organs of generation have an intimate and sympathetical contact with each other, so that whatever parts are affected, the rest share and partake; the seminal organs, however, rule the rest: The testicles are the chief, as generators of the seed; and if the communication of them with the rest is cut off, the spasmodic secretion, excretion, contraction, pleasure and desires must of course leave off: Hence an eunuch is a stranger to venereal passions, (and consequently every other manly passion) because he has no seed; and no seed, because no testicles the organs thereof, though he is not deprived of the vesiculæ feminales; but since they are become useless, they are merely shrivelled up, and scarce perceivable in the subject. Again, when the vesiculæ feminales are filled with semen, the fabric of the penis is ready for an erection; but when this erection is often repeated, it is plain that the muscular fibres must lose gradually their elasticity. When the seminal vesicles discharge continually, there will of course be a continual propensity for filling them again; for by their emptiness there will be a perpetual suction; that is, where there is an excretion, there must be a secretion. Hence the elaborating organs, the spermatic vessels, the epididymidæ,

didymidæ, and the tubuli in the testicles, from their continual irritation to work, and not being supported by the nerves, lose their strength, become weak, and suffer themselves to be stretched longer than usual; and thus, from a relaxation of the spermatic vessels, and the vasa deferentia, by which the testicles are suspended, and the weakness of the cremaster muscle, the testicles sink remarkably low, and become almost a burthen. From this the vasa deferentia, the caput gallinaginis, &c. becoming relaxed, and unable to retain the seed, let it pass into the urethra before the vesicles are quite full; from thence, likewise, the muscoli penis become sluggish, and the penis has little or no erection; and, from the same reason, the fibres in the corpora cavernosa, having their contracting powers much diminished, the penis will neither become properly erect nor flaccid.

At length, the nervous humour being drained from the fluids, the weakness spreads over the whole body, impairs the strength and faculties in general; till a fever, the last effort of nature, closes the scene.

From this description we shall be able to see the rationale of the cure, when we come to treat on that important part; as it will plainly appear, that it differs widely from the virulent gonorrhœa in its evil, and must consequently in its cure. Having thus examined the various stages of the gonorrhœa in men, we will next consider the same maladies in women.

Of

Of the virulent GONORRHŒA in WOMEN.

THAT there is a manifest difference between the seat and symptoms of the virulent gonorrhœa in women and in men, must be obvious; in what however it consists, is here to be examined. Whilst the urethra is the seat of the disease in men, so principally the vagina, is that in women; from whence the whole pudendum soon partakes of the symptoms and infection. The approach of the symptoms is much of the same nature in women as in men; with this difference however, that they rather appear quicker, and seldom rise to such an inflammatory height. This is easily accounted for: First, their fibres are more delicate, and therefore the symptoms sooner appear; secondly, they are laxer, and therefore easier give way, whereby the inflammation is checked; but on the other hand again, from the same reasons, the discharge is more plentiful.

I have observed in the preceding, that the symptoms in a gonorrhœa, are in general, more acute the first time; but this is more remarkably so in women: For whilst a young woman, for the first time, shall suffer much, an old offender shall scarce know it is so, but from other symptoms, and that she has already propagated it.

However, in general, it makes its appearance more or less in the following manner: About two, three, or four days after the infection, the patient feels, from the irritation of the miasm, an incli-

inclinations for coition, but this irritation soon degenerates into pain; she feels a pricking, shooting, and constrictive pain within the vagina, so that she cannot suffer coition but with the utmost difficulty; for the vagina from the inflammation, is sore and constricted, from which it is become narrower and more turgid at that time than usual. From the irritation likewise, the clitoris becomes erect, and the labia, alæ, and carunculæ myrtiformes, swell up; but, like the inflamed priapism in men, sore and painful. The urine begins to be hot, and soon scalds, particularly afterwards, so that the patient dreads making water; which however she is obliged to repeat oftener than usual. She feels a contractive and painful sensation, from the mons veneris up in her body, about the hypogastric regions, together with some creeping motions within the sides, about the hips, as also some dull pains in her loins across the sacrum; which is occasioned from the stimulation of the virus in the clitoris, and communicated to the ligamenta rotunda, and the irritation given the uterus and ovaria. The running, or discharge, is at first lymphatic or slimy; next, watery, sharp, foetid and bloody; and at length becomes a deep yellow (sometimes inclining to a greenish cast) purulent, foetid, and a copious discharge.

If the gonorrhœa is of the ordinary kind, and nothing interrupts the course of the discharge, the acute symptoms soon abate; the inflammation, constriction of the vagina, dysuria, tumefaction of the pudendum in general, spasmodic contraction of the clitoris and ligamenta rotunda, gradually subside; and if proper remedies are

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applied,

applied, the purulent discharge will gradually verge towards a white and slimy consistence, till it becomes transparent, ropy, and at length disappears.

The seat of the gonorrhœa is chiefly in the lacunæ in the vagina; but sometimes it will be seated near and in the sphincter of the vesica urinaria, otherwise called the prostate, or else in the lacunæ, seated about the clitoris; at other times it will be seated in the Cowper's glands near the perinæum, which are but lacunæ with the rest. Be however the seat where it will, it makes but little difference, as long as the place may be come at; but the worst seat of all, is within the uterus, or the os internum, whence the evil is not so easily removed. That the seat of the gonorrhœa may be judged in the uterus, may be gathered from the sharp burning and stinging pain they feel there; and which is followed by a more than ordinary quantity of fœtid ichorous and bloody matter.

Women are in general more subject to shankers than men, on account of the great quantity of matter they discharge, and particularly if they are not very cleanly; but they are never so obstinate in the cure, if properly managed: They differ, however, greatly in this respect, according to their situation. Ulcers are more painful, and difficult to manage, in the clitoris, the os internum, the carunculæ myrtiformes, or sphincter urinaria, than those in the alæ, or labiæ; because the first mentioned parts are of a nervous and tendinous texture, whilst the latter are more relaxed and vesicular; and therefore
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not so liable to constrictions, consequently yield easier to the applications, and more readily cicatrize. But on the other hand again, since these softer parts are more compliable, they are for the same reason peculiarly subject to fungous excrescences; the nature of which we shall more fully explain in another place.

Let the seat of the first infection or the recent gonorrhœa, however, be where it will in the pudendum muliebre, the virus is liable to be propelled, and disturbed in its course, the same, and from the same causes, as mentioned before with men; hence, females have buboes as frequent as the other sex. It would appear absurd to say they are likewise subject to swell'd testicles; yet, what is the same with them, the ovaria, suffer frequently not a little; and I make no doubt, that there is at times as great an obstruction in these organs, as in the male testicles, if we may judge from the heavy complaints made sometimes of those parts, and the symptoms that evidently indicate such obstructions.

That the virus is liable to be propelled to the uterus, I apprehend no one will make a doubt of; but I am afraid it is not in general paid so much attention to, as it deserves; and from the want of a strict regard to these circumstances, many women have not only laboured all their lifetime under the virulent gonorrhœa (under the name of the whites) but either become barren, or else brought forth children, objects of misery and pity.

Women are subject to many infirmities, which, though at times are much in their favour, yet lay

them in general under many disadvantages; and from whence even the most experienced will have difficulties to judge properly of the many ailments incident to the sex, either from their complaints, or from appearances: They are likewise subject to be imposed on (which at times they are most grossly); but the artful of the sex, in their turn again, have it greatly in their power to baffle and deceive the most sage *Æsculapian*: How easy it is, in general, to persuade an innocent and virtuous woman, who unfortunately has contracted a virulent gonorrhœa, that it is only a sharp fluor albus, or the whites, I appeal to unfaithful husbands; and that sometimes the most curious examination cannot distinguish an inveterate clap from a fluor albus, if the woman will deal cunningly, I appeal to the experienced surgeon.

The symptoms of an incipient gonorrhœa sooner subside in women than in men, and a woman is certainly easiest cured; yet, with this difference, provided she is young, and carries no remains of former injuries, either from claps, miscarriages, or other female weaknesses; otherwise, the cure becomes too frequently but superficially so; for then, to do it properly, is a more difficult task than we are generally aware of, at least by the common method. Thus much on a recent gonorrhœa in women. I shall therefore, in the next place, proceed to the inveterate or habitual gonorrhœa, which is of greater consequence, and most difficult to be acquainted with.

Of the HABITUAL GLEET *in* WOMEN.

IN order to make a proper diagnostic distinction between the virulent gonorrhœa, particularly, when it is become habitual, and inveterate, from the fluor albus, or the whites, it is but right, we should have a just notion of both : In regard to the first, it is the continuation of the gonorrhœal ulcers, with this difference, that the phlegosis of the pudendum in general, the dysuria, painful copulation, &c. before described, have abated, but the discharge flows as plentiful as ever, and is become purulent ; however as to the latter, namely, the fluor albus, it is not only produced from various causes, but is attended with so many different symptoms, and puts on such a variety of appearances, that there remain but very few characteristics to distinguish it from the habitual purulent gleet.

To treat on the various causes, and the nature of the fluor albus, might make a volume of itself ; I shall therefore not pretend here but barely to give the outlines thereof ; yet, though concise, I hope sufficient to answer the purpose. The fluor albus signifies a white flooding ; this indeed is its appearance, if, of the mild kind ; but from this it will vary, not only in colour, but likewise in consistence, according to the causes of it, and the habit the body is in.

The causes from whence this flux may be produced, are many ; but they may be distinguished into two kinds : The first, from a weakness of

the fibres, and the tubulæ from whence it is discharged; the second, proceeding from some injuries, when those vessels have been, by whatever cause, lacerated, and thus continue in a state of ulceration. To understand the first kind, it is requisite to examine the catamenia, or menstrual discharge, since the fluor is a production from the same tubuli.

The catamenia is the monthly discharge from the pudenda in women whilst unpregnant. It generally begins about the age of fourteen, and lasts till between forty and fifty; the time that nature designed them for generation. Most generally the interval is about a lunar month; the time it is on them, is as various as the quantity they discharge; in general about three or four days; and the quantity about eight or twelve ounces. With some there are various preceding symptoms, such as head-ach, pain in the loins, and in the breasts, a short breathedness, &c. with others, it appears without giving any previous notice, except the stated exact intermediate time. With some it will have the appearance, and is in fact nothing but good blood; with others, it will be watery, sharp, different colours, and even sometimes very offensive: And yet, under all these different appearances, the patient appears frequently healthy.

There are curious problems of physic under this head, which remain unsolved; which however the limit of this work will not admit to enquire into, (viz) Why this flux is peculiar to the human species? The cause thereof? &c. It is sufficient for our purpose, that it is drained from
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the officula of the hypogastric and hæmorrhoidal ramifications, which spread themselves within the uterus and the vagina, according to the period prescribed by nature.

That it is not from an overflowing of a plethora, as many have asserted, is, I think, very plain; since weak, delicate, and thin habits have generally more of it, than sanguine and robust females: And that it is thought to be owing to an internal fermentation, is equally in my opinion, as great a mistake; since nothing is more prejudicial than bad digestion, strong emotions of the mind, and whatever causes a feverish swelling in the blood; moreover, working, and hard labouring women have least of it; even so, that it has quite disappeared in appearance of blood, and yet they have remained in perfect health: That it is neither actuated by lunar influences, is likewise plain; since every woman has her stated time, regardless of the changes of the moon. And lastly, that it is only peculiar to the human species, is neither founded on strict observation: for apes, who somewhat resemble the human species in their genitals, have it very regular: But besides this, every species of animals, particularly quadrupeds of the domestic kind, have been observed, that when the females have, by a natural instinct, been desirous of copulation, a humour has oozed from the genitals, and repeated at certain periods, till impregnated; add to this, the less exercise such animals have, the more such discharges have been.

On the whole, it appears to me, that this monthly discharge of the catamenia, is destined

by nature to open the female organs for gestation; in order that the osticula of the wonderful fabric within the uterus, may the better receive the adherence of the semen virile in coition; as it is allowed on all hands, from experience, that a woman readier conceives immediately after the menses than at any other time.

In the general course, the catamenia approaches with the following appearances, or rather symptoms; a day or two before the pudendum is more than ordinarily lubricated with a lymphatic mucus: This proceeds from the congestion of humours towards these parts, whereby the osticula of the lymphatic ramifications in the uterus, but particularly the lacunæ, in and about the vagina, are urged to a more than ordinary secretion: For the most part, a pain, or at least a disagreeable oppressive sensation, is felt in the loins; this is caused by the plenitude of humours accumulating themselves in these parts, and must give a pressive sensation to the nerves; which take their origin from the sacrum. Then the flux makes its appearance; which continues 'till with a proper elasticity of the fibres, they are admitted to contract themselves again; when the discharge ends gradually with the lymph, and disappears.

This is the general state in health; but if the habit of body is acrimonious, the fibres from the congestion are oppressed, and the flowing is retarded; hence, the pain in the loins, and the pubes, head-ach, &c. is greatly augmented; and since the humours, in some measure, are become stagnated, and flow but sparingly at first, the proper crassamentum of the blood is lost; and
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hence it will, when it begins to flow, appear quite different from pure blood : To this we may add, if there be an intermixture of bile, either from ill digestion, or emotions of the mind, (to which the sex are more subject than men) the humours will the more incline to a putrid acridness; and hence, in such habits, the menstrual discharge, will at times become of a malignant nature. This gave rise to the ancient assertions of poisonous qualities in the catamenia.

When either with the addition of the fore-mentioned, or exclusive thereof, the fibres of the generative organs are in a state of relaxation, the flux will continue longer; and as they, from such weakness, have neither power to discharge properly, nor constrict themselves from the influx of humours, till the proper period arrives, they will remain oozing for some time after the menstrual discharge; and this is properly the fluor albus.

Whilst the fluor remains simple without any painful inconvenience, it is white; much resembling a milky cream, and tends only to weaken the body: But if accompanied with an habitual acrimony, it will lose this favourable consistency, and turn humid, sharp, and foetid; when it will be liable, not only to erode the parts it flows from, thereby give them an ulcerous aptitude, and thus make the fluor of a purulent aspect; but if repelled, taint the whole mass of blood, with pernicious acrimonies, and be the author of many grievances.

The fluor albus, whilst in the simple state, seldom succeeds the catamenia immediately; since the natural inclination of humours in the discharge,

charge, has avoided going to these parts for a while, but it soon appears again: Nor does it flow in the menstrual discharge itself; since the flux is too successive, to admit of time requisite to the transmutation, from a sanguine colour, to that of a lacteal: Various authors argue a production of the fluor albus from lacteal vessels; but I humbly conceive such lacteal vessels, in the organs of generation, exist in their imagination only; for that the blood easily becomes of a puffy white, we experience daily in the act of suppuration; and that the fluor albus is generated by a suppurative concoction, (if I may be allowed the phrase) I think is demonstratively clear.

Be this however as it may, certain it is, that the fluor albus is an infirmity attendant on delicate, and sedentary women chiefly, and from whence they become valetudinarians; whilst women of a more robust mould, and who use moderate exercise, are for the most part strangers to it: This is one of the blessings the blooming rustic country lass possesses, in preference to the pale and delicate fine lady.

The fluor albus in its infancy, is generally easily remedied; not indeed so much by the help of gallipots, as moderate exercise, and a good regimen; but if it continues, it will naturally increase; whereby the body will be weakened, and contract a lassitude; the animal spirits be exhausted; the blood lose its spissitude, and become impoverished; the habit cachexious: The mind whimsical, peevish, and have strange longings, like those attending pregnancy; the eyes become weak; the ancles swell in the day, and the face

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is bloated at night ; at length commences an œdematous puituity from the ancles gradually extending upwards ; and a marasmus, or an ascites frequently ends the scene.

The evacuation of the catamenia, generally at first, is somewhat irregular, 'till nature is brought into its proper channel ; in like manner is the fluor albus, 'till it is become habitual ; with most women it will soon come on very regularly, between the periodical time of menstruation ; with others again, observe no regularity at all ; but some however, will labour under it continually, even in the time of the menses itself.

When either by an overflowing of bile, (as it is termed) or otherwise, the fluor is become acrimonious, it will cause disagreeable sensations about the various parts of generation, as well in the matrix, as in the pudendum in general ; occasion a heat of urine, and pain in the loins, and pressure at the pubes : This however, does not continue in general, but comes on and goes off irregularly. Sometimes the fluor will be purulent, sometimes of a sanious hue, sometimes of a deep yellow, green, or brownish cast, and even at times black.

In this state the patient is frequently troubled with rheumatic flying pains in various parts of the body ; sometimes violent itchings in the skin, attended with blotches and pimples, frequently on the face ; particularly in the forehead, yellow scales will appear, and even sometimes an achor all over the head. At length, if not remedied, the patient sinks gradually into a marasmus, or
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hectic decline, attended with a malacia, and universal feebleness, 'till gradually the dropfy and death closes the whole.

Such are the consequences which gradually may proceed from female weaknesſes; whether from obſtructed menſes; leucophlegmatic habits, chloroſis, hyſterics, &c. or even a ſedentary life; and to which the female ſex in general, young or old, maids or married, chaſte or lewd, are liable.

But there are other cauſes of a more abſolute nature, from which evacuations, under the name of fluor albus, (though from their nature, ought to have different appellations) take their origin: Namely, when the diſcharge is of the purulent kind, and cauſed by lacerations of the reticulary officula in the uterus; or the lacunæ within the vagina, or pudendal parts in general: Such a diſcharge is evidently the production of actual ulceration; which in fact, can differ very little from the inveterate gonorrhœa, except in the method of its firſt being contracted.

Now ſuch a purulent fluor, may be occaſioned by many different means, (viz.) from exceſs of venery, miſcarriages, difficult labours, or other injuries received, either in the uterus or vagina, excluſive of the venereal virus.

In regard to exceſs of venery, this has been explained before; to which I ſhall here add, that nothing contributes more to emaciate the beſt conſtitution than this; beſides, this pernicious kind of fluor is generally univerſal; as well in the uterus, from the continual ſtrains the uterine organs are ſubject to, from the violent agitation of repeated venery, as alſo in the vagina, and pudendum

dendum from the ulcerous discharges, occasioned by the repeated friction, together with the straining of the parts; and I defy the most experienced surgeon to make a distinction between this kind of ulceration, and an old standing clap, by the most scrupulous examination: except the cause of it is communicated by the patient herself.

Miscarriages are liable to occasion great mischief; and I'll maintain it, that a woman runs more risk of being ruined by one miscarriage, than ten natural parturitions: For, as the embryo, or foetus, is intimately united to the uterus, even so as to continue the circulation of humours, betwixt that and its contents, it is plain, that a separation, before a natural maturity, must occasion a delaceration of the delicate anastomosis of the reticular substance of the matrix, and the unripe placenta; particularly if some superwise midwife lends her officious assistance, to tear it away by main force, and next drenches the poor patient with the most powerful emmenagogues. The injuries received from such miscarriages, (but rather indeed from unskilful assistance) are too obvious; an habitual purulent fluor too often follows the patient for life, with all the fatal attendants thereof.

The evil consequences of hard labours, need scarce be mentioned; too well known from sad experience. Were these evil consequences however, barely from difficult labours, owing to a default of nature, such sufferings would but seldom occur; but unfortunately the cause proceeds too frequently from self-sufficiency, and unskilfulness of midwives, male or female; add
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to this, the barbarous practice of grabbing, either with hands, or what is yet more abominable, tongs, under the name of forceps, in the uterus; from whence such unfortunate patients, generally drag a perpetual evacuation of purulent fluor, accompanied with many other grievances, with them to their grave.

Concerning other injuries, such are too frequently occasioned, either from a procidentia uteri, the imprudent use of astringents, or emmenagogue pessaries; or eroding injections, &c. all which may have the evil tendencies equal with the former.

In short, whatever injuries the stamina of the ramificating vessels, either in the uterus, or the lacunæ in the vagina, or pudendum in general, cannot fail of causing ulcerations; which are too frequently experienced in their nature, equally as injurious, as if contracted from venereal ulcers; with this difference, that a venereal virus attacks more, as it were, by surprise, and thus causes a greater contest in the parts, or an inflammation; from whence other parts are subject to receive an infection; whilst these puffy discharges have had a more gradual approach, and slowly come to such a height of ulceration. But when the inflammable symptoms of the virulent kind are abated, the continuation thereof is so exactly alike to the former, that the consequences, signs, diagnostics, prognostics, and the very cure thereof, are exactly alike: That is, the fluor albus proceeding from ulcerations, particularly in the vagina, or pudendum in general, cannot be distinguished from the habitual purulent gonorrhœa, being exactly alike in every circumstance.

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From this description, we clearly conceive a rational distinction, which ought to be observed in these inquiries; and from this we see likewise the causes of many ailments, not only in chaste mothers, but also entailed on the innocent offspring; and though nothing venereal has been in the case, yet it has had, at times, so near a resemblance, that the parties concerned have often been stigmatized with crimes they have not deserved. It behoves therefore, the judicious practitioner, to be cautious in his diagnostic conclusion; yet may his indication be levell'd against the greater evil, to which the lesser will always yield.

A recent gonorrhœa is easily known, but in respect to the inveterate kind, all what we need to know (regarding the benefit of the patient) is, whether the discharge is mild or virulent, lymphatic or purulent, &c. and whether the seat thereof is external or internal, the quantity of the discharge, and the various symptoms; for if the discharge is mild, white, lymphatic, by intervals only, without pain, or heat of urine; it is only a simple fluor albus: But if the discharge is of a deep yellow, purulent, foetid, continually, without intermission, attended with pain, and smarting of urine, the fluor is purulent, and requires another treatment; let the origin be venereal or not.

If by inspection we find the lacunæ about the sphincter urinaria, or any other part in the pudendum sore, or on a gentle pressure, yield a puffy matter, we know such parts are affected; likewise if any part within the vagina feels more tender than any other, on the touch, an ulceration

tion is plain; if however, the discharge flow, besides all these examinations, it is evident the production must be from the uterus; the recenter the case is, the easier it will yield to proper applications; but if of long standing, and becomes habitual, it is natural to suppose the case more obstinate.

Notwithstanding the similitude of the various kinds of purulent discharges beforementioned, there remains still something peculiarly characteristic to that of the venereal kind; namely, the propensity and aptitude to insinuate itself more in the lacunæ, than any other parts, and involve itself deeply in that substance, where it at first struck root; consequently acting with more violence, to work its way outwardly; and thereby, not only ingrafts the ulcerations more intimately in these little glandulæ, but from the symptoms which such elaboration occasions, affects other parts, and renders them liable to partake of the miasmatic virus: But after the ulceration is become quiet, and the inflammatory symptoms abated, it loses also, in some measure, its infective quality, insomuch, that in time there is no difference at all, in the nature of it, distinctive from that of any other cause: Hence the habitual venereal gleet in men, and that in women, may remain dormantly inoffensive to themselves, even for life; and those accustomed to their embraces; yet only like a smothered fire, which is subject, one time or the other, to awaken, and put the whole animal mass in a blaze.

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It is true, that this habitual gleet in men and women, if regular and gentle, may not prevent procreation, and even the bringing forth healthy children: Yet how precarious and detrimental such an ulcerous issue is to the parties and posterity, is too evident, from the many melancholy examples; which will appear more in the sequel of this æthiological enquiry.

Having thus examined the nature of a gonorrhœal evacuation, we will next turn our thoughts on the various disagreeable attending symptoms thereof.

OF INFLAMMATORY SYMPTOMS.

WHEREVER there is an opposition to the free circulation of the fluids, there must be an inflammation. Liberty and freedom is the great wish of nature, and implanted in every atom of life; and whatever obstructs this sacred enjoyment, gives the alarm to the interested parties, and all concerned, unite, to expel the encroaching enemy. The first emotions are the most painful; but at length the contest subsides, and the vanquished, gradually submits to the yoke of oppression; at the same time labouring under a discontent, and for ever endeavouring to shake off the obnoxious burthen. Thus it is in a state, and thus it is in the animal œconomy.

The symptoms of inflammation which gradually occur in the recent virulent gonorrhœa, would naturally have made the same appearance,

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if the injury had been occasioned by any other means, than a venereal virus; as is evident from wounds, burnings, contusions, caustics, &c. For as the vesicular ramifications are either lacerated or maimed, so as to be unable to do their functions, the humours consequently obstruct in them, and dam up the perpetual influx and circulation of humours coming from other parts; and of course continue the distortion of the neighbouring tubulæ; whereby the nervous texture becomes irritated, and stimulated to a contraction, and thus makes their extension more intolerable: It follows therefore, that the accumulating humours, pressing on all sides, the tubulæ and nervous fibres must irritate them to increase their functions; whereby they endeavour to disengage themselves from the oppression; which struggling agitation, must naturally excite a vital heat in the contesting parts: And because the globules of the blood are drove by the constriction of the fibres, out of their proper channels into the lymphatic vessels, the parts also become swelled, and of an inflammatory red. This is the first state of inflammation; which will naturally farther effect the neighbouring, and such parts as are most intimately linked hand in hand in the chain of friendship and interest.

When the fibres of the oppressed tubulæ, either by a relaxation give vent, or by the power of their elastic constriction repel the stagnated fluids, without any elaceration of their fibril stamina, so that the fluids may pass again unobstructed in their wonted course as before, nature is restored to its former tranquility; and this is
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a dispersion; the most favourable conclusion of an inflammation.

If however, the intestine broils of inflammation are obstinate on either side, so, that neither the fluids can disperse, nor the solids give way, or strong enough to expel the obstruction, the contending parties threaten destruction to each other; the fluids, from their stagnation, lose their natural benign quality, and become acrimonious; and thereby destroy the tone and texture of the solids; and this is the state of a gangrene.

But if yet the destructive enemy has no outlet, but is become putrid, bores its way by a continual slaughter, and cuts off all communication of succour to replenish the distressed party, the torrent of ruin destroys every thing before it, and aims at nothing less, than the dissolution of the whole animal fabric. In this dilemma, either the branch must be lopt off, or the stem must die: And this is the dreadful havoc of a sphacelus, or mortification.

When however the friendly commerce of circulation is not totally prevented, yet the distended tubulæ of the containing obstructed humour, unable to stand it longer without an elaceration must give way, but at the same time retain a gentle contraction, so, that the fluids are not let out too plentiful, the case becomes an ulcer; which by suppuration, detergion, and cicatrification, sets nature to right again.

This is the general state, and consequences of inflammations: Let us now proceed to particulars.

Of the D Y S U R I A.

WHEN the titillating sensations on the approach of the gonorrhœa increases, attended with a weeping of lymphatic matter from the urethra in men, and from the pudenda in women, a dysuria gradually comes on; the urine at first is let oftner than usual, with a remarkable titillation, which gradually degenerates into a burning and cutting pain; particularly, immediately afterwards. The urine acquires a high colour, from a deep saffron, to that of strong beer; as it advances in highness of colour, it diminishes in quantity, and increases in acrimony; in so much, that the patient sometimes is continually irritated to urine, but scarce able to discharge a spoonful at a time, and which cuts like a two-edged sword. But sometimes it degenerates into still greater ailments, as we shall see presently.

That the dysuria is only an inflammatory symptom in the gonorrhœa, and not the infection itself, is evidently plain; since it is always an immediate attendant of acute fevers, and inflammations in general, and ever ardent in proportion, as the patient is more or less subject to spasmodic affections: From hence we see the reason, why men are greater sufferers in this additional torment in the gonorrhœa, than women; and particularly if they are young, fiery, and of tense fibred constitutions. But besides this, the structure of their urinary organs, lays them in this complaint under many disadvantages, different from the female sex.

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The diagnostics, and prognostics, from the examination of urine, has had its pro and con, ever since physic was a study; some pretending to too much from it, whilst others again have rejected the observations of it entirely: Thus mankind are apt to fall into extremes; and seldom have either judgment, or resolution to pursue the medium. Whoever pretends to know all diseases from the inspection of the urine, must be a Quack; but I will venture to say, he, who rejects taking any notice of it at all, must be another.

There are many diseases, where the urine affords us more certainty than the pulse, or any other signs or symptoms; and I am persuaded, that a judicious and unprejudiced practitioner must have frequently observed, many things in that respect, worth farther notice and speculation. It is certain, that the ancients had great skill in the inspection of urine; and though they sometimes carried their notions too far, yet they have left us many valuable observations; which if they were properly improved and pursued, would in my humble opinion, be of no small importance to the acquisition of physic.

It is certain, that every acute and spasmodic distemper is attended, with a sharp and strong urine: But, why is it so? The general answer is, Because it is loaded with saline particles and acrimony, which it has attracted from the blood. This however, on the least reflection, (though it is taken in general for granted) must appear absurd: For suppose a person, in a perfect state of health, shall accidentally scald or burn some part of the body, experience teaches us, that within

a few hours the patient will labour under a severe inflammation of that part, become feverish, and immediately perceive a remarkable sharpness, and high coloured urine; but as soon as the fever and inflammation abates, the urine again will alter, become more in quantity, and of a milder nature. And, that the application of epispastics affects the urinary organs, and the nature of the urine, is more known, than what tends to the good of patients in general. From whence I think it is plain, that sharpness, and acrimony of the urine, is generated by the inflammatory affection of the nervous fibrillæ, without regard to the blood, be it in what state it will.

But our business here is not to enter minutely into these particulars. Let us however enquire into the nature of the various kinds of dysurias, attending the gonorrhœa, how far it may be actually virulent, and how far symptomatical; which will not contribute a little to the cure thereof.

Let the seat of the gonorrhœa be where it will, a dysuria will always attend in proportion, to the inflammatory symptoms it occasions. Young people, as I have frequently observed, and particularly the first time, have this dysuria more ardent than veterans; because the spasmodic inflammation is more acute. I will not take upon me to demonstrate, how the kidneys secrete the urine in the inflammation, so differently from the sound state; for I might as well pretend to describe the wonderful secretion of the many different appearances it is discharged in: Suffice then, that the inflammatory constriction of the virus, is communicated

ted to the tendinous substance of the sphincter, and bladder, from thence along the urethra, up to the reins, and affect the very secreting tubulæ in the glandulous substance, the pelves, and even the emulgent arteries.

Whilst the irritation is gentle, they are only stimulated to their secreting function, in the manner perhaps, as diuretics in general; hence the patient at first, urines oftner than usual: But when this virulent stimulus becomes actually inflammable, the inflammatory constriction is conveyed along to the organs of secretion, and effect that function accordingly; by which the urine secreted, will become converted into the acrid state it then is in. It is probable enough, that the high colour of the urine, proceeds from particles of blood, intermixed in the inflamed secretion; though from causes, which makes it more acrimonious, it might as easy become altered in its hue.

If the inflammatory constriction is regular, without leaving the virus in any particular part of the urinary organs, the dysuria will gradually subside with the inflammation; and the scalding then remaining, will only be from the gonorrhœal ulcer, and not from the extraordinary acridness of the urine; and thus far it remains barely symptomatical.

As long as the urine is hot and painful only, yet may be retained for sometime by the patient, it is barely called a dysuria; but when the pain is remarkably in the neck of the bladder, and in the bladder itself, attended with a perpetual irritation for urining, yet comes away by very small, but
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painful quantities, the ailment is then a strangury. Now, this is either occasioned from the acridness of the urine stimulating the tendinous substance of the bladder, whereby it is in a continual contraction to expel the urine; but more frequently in virulent cases, the miasm has taken its abode either in the sphincter of the bladder, or perhaps in the stamina of the tendinous substance, of the bladder itself: When this symptomatical spreading of the infection is the case, an ulceration is too often the consequence; and if not treated with the greatest circumspection, gives birth to grievous cases, and very tedious of cure.

But when an ischuria, or a stoppage of the urine follows, the case is still worse, and even at times desperate. When the virus is seated in the sphincter of the bladder, as is too frequently the case, the sphincter is inflamed; and by its tumefaction is liable to be entirely shut up: Add to this, the sharpness of urine, and the imprudent attempt to introduce the catheter. Sometimes it will happen, that even the kidneys are inflamed, so as to prevent the secretion of the urine: If this is the case, and particularly from the venereal virus, the patient is in imminent danger.

On the whole however, a dysuria attending a gonorrhœa, is in itself not of a very evil nature; and when these last mentioned evils are the consequences, it generally proceeds from wrong treatment, or from neglect of the patient; wherein this consists, we shall examine in another place.

Of the PHIMOSIS, *and* PARAPHIMOSIS.

WHEN the virus of the infection begins to act inflammatorily, a phimosis, or a paraphimosis, makes generally its appearance; but more especially the first time of being infected. Sometimes it begins immediately at the commencement of the clap, seldom before it, and generally at the time when the gonorrhœa begins to discharge plentifully.

A phimosis is the attendant of those who have their glans covered; when the præpuce inflames, and is puffed up, so that it not only makes a great bulk, but becomes scarce able to admit the flowing of urine, or the virus from the clap.

A paraphimosis, happens to those whose præpuce is shorter than the penis, or does not cover the glans; in which case the inflammatory tumefaction, makes it shrink back behind the glans; where it will be contracted, and grasp the penis behind the corona; so that it not only is unable to come forwards, but binds itself so tight, that an inflammation of the glans makes the worst part of it.

Either of these two kinds of inflammatory tumefactions of the præpuce, are ever the attendants of the inflammation of the penis, either venereal or not; and thus far it is barely symptomatical; in which case it generally subsides with the inflammation. But when it is the consequence from an actual imbibed poison, received in impure coition, it does in general not go off
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so easily; and in that case, it is not confined to young and unexperienced venereal combatants, but subject likewise to incommode old experienced veterans. The tumefaction of the phimosis, and paraphimosis, may be of three kinds, inflammatory, œdematous, or scirrhus.

The inflammatory tumefaction is the most general, and always of the phlegmoid specie. It must be observed, that there is no part of the human body, which abounds with more lymphatic vessels, than the tegument of the penis and the labia of the pudendum muliebre; for though it is a continuation of the membrana adiposa, yet the cellulæ are discontinued and in those parts converted into lymphatic ducts: And as they abound most with lymph, the texture becomes more soft and pliable, and therefore easier gives way to the phlegosis.

It will not be improper here to observe, that the lymphatic vessels have many peculiarities, distinctive from all other conveying channels; namely, that they are merely a continuation of small pellucid cellulæ, which empty themselves by valves, one into the other, in a manner, so as to prevent a reflux; but at the same time, that they communicate with themselves, they have also a collateral correspondence, with the small ramifications of the arteries and veins, as also another connection to the tendinous and muscular fibres: so, that they have a hand-in-hand friendly communication, with every particle of the solids and fluids, of the parts where they reside.

Whilst now the seat of the gonorrhœa excites an inflammation, the delicate nervous texture of the

the lymphatic cells, become stimulated to a contraction, whereby the circulation is hindered: At the same time, the influx is promoted, and swell up the cellulæ; which at that juncture, compress the little tubulæ of arteries and veins, and force their contents into the lymphatic cellulæ also; and thus distend them, making them red and inflammatory: Now this is the first state.

If the lymphatic cells burst, shankers must be the result; but if the parts become lame, the fibre of the lymphatic cells lose their tone, and then the tumefaction becomes œdematous. But this is seldom or never at the first onset; but generally happens in long standing, shankerous cases, worn constitutions, and at the approach of the confirmed lues, in lax habits. Thence it is more frequently in women; but rarely in men, except in the real pox.

When however, the lymph is become spissit, and at length callous, the cellulæ of the lymphatic vessels contracted, so as to prevent the outlet, the tumefaction is become scirrhus: This is seldom or never the case by itself, much less in an incipient infection; but when the præpuce is all within filled with shankers, whose lips, when they become inveterate, are generally callous and stubborn, the præpuce will greatly suffer from the shankerous ulcerations, and sometimes be reduced to a most irregular, and inconvenient bulk.

If the phimosis or paraphimosis have been of any standing, they are always attended with shankers. The phimosis in this case is troublesome, and frequently productive of great mischief; in so much, that sometimes the whole surface within is not only ulcerated, but has at-
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tacked again the glans, the corona, and particularly the frænum: And to add to the evil, the ulcerated parts, namely, the glans, the corona, or along the frænum, have sometimes united with the præpuce, and made a growing together; formed behind their conjunction, abcesses, which have either eat their way through the præpuce, or else been obliged to be opened, like another imposthume. We are generally taught in books of surgery, how to open such troublesome præpuces, in order to come to these preying evils; but I have not been successful enough to find one who proposed a proper method to prevent it, for poultices are of little benefit; the venereal virus is too stubborn to yield to common emollients and cataplasms; but a more effectual remedy, than hitherto has been offered shall be pointed out in its proper place. When however, there is an actual cohesion of parts, it is but just that there should be a separation; and this can but be performed by a manual operation.

In regard to the paraphimosis, this is sometimes of a more alarming nature, and very often puts the patient's life in imminent danger; for the præpuce which becomes inflamed, contracts itself behind the glands and hinders the reflux of the blood in the vena ipsius penis, whereby the glans swells up and inflames; each provokes the inflammation of the other; and, if timely assistance is not given, a gangrene, and sphacelus, will soon come on; and the member is not only at the eve of being lost, but even, not without the hazard of life itself. Yet it is not always attended with such bad effects, but when the patient is of a tense, fibred constitution, and inclined to acrimony,

mony. But in general, a paraphimosis is very troublesome; as it frequently conceals ulcers and shankers behind the corona, which fret themselves betwixt the glans and the conjunction of the corpora cavernosa; and leaves sometimes fistulas behind, which penetrate into the very urethra itself. When the paraphimosis is become scirrhus, it deforms the penis yet more than the phimosis; as it makes a kind of breast-work behind the glans, which, from its callosity and habitual contraction, gives the patient not a little pain, and causes many inconveniences at the time of erection.

What a phimosis or paraphimosis is in man, is the phlegosis in the labiæ and alæ (*mutatis mutandis*) in women; but, in my opinion, not as Dr. Astruc thinks, the inflammatory constriction in the clitoris, the *caruncula myrtiliformes*, or particularly in the orifice of the vagina; for the structure of these parts stand more in comparison with the cavernous substance of the penis and the glans, and may therefore justly come upon a par with a chordee, and priapism; which we shall consider hereafter. It is easy however, to conceive, that women cannot suffer so much from this phlegosis, as men in the phimosis or paraphimosis; not only from the unsimilar structure of the pudendal parts to those of men, but from the natural pliable disposition of their fibres: Yet shankers within the labia are as frequently the result; but far from being of so stubborn a nature as those in men.

There is another kind of phlegosis under this head, viz. that which catamites are subject to,
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about the sphincter of the anus, from the unnatural and filthy venery of sodomites: This kind is not only exquisitely painful, but frequently produces the most stubborn kind of shankers, and often the fistula in ano.

On the whole, the venereal phimosis or paraphimosis always commences with an inflammation of the phlegmon specie; at least, that is the appearance it takes on; whether it is symptomatic, or excited from an actual imbibed poison: But by far more malignant in its nature, than the common kind, as well from the structure of the parts, as the virulent cause. That there is a material difference in this part of the skin, from the rest, as well in the male pudendum as the muliebri, is evident; since leucophlegmatic habits of either sex are peculiarly subject to have the pudendal tegument, œdematously tumefied, to a great degree, whether venereal or not.

When the phlegmosis in either sex is simple, it easily disperses: But what evils it farther is capable to produce, shall be considered as we advance in the subject.

Of SHANKERS.

THE next salute the patient has a right to expect after a phimosis, or paraphimosis, are shankers. It is however, not always these visitors give so much friendly warning, as a previous, sensible inflammation; but sometimes pop out in such a sly manner, as if they were directed by the most experienced hypocrisy and deceit; yet

yet, soon convince the patient, that they have malice as well as slyness.

When the virus begins to operate inflammatorily, the whole mechanism of the pudendum, whether male or female, is contaminated, be it symptomatically or primarily; for in fact the difference is only, whether the house is set on fire more than in one place; in either case, the conflagration may increase with equal rapidity. The lymphatic vessels, as I observed before, become not only constricted and expanded in some places; but in others, the fibres of their cellulæ being stimulated to a different motion to what they were in their sound state, corrupt their containing lymph into acrimony; which again act upon themselves, till they burst, and thus commences an ulceration.

At first the various cellulæ, which have the least resistance, swell up beyond the surface, and become little bladders; if their containing lymph, or rather serum, is clear, they are called chryсталines; otherwise they pass under the general name of hydatides. These chryсталines, or hydatides, make their appearance within the inflamed præpuce; sometimes again, are very neatly scattered all over the glans; but chiefly they come behind the corona, near, and about the frænum: Their first approach is with great itching; which however is soon converted into smarting.

Shankers differ in the malignity of their nature, not only according to the recentness of their being contracted, but likewise according to the parts they are seated in. The tegument of the pudenda of either sex, is peculiarly subject

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to shankers; in men, it extends from the præpuce all down the scrotum perinæum, and round the anus; in women, from the mons veneris, down along the labiæ, perinæum, including the sphincter of the anus; farther however than this kind of tegument, the shankers do not in general extend; particularly in regard to the first infection: The shankers which appear in these parts, are never of so malignant a nature, as those which attack the more nervous; such as the glans, frænum, and the cavernous substance of the penis in men, and the clitoris, prostata, and carunculæ myrtiformes in women; because these parts are more tense and nervous, consequently more subject to inflammation, constriction, pain, and of course more acrimonious; whilst the former parts are more relaxed, less nervous, and therefore, the shankers neither so inflammatory, painful, or corroding.

In young persons, male or female, and especially for the first time, shankers are attended with the most inflammation; add to this, when the habit of body is otherwise tense fibred, and inclined to acrimony; in which case they always encrease with more rapidity, than in laxer, cooler, and milder constitutions.

Sometimes the patient will have but one or two; which, if neglected, may give trouble enough: But others again, will have these chrysaline pimples variously scattered about the glans, and within the præpuce; which, when they break, become confluent, and soon reduces the whole glans like an honeycomb. If this is the case, together with a phimosis, the prepuce and glans will soon be in a perfect ulceration; but
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if a paraphimosis attends it, a gangrene, or sphacelus is not far off, and ought to be guarded against. At the best, however, when the glans is much affected with shankers, it seldom ends without loss of substance; particularly about the corona, or frænum.

When the glans is shankered, it yields frequently a great discharge; particularly when the shankers are numerous and small; and this is perhaps what Dr. Astruc meant by the spurious gonorrhœa; for it could certainly be no other: And in fact, the gonorrhœal drain, is no other than the discharge from the shanker within the urethra.

Whilst the first fury of the shanker lasts, the stamina of the substance, where the ulcer is, becomes rapidly destroyed; and the shanker will sometimes penetrate very deep, even so as to corrode arteries and veins, and occasion dreadful hæmorrhages; gradually however, the lips of the ulcer become hard and callous; and from the bottom of the shanker sprouts out a bastard carnation, which not only fills up the cavity, but sometimes projects beyond it: This is called in common proud flesh, and by surgeons fungosities. When however the ulcer is come to this state, it is properly no more a shanker; as it then, sometimes take on one appearance, and sometimes another; from whence those excrescences have acquired different names; which we shall examine in another place.

Shankers are not the less grievous in the clitoris, alæ, carunculæ myrtiformes, and within the vagina, than in the penis; and very frequently

quently fret great part of the substance away, before they become so far reconciled, as to sprout out this fungous excrescence. For whatever be the established outcry, against that fungosity, it is far from being so pernicious, as is thought in general; and I am well persuaded, that the various bitter applications in practice against this salutary effort of nature, have been the ruin of many patients.

There is not one effect of the venereal virus, so singularly peculiar to itself, as shankers; whilst they are in this phagedænic state, they are nearer to a cancer than any other kind; and they defy almost every other kind of application, than mercurials; and even these must be used with great judgment. They are likewise ulcers, peculiar to glandulous substances; and as there is a great familiarity in the structure of the substance of the fauces, in general, with the pudendal part, shankerous ulcers will frequently, in venereal habits, make their appearance in the throat, mouth, tongue, and other neighbouring parts; where they will, if not prevented, do much mischief; as we shall see hereafter.

When shankers have attacked the præpuce or the tegument of the penis, they frequently spread this malignity farther on; sometimes in the perinæum, the scrotum, and all about the anus; in those parts they don't however remain long in the phagedænic state, but generate into other excrescences; as *christæ*, *mori*, *fici*, &c. to which particularly pathics are subject; where the shankers, and afterwards those excrescences, or perhaps both together, will make their appear-

ance first about the anus, and gradually rise upwards; cause buboes; and sometimes even a hernia humoralis, &c.

It is scarce necessary to mention, that shankers are infectious; since in them the virus discovers the liveliest acrimony: Yet it is with them, as with the gonorrhœa; the aptitude to receive the infection, and the acridness of the virus, greatly alter that effect.

There is much left unsaid about shankers; but the limitation of this treatise, will not admit of a deeper enquiry in this place. We shall however take a second examination of them, when we come to the curative part; where I hope also to demonstrate satisfactorily, that the erroneous practice of caustics, ought to be banished from surgery, and that they are equally pernicious as actual cauteries.

Of the CHORDEE and PRIAPISM.

THE organs of generation, have the greatest share of nerves of any carnal part of our body; no wonder therefore they should be the most sensitive. The urethra particularly, is in fact nothing but an interwoven texture of nerves, tendons, and interspersed with the glandulous substance of the lacunæ. The function of the lacunæ is to nourish and protect those delicate nervous stamina from injuries; when therefore, those fibres, not only become destitute of that nourishment, but what is still worse, the very means which is designed for their support, be-

comes their destroyer, it cannot fail of giving them great irritation, inflammation and pain. But besides this, when there is a disunion of parts, loss of substance, and inflammation, there must also be a contraction, since the surrounding vessels must be swelled up, and consequently become shorter than usual; this is the case with the chordee.

When the penis is erect, the fibres from the frænum to the vesiculæ seminales, are stretched to their greatest length; for by this expansion the titillation of the glans in coitu, is conveyed with more force to the seminal organs, to do their function, at the crisis of ejaculation. This constriction of the frænum is very remarkable; in the sound state it gives great pleasure; but in a recent gonorrhœa, where there is a chordee, this critical juncture of ejaculation is remarkably painful.

The greater the inflammation is in the urethra, the more it must be contracted, and consequently the more painful; and what adds not a little to the torment, is a priapism, which provoke each others constriction; nay, sometimes the torture is so intolerable, that the patient strives to force the penis downwards, as much as he can; from which he seems to gain some little ease.

A chordee generally, as I have already mentioned, is on the under surface of the urethra, which besides swelling up the tubuli, or the fibres of the tendinous tegument, is apt, and very frequently penetrates into the corpus cavernosum urethra; and leaves callosities, which, if they remain

remain any time, are not easily got rid of. But besides, it will sometimes happen, that the seat of the gonorrhœa will be sideways; when so, the contraction will incline proportionally that way the virus is; and the penis will be bent to the right or left; nay sometimes, upwards. It is however not always the seat of the gonorrhœa that occasions this distortion; the inflammation will sometimes spread, and the virus will attack the cellulæ of the cavernous bodies of the penis, contract them, and leave for some time callous and stringy chords, or phymata.

In the general course, the chordee remains seldom beyond the inflammatory symptoms; for when the turgidness of the parts hath subsided, the expansion will become as easy as before; except where there is an actual loss of substance, but even then, the parts will gradually extend; by which the deficiency will be again replenished. But it is easy to imagine, that from the fatigue of the fibres, which they suffer in the inflamed constriction, and painful expansion, the parts will be liable to contract a lameness; and hence an obstinate virulent gleet, together with a seminal gleet, are too often the followers; and as the tone will be greatly impaired, the penis will, in the state of flaccidity, be larger than ordinary; but far from recovering its wonted vigour in the erection.

What makes the chordee so very painful, is, the turgid erection, which, though very unwelcome, always is more or less accompanied with the chordee, and even in proportion as the chordee is acute; and this is the venereal priapism:

Though I must own, that this inflammatory erection is of a different nature to that which in all probability was meant by the perpetual erected penis of the fabulous deity Priapus, worshipped by the Lampfacians, from whence it derives its name: But this is immaterial: In physic we mean by a priapism an involuntary and painful-erection, the nature of which we will here examine.

I am afraid, that notwithstanding the many physiological descriptions given us, concerning the erection of the penis, that we are yet unacquainted with the most material circumstances thereof; 'tis true, that an injection into a dead penis by the vena ipsius will distend it like a natural erection: But this is not enough; the continuation is the mystery. The pressure of the vena ipsius against the os pubis, is idle; for neither pressing it to, nor keeping it off, makes any odds; besides, about that part there is the least pain felt in the priapism. It is however most likely that the whole penis contributes towards it; for in the priapism, the penis seems compressed as if it was prest between two hands; which pressure extends from the sphincter of the urinary bladder, to the very opening of the urethra. That the musculi penis are parties concerned in the erection is evident; but I cannot conceive, and therefore not believe, that they do all; nay, they even perhaps contribute the least share towards the real erection; I am rather inclined to think, that the elevators act chiefly as suspensories; the accelerator, like a ligament; and that the act of erection is principally by the peculiar structure of
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the so very nervous and tendinous substance of the various corpora cavernosa of the penis, and the structure of the vena ipsius itself; by which the blood is forced into the cells and confined there. 'Tis true that the constriction and tumidness, particularly in the inflamed priapism, is felt very spasmodical in the perinæum, and that the accelerator seems very strongly contracted; but quære, whether this constriction may not act secondarily from the stimulus of the inflamed penis. I have hinted something of this before, but the limits of the work will not let me search so deep into this examination, as my inclination would lead me.

Certain however it is, that the erection is produced more from the nervous substance of the urethra, or other parts of the penis, but in particular near, or rather in the vesiculæ seminales, than from the irritation of the muscles themselves; especially in the virulent inflammatory priapism, where, in my opinion, the muscles have but little share.

Amongst the various aphrodisiacs, cantharides seems the most powerful; and there have been instances where this pernicious stimulus has caused such an inflammatory venereal furor, that the patient has expired in the very act of coition.

A priapism is of an alarming nature, if it continues without intermission for some time; for since the circulation of the blood is in some measure hindered, it is subject to degenerate into a gangrene; when universal convulsions, a sphacelus and death itself is not far off; besides, when

a patient has once had a violent priapism, he generally feels the effects of it a long time after, with a lameness, and an incapacity to perform venereal functions.

A priapism is generally said to be without venereal inclinations; but this however is only partly just; for at the beginning, or by intervals of the most inflamed priapism, there is actually, at times, an emission of semen; but immediately after this emission, if the turgidness continues, the patient is tortured with a pungent pain; particularly if connected with a chordee, yet more so, if a paraphimosis is the case. For the moment of a natural emission is the crisis of pleasure in coition; and the friction which is continued after that, is painful: And so it is with the priapism, only in a severer and stronger degree: There are moments of pleasure; but unfortunately they are far over balanced with pain.

—————*Nocet empty dolore voluptas.*

Hor.

Those who are whipt, always have a strong priapism, and which is even attended with emissions of the semen; every lash the criminal receives, after the juncture of emission, becomes more torturing than all that he received before: Hence ensues their fainting; and if such emissions are tormentingly repeated, we see the poor sufferer sometimes die under the punishment. I think such a correction would prove an excellent remedy for those wanton fools who lasciviously exercise whipping; namely, to give them as many switches after the emission as they endured before it, which would at once satiate them of this diabolical stimulation,

But

But in regard to the inflammation, (to which a priapism is subject, whether it is occasioned by the venereal virus, aphrodisiacs, or external stimulants) when the parts are violently contracted, the *vesiculæ feminales*, as well as the *sphincter urinaria*, are spasmodically shut up; so that neither the blood can circulate, nor the semen or urine be discharged; and the case of the patient is in that juncture deplorable: The member is swelled to a great bulk, inflamed like fire itself; and so exquisitely sensible and painful, that the least touch is dreaded like death itself; this is the commencement of a gangrene; and if a *sphacelus* approaches, the dilemma of the patient is desperate: for even at the amputation of the member, the last shift, death stares him full in the face.

What the chordee is in men, a peculiar constriction towards one side or the other in the vagina, from the inflammable attack of the virus, is in women; and from which, at times, they experience not a little pain. In regard, however, to the priapism, this may justly be compared to the *furor uterinus*; and that this malady, in some degree, is often the effect of a venereal virus, judicious observers of diseases will not contradict.

In the first inflammatory state of the gonorrhœa, there is generally an external phlegosis of the pudendum, attended with a very great itching and inclination for venery; but when the vagina is inflamed, together with a very great constriction at the entrance, coition must of course become painful; but after once admitted, the difference is only, that the pain overbalances the pleasure; which both are in a great degree.

It is too much experienced, that venereal stimulants act as powerfully on the female sex as on men, and are equally as much perniciously made use of; I forbear however particulars; especially as it is immaterial to the subject.

On the whole, the chordee, priapism, constriction of the vagina, contraction of the entrance, and the carunculæ myrtiformes, are inflammatory symptoms of the virulent recent gonorrhœa; which seldom are obstinate to remove, if properly managed: But, it is not simple poultices will do it; the virus must be corrected, before these dangerous symptoms will yield; how this may be affected with ease and safety, we will consider elsewhere. We will therefore leave this evil, and consider another, of a different nature, but at least of equally as great consequence.

Of B U B O E S.

BUBO is the Latin for an owl; but this is not the etymology here, the word is of Greek extraction, and signifies an inguinal tumor. Hence those authors err, who very learnedly enumerate buboes, not only in the arm-pits, but in the salivary glands*, &c.

* *Astruc. de Morbis Veneris, lib. iii. cap. 5. An bubones ulli venerei alibi subnascantur quam inguinibus? Constat enim exprientiâ et in axillis & in jugulo, & in lateribus maxillæ inferioris venereos bubones aliquando enasci, vel saltem tumores buboniformes, bubonibus inguinalibus simillimos, qui eodem modo invadant, morem eundem teneant, iisdemque curentur remediis.*

We

We may however count up four kinds of buboes, namely, venereal, pestilential, scorbutic, and scrofulous: Our enquiry however is concerning the venereal; and by making a proper ætiological examination of this, we shall scarce be subject to mistake this kind for any of the former; as it has something very characteristic in its nature.

Venereal buboes may be distinguished into two kinds; namely, the recent, or that from the first infection; or the latent, or that from the second infection, which are always the pathognomonic signs of the confirmed lues. Of the first kind we will understand those buboes, which approach whilst the seat of the disease is merely local; but the latter we shall examine in another place, as they are remarkably different from these. Men and women are equally subject to buboes, and whether they are recent, or latent, the symptoms and progress are equally the same in both sexes: But yet it is rational to suppose, that the difference of the natural tone of the texture of the patient, together with the habit of body, must make a material difference in the nature of them.

The recent bubo may be contracted either from the immediate infection of impure coition, without any previous local eruption; or else from the repelling of the virus from any other part. The first means of contracting however is but rare, on two accounts; first, whilst the virus insinuates itself exclusive of the penis, or the vagina, it is subject to be taken up in the blood, and circulated before it utters itself there or on any other parts; and secondly, it rarely happens to
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those who copulate the natural way ; but generally to those who use the abominable and stupid practice of machinery ; to sodomites and pathics ; which miscreants we must hope will ever be the least part of mankind. The latter however is more common ; namely, that from the infected virus being propelled, either from the phlegosis or shankers in the præpuce of the penis, the labia, &c. of the pudenda in women, or else from a virulent gonorrhœa ; (which is more general) and carried along the lymphatic vessels to the inguinal glands.

Whether, however, the virus is thus transported by the solids or fluids, we have considered before ; and that they both have equally shares in it, will appear more and more conspicuous.

A venereal bubo has, in general, many peculiar symptoms different from other buboes ; yet sometimes they will draw near in resemblance ; impure coition, however, and other preceding symptoms, will soon remove all doubts.

A recent bubo, whether it is the effect of the first infection, without any previous symptoms, or from a repelled virus in an obstructed gonorrhœa, makes its approach in the following manner : The patient feels in one or both groins a stiffness, attended with a dull pain ; in the groin, right or left, (or perhaps both) is perceivable to the touch a little hard swelling, at first perhaps the bigness of a pea, but gradually becomes larger ; externally there is no inflammation or remarkable soreness ; but immediately after handling, the part becomes more painful, and increases in stiffness. Gradually the kernel tumor
increases

increases to the bigness of a hazel nut, when the pain becomes more sensible, and by turns begins to throb; the body becomes affected with inflammatory symptoms, an universal lassitude, pain in the limbs, head-ach, thirst, &c.

At this juncture the patient begins first to complain; if proper remedies are applied, the bubo easily disperses; but mistaken notions have made it a too universal maxim, that a bubo should not only be brought to suppuration, but opened, and be kept open, in order to expel the virus. If this is the intention, the patient is advised to live high, have great exercise, and every thing which will promote the inflammation, and suppuration; such method is exactly as rational, as throwing oil into the fire in order to extinguish it.

Whether however intentionally, or from the natural constitution or habit of the patient, the bubo inclines to suppuration, the tumor increases with the pain and symptoms; till sometimes it acquires the bigness of a pigeon's, or even a hen's egg; becomes inflamed, of a redish and blueish cast; when the matter begins to form, and is actually felt to fluctuate.

At this state, the bubo is arrived to its maturity, the inflammatory symptoms abate, and the tenderness in some measure subsides; the hardness of the bubo is changed towards a softness; particularly where it protuberates; where it is frequently the least painful, and sometimes of a different hue from the rest; blueish, redish, or sometimes inclining to yellow.

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The bubo is now fit to be opened ; if this is done judiciously, and afterwards treated properly, the affair is soon settled ; but what could induce surgeons to effect this with causticks, I cannot conceive ; unless either to punish the poor patient ; or more probably with a view of gain. I don't mean here all surgeons or apothecaries who have and still practise this ; for there are weak men in that profession as well as any other ; who may easily be persuaded into any method by the more cunning, without any other reason than authority and custom ; especially if the interest of their purse is consulted, previous to the welfare of the patient. I am not ignorant of the many ridiculous pretended plausibilities said in favour of causticks ; truth, reason, and experience confirm to me, that the first advocate of this abominable practice, must either have been a knave or a fool ; but neither a philosopher or a surgeon, nor perhaps an honest man. The method may perchance have succeeded, but what mischief caustics in opening buboes have done, in general, I apprehend more are conscious of, than have candour enough to own. Harsh as this may seem, yet I will venture to affirm, that more patients have been poxed by wrong treatment, than the venereal virus itself.

A bubo, in the first stage, is easily dispersed, root and branch : And after my eyes were opened, to the impropriety of the usual method, I have with success dispersed them, even when there has been an actual fluctuation of pus. I remember the time, that I would highly have condemned this ; and therefore I expect it now from others ;
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but at the same time I don't expect it from an experienced and unprejudiced surgeon; particularly if he has always waited with prudence for maturity of the bubo before he has attempted opening it, when I am persuaded he must have sometimes met with cases, where the bubo has dispersed even without his intention.

When however there is an actual collection of matter, and the bubo is perfectly ripe, it is but just to open for the discharge of the pus; for if the surgeon does not perform this, nature will do it for him: But then, (to do the patient justice) I have no notion of making the evil worse, by stuffing up the fore, or making an obstinate, callous, and phagedœnic ulcer, where nature meant the parts peaceably to unite and to heal up again.

A patient must be in a very ill habit of body, if a recent bubo becomes obstinate to proper applications; I don't know in fact any one branch of the venereal disease more tractable: But, as all glandulous parts are not to be trifled with, so in this case, injudicious treatment is of the greatest consequence; it is not only a fistulous, scirrhus, and cancerous bubo; but an universal and confirmed lues, which is too often the result. The venereal virus, like fire, is not safe whilst there is the least spark remaining; to aggravate it therefore, is only adding fuel. At the appearance of a bubo, the patient is on the brink of the second infection; and nine out of ten, who have fallen a sacrifice to the lues, have been plunged into this malady from unskilful management of the bubo, be the fault their own

or

or their doctor's. If a bubo is dispersed imprudently, without destroying the virus, 'tis plain the virus must be drove into the blood, or propelled to some other part; if it is aggravated, it is as obvious, that the quantity of the virus must be increased, and consequently spread; either way therefore the consequences are conspicuous.

But let us enquire into the nature of this venereal recent bubo: The seat of the bubo is in the conglobate lymphatic inguinal glands; the question is, how and by what means it comes there? If the bubo makes its appearance without any previous symptoms of the gonorrhœa, &c. on impure coition, then we may with propriety account for its progress, in a manner, the same as the progress of the gonorrhœa, or the external phlegosis, shankers, &c. by the absorption, at the universal contraction at the crisis in coitu, immediately after ejaculation. But to this it may be objected; if so, why is not this always the case? and why may not a bubo follow along with the other usual symptoms? We must observe, that in the animal œconomy, where there is the greatest irritation, there is always the greatest afflux of humours; now when the penis and the vagina are most exposed, the virus will, in those parts, as being tenderest, easiest make its attack, and utter itself; and whence the other imbibed particles of the virus will the readier accumulate to such parts, as are most irritated: But on the contrary again, when the penis and the vagina are sheathed from the infection, the rest of the pudendal parts, particularly

larly the groins, are still exposed to the miasmatic effluvia, subject to be imbibed by the inguinal glands; or otherwise brought into the blood, and circulated, till it catches either those, or other parts equally subject to be affected. As the inguinal glands are the nearest, they are most liable; but the axillary glands, the tonsils, and even the salivary glands, will sometimes first give the alarm; in which circumstances there is but little time to look about; the confirmed pox comes approaching with long strides, and threatens misery and destruction.

But when the bubo is the result from a suppressed gonorrhœa, a repelled virus from shankers, or from a hernia humoralis, the cause must otherwise be accounted for. When a patient labours under a virulent gonorrhœa, and has the discharge any ways obstructed, the virus must be propelled, either to the groin, or somewhere else. This is effected, either by getting cold, whereby the circulation is hindered, by sudden chills and heats, and other indispositions; or else by emotions of the mind, anger, fear, surprise, &c. by which, from the sudden universal constrictions, the virus is liable to be propelled. But not less frequent than these causes, is injudicious treatment; bleeding, purging, astringent injections, &c. without correcting the virus; in which cases it is fortunate for the patient, if the repelled virus occasions nothing worse than the bubo.

But why the propelled virus, on these disturbances should take its flight so frequently to the inguinal glands, is not so easily demonstrated, as

so many very learned authors have endeavoured to prove. If this flight was not confirmed by repeated experience, these great men, through a thirst for fame, would scarce have ventured their reputation on such sophistical arguments. 'Tis true, they have followed the many turnings and windings of the virus, close at the heels, as if it actually moved by their direction; but notwithstanding the smoothness and plausibility of the description, with humble submission, it seems to me equally as absurd, as their cures are tedious and dangerous. I don't mean to give personal offence; and therefore shall avoid particulars: I am convinced, however, that nine out of ten, who have written on the subject, have been governed more by theory and speculation, than by experience and practice.

That the venereal virus is transported from the suppressed gonorrhœa to the inguinal glands by the lymphatic vessels, seems, to all appearance, most rational; yet we must not obstinately persist, that the fluids only are the conveyers of the virus, for query, whether the vessels supply the glands with lymph, or the glands the vessels? Whichever way we incline to determine, obstacles will arise. Let it suffice, that the solids, as well as the fluids, are capable of conveying the virus thither, or to any other part. In what manner such conveyance may be effected, we have somewhat considered before, and therefore will here rest contented; for we must not pretend to more than what seems comprehensible: and the more we speculate on the various acts of secretion, the more we find, if we are candid, ourselves incapable to account
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for the various functions of the different glands. Sometimes they will be stimulated to a copious secretion; but sometimes again, seemingly from the same cause, agitated to obstruction.

The inguinal glands spread their lymphatic branches all about the genital parts, like the axillary glands (which are of the same kind) spread their branches all over the mammillary parts; each are subject to be tumefied, when their branches are injured: Thus, in inflamed breasts, the axillary glands partake of the spasmodic contraction, become tumefied and knotty, frequently inflame, suppurate, become scirrhus, and even cancerous; and so the venereal virus is apt to affect the various parts in the pudenda, male or female.

In regard to the enquiry, whence sometimes the left, sometimes the right, or at other times, both groins may become affected from the venereal virus, is easily accounted for; but so far only, as is useful to the cure: Namely, according as the vessels are disposed to yield to the effect of the virus; and this, after all that may and has been said by many authors, is merely the work of chance.

A bubo generally comes on gradually, without acute pain, and external inflammation; the reason of this is, because the virus has attacked the very glands themselves, without any of the external parts; and though they are nervous, yet the fibres are not tendinous, and therefore yield easier to the expansion they suffer; but as the bubo advances, the inflammation spreads, and

consequently increases in irritation and pain, till at length the very tegument is eat through.

It is certain however, that the progress of a bubo differs greatly, in different subjects; with some they will be tedious, slow, and with little pain; with others, more rapid, and attended with much inflammation; with some, soft, sluggish, and somewhat œdematous; with others again, on the contrary, hard and scirrhus. The truth of the matter is, the different appearances at first, are according to the various constitutions of the patients.

In women and lax-fibred constitutions, a bubo comes on generally pretty fast; at first with little pain, but soon becomes large, full of matter, and troublesome. And whether it breaks of itself, or is properly opened, it soon heals up again; but if quack'd with, is subject to become œdematous, obstinate, sluggish, and liable to ruin the whole body.

In robust men, and rigid fibred constitutions, the bubo advances slower, is more indurate, attended with more pain, and very difficult to bring to suppuration: And they are the greatest sufferers by injudicious treatment; particularly when they are tormented with suppuratives, caustics, &c. Indurated scirrhus buboes, or callous, fistulous, phagedænic and cancerous ulcers, are too often the consequences in such recent cases, exclusive of the confirmed lues; but to all which however, we must add the different habits of body.

The time for the coming, progress, dispersing, or suppuration of the bubo, is quite undeterminable.

ble. A bubo will sometimes make its appearance in a day or two after impure coition; but at other times, even months afterwards. Sometimes even at the approach of a clap, at other times at the decline; and even there have been instances, when the patient has supposed himself cured. Sometimes a bubo will come and be ripened to suppuration in four, six, or eight days; at other times it has lasted as many weeks, and even months. This, however, is by the help of wrong treatment. On the whole, the time for a bubo, depends on the constitution, habit, and regimen of the patient; but chiefly, the manner of treatment.

There remains now to characterise the venereal bubo, so that it may not be mistaken for others non venereal, and (vice versa).

In the first place, the venereal bubo begins by a small kernel tumor in the inguinal glands; generally attended with a stiffness and a dull pain, which gradually increases with the bulk of the bubo; forms itself in an oblong roundish lump, the figure and bulk like that of a concealed pigeon's or hen's egg; and gradually becomes soft, together with an external irregular surface, and attended with pain and inflammation; and when at that height, it either disappears gradually, or discovers an actual fluctuation of matter, or else becomes hard and scirrhus.

A pestilential bubo, we are, thank PROVIDENCE, in our days not acquainted with by experience; as it stands recorded to us, it differs widely from the venereal. It rises with a furious, virulent, gangrenous, and exquisitely painful inflammation. If it does not immediately ripen into a salutary, though

precarious

precarious and phagedænic suppuration, a pestilential sphacelus soon hurries the patient into the arms of death.

In regard however to the scrophulous, or strumous bubo, this indeed bears some resemblance to the venereal; but more particularly the latent or pocky kind; for whilst there is an actual virus wandering in the body, it is as liable to be propelled to the groins, as any other glandulous part. Such buboes I say bear a near resemblance to the venereal; and though the virus of the strumous kind may not be venereal, it is frequently as pernicious. For my own part, I have made no manner of difference in the cure; and have sometimes succeeded beyond my expectation. In fact, the manner in which such buboes are contracted, makes the only material difference. Under that class of buboes (though it scarce deserves the name) are the boils to which boys and girls of gross habits of body, at the approach of puberty, are subject; which though very painful, inflammatory, and quick in their progress, (consequently easily distinguished from the venereal) are in general of no great moment, and easily corrected.

As to the scorbutic bubo, this has scarce by itself any resemblance to the venereal; for when scorbutic tumours appear, the patient is generally reduced very low; and the body is then scattered with livid pimples and blotches: Such buboes come slowly, and though not at first very painful, soon become so, and are very obstinate; they will neither disperse nor suppurate, nor when opened, easily be brought to digest proper pus, but

but remain of a livid dead hue, and discharge a thin ichor, interspersed with grunns.

But after all that has been said to distinguish the venereal bubo from the various other kinds, it is easily to be supposed, that there may be a complication of acrimony attending the patient; which will ever render the case different.

There still remain mistakes to warn young practitioners against, namely, an inguinal hernia, or bubonocoele; in this it is scarce possible that an experienced surgeon should be deceived; yet as there have been instances of its being confounded, with a bubo, I will here specify the caution.

In the first place, the situation of the bubonocoele, is materially different from that of the bubo: the hernia is through the foramina of the oblique and transverse muscles of the abdomen, where, as an imperfect rupture, it remains, and not admitted into the scrotum; whilst the bubo is in the inguinal glands, situated in the angle of the groin. A bubonocoele is always occasioned by a strain, and therefore makes its appearance suddenly. The epiplocele is that kind of tumor, where only the omentum is forced out; it is soft and generally easily reduced, when the patient lies backward: But the enterocoele is that, where part of the intestine is drove out, and is sometimes very alarming; for, if it is not immediately reduced, the foramina, through which it is passed, will constipate, and the peristaltic motion will be liable to invert; hence cholic, vomiting, and other alarming symptoms will ensue. These are different symptoms from any attending a bubo of any kind. Besides, the figure and touch of the hernia, differs widely from the bubo; the

first is flatulent, and as it were, having somewhat a head and neck; whilst the bubo is hard all round, and if any where soft, it is chiefly on the apex, where the fluctuation of matter is felt.

Lastly, an aneurism of the crural artery, whether true or spurious, may be liable to mislead the unexperienced equally with the former; in this case, the tumor will be soft from the beginning, disappear upon pressure, and be attended with a distinct pulsation; these symptoms are different from any attending a bubo of any kind whatever.

Thus much then on the æthiology of the venereal bubo in the local state, whether essential or symptomatical. In regard to the bubo proceeding from a latent pox, that shall be considered in the next chapter. We will therefore leave this evil, and examine another.

Of the HERNIA HUMORALIS, or SWELLED TESTICLES.

AMONGST the various operations of the venereal virus, there is no one which damps the courage of the patient so effectually, as the disagreeable symptoms of a swelling, and inflammation, in one, or both testicles. It is not only the pain that torments the patient, (which at times is the most exquisite) but the mind, which remains in a most anxious and disagreeable suspense, till the fate is determined; and remarkably more so in this case, than in any other venereal symptom. This is nature, and pure nature itself; for there is nothing that the manly nature dreads more, than the
terrible

terrible apprehension of being unmanned, In fact, the case itself is of the greatest importance, and ought not to be trifled with.

A swelled testicle comes on from the same causes as those which occasions a bubo, and may terminate as variously; but the case is always attended with more trouble, precariousness, and pain. The causes thereof may first be from an imbibed poison, in impure coition; which, not taking the common road to utter itself in a gonorrhœa, or may have been propelled, perhaps, towards the vesiculæ seminales, or some other leading nervous fibres, towards the testiculine tubuli, or even their teguments, and from thence communicated to their substance: Secondly, from a suppressed or obstructed gonorrhœa, bubo, shankers, &c. Thirdly, from the latent pox itself. The first kind is called essential; the second, symptomatical; and the third, a pathognomic sign of a confirmed lues. Be the kinds however what they will, the first approach is always alarming, and there is no time to lose; as the consequences may be many and grievous.

When a patient has contracted the venereal virus, a gonorrhœa is generally the consequence; but when the virus is propelled, either by sudden shocks of emotion, cold, or injudicious treatment, it is liable as well to deflux towards the testicles, as to the groins, or any where else. If this be the case, before it has made its external appearance, it follows, that when it has commenced ulceration and inflammation, the testicles must not be less liable to the infection.

The account we have in general of the hernia humoralis, is, that the contaminated semen being

ing obstructed in the discharge from the vesiculæ feminales into the urethra, accumulates itself in the vasa deferentia, and so communicates the obstruction in the various tubulæ of the testicles. This may indeed be so, but I'll venture to say, very seldom: For first, it is very rarely, that the seat of the gonorrhœa is in the feminal organs; which, I hope, has been sufficiently demonstrated: Secondly, we find in that case, that the virus will be as quickly repelled to the groins; and from thence sometimes, to the testicles; or from a swelled testicle go back and occasion a bubo, or even both together: Thirdly, that shankers, even without a gonorrhœa, have frequently given rise to a swelled testicle also. It may indeed be advanced, that the virus may find its way in a round-about manner, till it strikes its road along the vasa deferentia, from the feminal vesicles to the testicles; it may be so; but not without giving sufficient warning as it passes along.

On the whole, the genital parts both in men and women, are so intimately connected, and interwoven with themselves, that the virus, when propelled, may find a thousand ways to affect one part or other, in a manner beyond the conception or proper demonstration of the wisest of us. The lymphatic vessels, the arteries, veins, tendinous and nervous fibres, not only of external and internal teguments, but even of the substance of the whole continuation of the feminal secretory tubula, may contribute towards the transportation of the poison.

In regard to the pocky hernia humoralis, this comes on spontaneously, like the innumerable
other

other ailments attending the confirmed lues; of which more in our next chapter.

There is not an organ so exquisitely delicate, so curiously elaborated, and so sensible, as the testicles; and hence they are subject to pain, the most excruciating. A contusion on the testicle, occasions torture, which paints death and horror in every feature of the countenance. No part is more liable to a gangrene and sphacelus, than this organ; and a fatal accident of that nature, for example, a contusion, if not timely and judiciously remedied, or the part extirpated, may extinguish life within twenty-four hours.

The first symptom of a gonorrhœa, when the venereal virus begins to operate, is, a creeping vermicular motion in the testicles; which continues till the outlet, or ulceration of the virus is fixed or determined: And hence we see, how easy the virus may be propelled that way; and how sensitive the texture of those organs are: And was it not for the promoted secretion of them, when the venereal virus begins to operate, perhaps they would oftener be liable to partake of the infection.

A hernia humoralis, from a venereal virus, always commences with inflammation; let it be essential or symptomatical. That such inflammation differs, according to the constitution of the patient, whether lax or tense fibred, whether phlegmatic, choleric, or inclined to acrimony, is easily supposed, from what has been demonstrated before; but besides, it differs according to the manner, and from what channel the virus came communicated to these organs; the deeper the
attack

attack is in the substance of the testicle, the duller the pain at the commencement; but at the same time the more obstinate and precarious: On the contrary, the more external, the more inflammatory to appearance and sensibility, at the first onset, but easier to yield to proper applications.

But in order to judge more particularly of its various degrees, and different kinds it is liable to degenerate into, we will trace this kind of inflammation from its commencement, through its various stages.

The first symptom which the patient is sensible of, is a rotating vermicular motion, in one or both testicles; which at first comes and goes off by intervals; but gradually increases and degenerates into a continual, dull, heavy, and burthenfome pain, attended with sudden twinges and stitches, extending up in the hypogastric region, and across the loins. The testicle now begins to swell; becomes tender, sore, and burthenfomely heavy to the patient; which if not suspended, makes him almost feeble, both in body and mind, to sustain the painful load. If the scrotum is properly suspended, the patient of a good habit of body, and proper remedies are applied, as we shall specify hereafter, the tumification will gradually subside again: But when this good fortune is not the case, the inflammation increases, the ascending plexus of the spermatic vessels, together with the vasa deferentia, inflame also, swell up, and become tender: Hence that part by which the testicle is suspended, generally inflames also, and is remarkably tender.

tender. The patient becomes feverish; the testicle begins to throb; the scrotum also partakes of the phlegosis, and now the crisis of inflammation is at hand; which is either a dispersion, suppuration, a gangrene, sphacelus, or a schirrhus.

A suppuration is a precarious and troublesome affair, and liable to generate a fistulous, phagedænic, or cancerous ulcer; though with care and proper management, at the first setting out, there is little danger but the patient may be perfectly cured.

A gangrene and approaching sphacelus however is desperate; and threatens the destruction of life. And as to a schirrhus, if this be the result, the testicle is only a useless and troublesome burthen; and to rid him of it in this and the before-mentioned misfortune, is the greatest relief he can hope for and expect.

A suppuration may be prognosticated, when the inflammation has continued for some time with a throbbing, which gradually loses, yet the bulk remains, though with less tenderness; and now becomes more soft on some particular part; where gradually an actual fluctuation of matter may be perceived. There are however various places where such suppuration may be generated. First, it may be in the separate teguments; in which case, the inflammation of the testicle may be various and symptomatical: This may be judged from the sudden progress of the inflammation and suppuration, but particularly by the external phlegosis attendant thereof. Secondly, the seat of the virulent aposthume, may have attacked the epididymidæ; in that case, the inflammation is not only

only rapid, but attended with exquisite pain, not only in the testicle, but in the ascending vessels, extending upwards in the epigastric region; attended with a most disagreeable pain in the loins. And lastly, the mischief may be in the very glandulous body of the testicle itself; when the case must consequently be more tedious, as the seat is deep in the substance.

In regard to the dreadful misfortune of a gangrene, and sphacelus, this can but take its abode in the testicle, or its appending parts; such a default is seldom or never occasioned by nature; particularly from the venereal virus, except additional accidents; but from a misconduct either in the patient, or the person under whose care he may be. But as to the schirrhous, this indeed may happen to the patient's ill fortune, notwithstanding all precaution and skill, though it generally may be occasioned from wrong management and dallying at first.

Here it may be proper to mention the sarcocoele. This ailment is a protuberance of fleshy excrescence, either in the substance of the testicle, or its tegument. If in the testicle, it is too often of the schirrhous or cancerous nature; but if within the tegument, 'tis generally of the wen kind. A contusion most commonly gives rise to this evil; yet as we have observed before, the venereal virus may give birth to it also. In what manner such excrescence probably becomes generated, will better be understood when we come to examine excrescences in general.

Whatever accident befalls the testicle, or testicles, so that they inflame, they are at that juncture

ture rendered useless to the patient; particularly for generation. I am not so presumptuous as to pretend to reason, why nature gave generally two of these secretory organs to the male; certain it is however, that whilst one is in the sound state, the animal is not impaired in the procreating vigour, more than he becomes blind who has but one eye: We may therefore, in my opinion, have some right to suppose, that kind and bounteous nature intended two testicles in the male, and two ovaria in the female, more for the sake of a reserve than any thing else. But if unfortunately the patient is maimed in both testicles, either inflamed, ulcerated, schirrhous, or sarcocelous, their secretory function is perfectly hindered, and rendered improlific; and the patient in that state is as much an eunuch as if he was actually castrated: Nay, I'll venture to say, he is that when he is sterile, be the cause either from a decay of nature, or from an accident; and that pusillanimity attends sterility, is as old an observation as natural philosophy itself. To lose one testicle in order to save life, in a desperate dilemma, a man indeed may consent to; but the thoughts of losing both, to the man of vigour, must be more horrid to the imagination, than all the mortal tortures of the inquisition.

It will be as proper here to point out the diagnostic distinctions of this kind of hernia from the intestinal hernies and hydrocele, as in the foregoing, the difference between a bubo and bubonocoele. In the first place, the tumefaction of the testicle comes on gradually, with pain and inflam-

inflammation, whilst a hernia intestinales comes suddenly, from a violent strain, either a blow, or other accident; besides those symptoms which have been mentioned before in the bubonocoele, sometimes attend.

In regard to the hydrocele, which is an actual hydrops of the scrotum, this may, with equal ease, be distinguished from the swelled testicle; being very largely extended, of a leucophlegmatic and semi-transparent hue; either so oedematous, as to retain the impression of the fingers at the touch, or else a collection of fluctuating humour, which is plainly perceivable both to the touch and sight.

The hydrocele is not an ailment peculiar to the venereal virus; proceeding from an over relaxness of the fibres in leucophlegmatic habits; the result of a long standing ague, or otherwise broken constitution: But as the venereal disease is enough to emaciate the best constitution, so we have had frequent examples, that an hydrocele has been one of the evil consequences attending this malady.

What the hernia humoralis is in man, an inflammation of the ovaria is in women; and though this has not generally been taken notice of, must notwithstanding be a serious consideration by every judicious practitioner. 'Tis true, those organs are more sheltered from external injuries than the testicles in men: But since we are convinced from anatomical inquiries, that the ovaria have not only been dropfical, sarcocelous schirrhous, and even ulcerated; we have just reason to suppose that those organs the ovaria, tubæ fallopiæ, and the uterus itself, may be subject to suffer
from

from a repelled virus; and which is likewise evident from the complaint in those parts.

Of VENEREAL EXCRESCENCES.

WE now advance to such productions of the venereal poison, which tend more towards the confirmed lues. As excrescences sometimes spring forth from the first infection, without any preceding symptoms, and other inconveniencies, besides themselves, I consider them here under the first infection and local diseases: But since they also are more frequently the production of the confirmed and latent pox, they had almost a greater right to be considered under the second infection. This however is very immaterial, since they are the production of both.

The various kinds of venereal excrescences which make their appearance about the pudenda, are either inflammatory or not, hard or soft, open or close, moist or dry. They have as many different appearances as quality and effects. But in order to distinguish them more properly, I shall concisely define each kind. *Verrucæ*, are a kind of venereal warts, which sprout out sometimes after impure coition; but they are more frequently the production of a latent pox. They are of various magnitudes; sometimes like pins heads, at other times like a ragged button. They are sometimes scattered over the glans and præpuce in men; præpuce, clitoris, and *carunculæ myrtiformes* in women; and about the anus in pathics.

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When they protuberate somewhat beyond the surface, their bases contracted, and hanging as by a stalk, they are called porri. These porri will sometimes grow to a considerable length, drop off, but come again; and if they are scattered about the glans in men, and at the entrance of the vagina in women, they render coition both painful and troublesome.

When they seem concealed under the skin like as with an hard lump, large and oval, round and spreading, they are called condylomata. They are more frequent in the tegumental parts, the perinæum, scrotum, and the tegument of the penis in men, and in the labia alæ and perinæum in women. These are rather more troublesome to get rid of than the former; since they seem to have struck deeper root, and are apt to spread their area in the tegumental parts; and sometimes they sprout out from the surface and produce little beds of porri and verrucæ.

Sometimes these warts take on the serrated appearance of a cock's comb, when they are called cristæ; these are most to be found near the corona and the frænum in men; between the nymphæ and labia, and very frequently about the anus in women; but especially in pathics, when they are of the worst specie: These differ considerably from the former in figure; which however seems more owing to the places they are confined to than any thing else.

These venereal excrescences appear sometimes without inflammation, trouble, or previous notice to the patient; and even apparently dry up, and after a while disappear again. If the patient
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takes them as friendly forewarners of the awakened latent lurking pox (as he ought to do) the fly virus and their ambassadors are not so difficult to expel the territories; but if neglected, the enemy may be expected to approach. Sometimes these pocky warts are inflamed and sore, when they are then taken more notice of; and it is but just they should: For, if the patient is of an acrimonious habit, irregular, &c. not only phagedænic and cancerous ulcers are the result, but the confirmed pox is now at hand; and even sometimes has already laid its destructive foundation.

In regard to the production of these warty excrescences, we must not be too positive. It is supposed by some to be the elongation of the cuticulous pupilla; but this seems to me but a lame conjecture; for the horney fibres of these warts have sometimes struck root quite deep: Add to this, they generally take their commencement underneath the cuticula; so that, that part, seems evidently to be excluded from the formation of them. Besides on some parts, viz. the glans, nay in the vagina, where they are most hard and horney, there are scarce any cuticula at all. It is rather a production from a vitiated lymph which produces a sprouting of those callous and horney fibres; the formation of which I shall have an opportunity of saying more to, in a more pertinent place.

The next venereal excrescences are of the fungous and soft kind. These likewise acquire names according to their resemblance. *Cristæ* are elongated laps of the skin resembling the combs or gills of a cock; and generally about the

the anus in women; but particularly in pathics. If they are soft and flaccid, they are generally somewhat sore, and seem to be moistened with a sharp ichor, from whence they are generally attended with frequent inflammation and disagreeable burning, until gradually they degenerate into a deep seated phagedænic and fistulous ulcer. Sometimes the cristæ will be callous, scaly, and inflamed; when they are not only extremely painful, but productive of the worst of evils in that part; particularly if unskilfully treated, and aggravated by caustics and other improper applications.

When these excrescences take on the appearance of mulberries, they are called *mora*; if like strawberries, *fraga*; like figs, *fici*; if like open ripe figs, *mariscæ*, &c.

These excrescences take sometimes their possession about the scrotum, perinæum, and sometimes, though seldom, about the anus in men; and the labia, perinæum and anus in women. But particularly round about the verge of the anus in catamites.

The *mora* and *fraga* are peculiarly common with the yaws; with this difference, that in the yaws they are common to other parts as well as the genitals; the same as the confirmed lues. Sometimes they are inflamed, fiery, and discharge nothing but a thin ichor; when they are attended with a burning and acute pain; at other times they are a complication of as many little running ulcers as there before were protuberated pimples.

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These excrescences are more peculiar to men and pathics than women. In men about the scrotum, near and about the rapha towards the anus; and by pathics all about, and in the anus itself. Sometimes they will be of an intermixture of yellow and red; hard, and every head filled with thick ropy matter; at other times they will be of a flaccid and cadaverous hue; and yield nothing but blood and stinking ichor.

The fici and mariscæ are flat spreading excrescences; they are more peculiar to women and lax constitutions than to men and tense fibred habits. Their seat is frequently within the pudendal labia, about the alæ, and particularly all round the anus. They sometimes spread their flaps very wide around; sometimes protuberate, split at the top, take on the appearance of a bursted fig; and issue from the numerous seed-like pimples a disagreeable sharp and foetid ichoric pus. When they appear on men, it is generally about the scrotum and the perinæum; but in pathics they obstruct almost the passage of the anus.

These and the mora, fraga, &c. or all of them, are frequently confounded with the piles, being not easy to be distinguished from each other; particularly when there is an actual intermixture: The hemorrhoids however, have in general (though this is not a strict rule) their bases wider than their tops, and appear somewhat conical, yet to make this distinction more nicely requires a great deal of practice. But the truth of the matter is, there needs not so nice a distinction as authors in general have advised us; if indeed there was

no other method to get rid of these disagreeable companions than by caustics, or actual cautery, and other horrid and ineffectual methods, I own the distinction very necessary; and it would be well for the patient if they were always mistaken for the piles: But we shall see in another place, that there are methods easier, safer, and more effectual, both for these excrescences and the piles too.

Though all these excrescences may be venereal, and generally proceeding from neglect or ill treatment, yet we must not strictly insist on, that they may not also be similarly produced from other causes, particularly the *fici* and *mariscæ* in the *pudenda muliebria*; which I have known instances of, where there was no room to suspect any thing venereal; but on examination I had reason to suppose they had proceeded from excoriations of the ichoric discharge from acrimonious piles; add to this perhaps a sharp fluor, or acrimonious catamenia, and want of cleanliness. Nor should we be too hasty to suspect the patient of pathic criminality, if we find such excrescences about the anus in man.

Where they spread upon the teguments, on the scrotum, &c. there must certainly be a venereal infection at the bottom; but there is a possibility that such excrescences may be the production about the anus, from a very acrimonious kind of hemorrhoids.

But in common, except some very rare instances, these various excrescences here mentioned, whether of the wart specie, or fungous kind, are not only venereal, but of a confirmed
pocky

pocky nature; and whether the patient is guilty or innocent, whether the causes assigned are feigned or real, the indication of cure should not only be externally, but aimed at correcting a latent acrimony circulating in the blood and humours, from which many evils, one time or other may be expected, if not timely subdued. The warty excrescences are of a more stubborn nature than the fungous kind, for though they at first seem more indolent, they frequently generate the most vicious, and even cancerous ulcerations.

Here I shall leave them, as from the first infection and local disease; but as they are more frequently the production, or the messengers of the confirmed lues, I shall take an opportunity of mentioning them in that place. There are various other equivocal productions of the first infection; such are the rhagadia or fissures in the anus, or in various parts of the pudendum muliebre. These chops issue sometimes a thin sharp ichor, and at times are very painful; if they are fresh contracted, they are not difficult, but if their lips are callous and inflamed, they of consequence are more difficult to remove.

Thus much then of the various productions from impure coition. It remains now to treat on the various other infections; but as they are more frequently of a universal nature, I shall consider their consequences in the next chapter: particularly as I have given my opinion on such kind of infection, under that head.

Here then I shall beg leave to conclude this ætiological description of the first stages of the venereal disease. The experienced and unpre-

judiced surgeon will find, that I have been more particular on that subject than authors in general; though at the same time I believe more concise. As to students and theorists, they may be convinced of this, by making an impartial comparison, and consulting their judgment and reason: But to the obstinate and prejudiced, I advise personal experience, the best argument to teach them truth and a due compassion for their patients; if this fails, all other arguments must of course be ineffectual. How far I have described the painful symptoms, patients who have suffered can only be the most competent judges. At the same time they may judge how far they have been properly treated. What the consequence is when the second infection takes place, we shall see in the next chapter.

C H A P. VI.

Of the Second Infection.

I AM now entering on a subject, which, if it was minutely handled, would almost make a compleat body of diseases, incident to mankind; or in other words, a description of Pandora's box. This is easily to be supposed, for when the virus is circulated in the fluids, and introduced into every particle of the whole animal composition, there must naturally arise as many diseases as parts affected, from whence such diseases can proceed. But we must not suppose that such a complication of disorders accumulate themselves in one and the same subject, or that the various diseases act alike in all patients: No, there is not one single cause existing which can lay the foundation to so numerous, different and separate evils as the venereal virus; nor acts so various in different constitutions. It is not only according to the various parts that become infected, but the operation is as it were guided, and conducted in its different modes of destruction, chiefly according to the constitution and habit of body the patient possesses.

There is not a disease incident to human nature, but what the venereal virus will occasion; or at least make so near a resemblance of, that there is no difference in appearance, or even the effects and consequences; it follows therefore,
that

that the causes are not only subject to be easily confounded, but subject to the greatest mistakes, if we have no greater confirmation than the present apparent symptoms for our guide. Nevertheless, there are peculiar characteristics attending the real confirmed lues, in regard to the progress it will make, if it is left to its destructive pursuit, without check or disturbance, either from accidents, or causes designed as remedies. It is scarce possible to enumerate the various ailments incident to a second infection; whatever disease other acrimony, from whatever cause, may produce, such may likewise be effected by the venereal virus; whether external or internal; or whether from a first or second infection. And hence we see the mere impossibility at times of adjusting the causes of diseases in general.

Throughout the animal œconomy there is a natural propensity to expel whatever is obnoxious to the tranquility of the fabric; and hence we experience in all infectious distempers, where there is an actual absorbed virus, that nature endeavours to throw the morbid matter to the external parts, in order to preserve the more noble organs of life from the pernicious attack: And so it is with the venereal virus, for though it may have been introduced and circulated with the sanguineous mass, yet for the most part it attacks the external parts, before it gains admittance to destroy the vital organs.

When however other accidents interfere, or that those external parts either repel or generate, and continue the infection, what can be the result, but an universal destruction of the whole animal

animal fabric? It is rare, but what some external appearances, or painful symptoms, give the first alarm in the second infection; which if properly attended to, or properly treated, would stop the approaching evil in time; but unfortunately the first appearances are sometimes too slight to claim proper attention of the patient; and what is still worse, the remedy sometimes proves worse than the disease.

But in order to exhibit to view the various classes of diseases, and the dreadful havock the second infection is subject to, we will begin with the more slight effects, and trace gradually the various symptoms and principal maladies of the confirmed lues venerea.

OF CUTANEOUS DISEASES.

MOST malignant diseases distinguish a salutary prognostic by a favourable crisis of cutaneous eruptions, which is an effort of nature to expel the morbid matter; but their pathognomonic expulsions generally are the first messengers of the commenced lues. Though it is not quite without exception, yet in general it is as common, as that the gonorrhœa is the first intelligence of an impure coition.

Wherever the first infection was received, there likewise is the greatest propensity for the utterance of the disease. If the venereal infection was from impure coition, the genitals are more subject first to discover the venereal poison, than other parts of the body, provided though the

natural course is not disturbed. But when there has been an universal circulation of the virus, every part of the body is equally subject to imbibe the poison. But whether from the least power of resistance, or from a peculiar propensity of the nature of the course of the virus, the tegument, or the skin, frequently give the first signs.

It must be observed, that the skin consists of four teguments; membranosa, adiposa, cutis, and the epidermis, or cuticula.

The membranosa is the inner surface, and adheres spontaneously to the muscles, tendons, and periosteum, according to the parts it covers.

The adiposa, or rather the cells wherein the fat is contained, continues over the whole surface, except the genitals and other regions as the scalp, eye-lids, and some few other parts of the head, where these cells end in lymphatic vessels; but in particular about the genitals; where they abound most, and all fat entirely disappears.

This part of the skin (if properly it may be called such) is a mere continuation of cells filled with fat in corpulent people, but scarce of any substance in lean, and particularly hectic constitutions.

The cutis, which is next to the last mentioned, is the real skin, spread universally over the whole body, and is an interwoven texture of tendinous and nervous fibres, arteries, veins, lymphatic vessels, intermixed with a multitude of excretory glandulæ; insomuch that the whole tegument seems to be a glandulous substance.

On the external surface of the cutis is the corpus reticulare, which are the extremities of the forementioned

forementioned vessels and nerves, interwoven in a plexus; and in this surface is the nature of the different hues which distinguishes the colour of the various species of people, black, tawny, and white; and this plexus is likewise the seat of the sun freckles, &c. The surface is filled with little papillæ, which appear more or less, as the skin is warm or cold, in a state of secretion or excretion.

And lastly, is the cuticula, or the scarf skin, the external covering of all, which is of a horny nature, insensible, and more or less substantial, as the parts are subject to external pressure and injuries. This cuticula seems on examination to be a continuation of interwoven scales, produced from the papilla of the extremity of the cutaneous plexus, and increases on repeated pressure.

Universally over the whole body of the skin, it is filled with pores, which are no more than the osticula of the innumerable little glands, called the miliary glands; betwixt which on the hairy parts, each hair is planted as it were, with a distinct root; and correspond somewhat in colour with the hue of the corpus reticulare.

This is a short sketch of the nature of the skin, which serves not only as an external cover to the body, like the bark of a tree, but appears in general to be a continued excretory gland; by which the body is in a perpetual evaporation; discharges obnoxious vapours (and in my humble opinion) exchanges it with particles absorbed from the circumambient air, or whatever surrounds it.

Now, according as the different parts of this curious mechanism of the skin that is affected

with the virus, the various diseases must be the result; add to this the different constitution of the patient. If the more external parts of the reticulare is tainted, a scabies or the itch will make its appearance. In moist and full constitutions, it will appear in pustules rising up the cuticula with little bladders of matter, which gradually become so many little ulcers; either dry up again, fall off, or spread their infection farther. In dry, feverish, hot, and scorbutic constitutions, and particularly the result from a venereal virus, such itch is less moist, but more sharp; commences with an intolerable itching, and small inflammations; and hence proceed tettery eruptions, furfuraceous, and corroding herpes, serpigo, impetigo, &c. These are all so many kinds of pforæ, or itches, and take on only these different appearances, according to the natural constitution and the present habit of body the patient is in at the time.

How troublesome soever and disagreeable the appearances of such cutaneous eruptions are, certain it is, that if they proceed from the first approach of nocturnal pains and other indispositions, so, that on the approach of the eruptions; the wandering pains cease, the patient ought to receive them as salutary efforts of nature; particularly in our times, where we are happily provided with means, in that very effort, to eradicate the most virulent malady lurking in the blood. But at the same time every scabious eruption is likewise the first messenger of the most loathsome leprosy, elephantiasis, the whole train of the horrible lues, a cutaneous putrefac-
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tion, and an universal corruption of the whole mass. For whether from the continued acrimony of the eruptions mentioned, or the increase of the humor from the blood, or both together is the cause, the acrimony of the virus will (if not rectified or prevented) attack the inner part of the cutis, corrupt the stamina of the fibres; generate a multitude of small phagedænic ulcers, which will clog up the perspiration; and either accumulate and generate scabs, scales, sores, floughs, &c. and a continued concealed sharp pus and acrimonious ichor, attack the neighbouring stamina, and at length introduce the true venereal pox.

If the virus, instead of, (by the expulsion from the blood, or from the first infection, as before observed) attacking the external extremity of the cutaneous ramification, should seat itself in the inner substance of the cutis, the first attack must be expected more acute; and the pustules, since they are deeper founded, will consequently have more time to make their appearance; of course more painful in their progress, in which case the abovementioned evils are more expected, or others not less grievous. But the deepest of all the class of cutaneous diseases are, when the membrana adiposa makes the beginning of this threatening calamity the pox.

Though the skin is in one continuation, and seemingly of one substance, yet from the different productions that the venereal, or any other acrimonious virus produces, it is plain, that the mechanical operations must be materially different; for at one and the same time, certain parts are subject to certain productions of disorders.

Porri,

Porri, verucae, cristae, mora, fraga, mariscæ, &c. are excrescences and protuberances of the cutis, which are peculiar only to the teguments of the pudendal parts; or in a very desperate case, extend perhaps to the mouth, nose, or neck. These excrescences are so exactly alike in the yaws and the lues venerea, that they coincide in those disorders, so different in their names, both in effect and remedy. Nay, in the very leprosy too, these excrescences keep their aspect, when the whole surface of the body besides has a quite different appearance.

Ragadia which are fissures, sometimes deep, callous, &c. are peculiar to the anus, the corners of the mouth, nostrils, eye-lids, nipples, &c. These however may proceed from extension and contraction, though of the same malignity with the former. Different from these in appearance are the chaps in the palms of the hands, and the soles of the feet; both proceed from the acrimony of virus, searching as it were to the cuticula, by which it is shrunk together; add to this the crusty flakes occasioned from dried up puffy discharge, which not only are brittle themselves, but deprive the cuticula of its natural pliability and tenacious elasticity,

The Alopecious furfuration of the head, is common to the leprosy, the yaws and the lues venerea; in the latter, it is called the corona veneris, or the venereal laurel. It takes its commencement from behind the ears, extends itself over the greatest part of the forehead, and all behind, below the hair on the neck. Whilst it receives a clogging support from the hair, the
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fordid scurf must there be the thickest, and most pernicious; as also in the eye-brows. This is of the same kind as the scald head in children, and the antient leprosy, where the scab is crusty, scaly, interspersed with a foetid flough, and frequently abound with vermin; particularly in children and leucophlegmatic habits.

Whatever complexion the patient is naturally of, whether black or white, and whatever natural hue the hair might have been before, they now lose this hue, become of a silver white, and at length fall off, root and branch. When the patient is crowned with such a laurel, his aspect and condition is horrible indeed.

A scabby head is generally the attendant of a universal cutaneous malignant eruption; and how moist soever the other eruption on the rest of the body may be, whether a pustulous psoa, serpigo, impetigo, phlyctæna, &c. the head, if it partakes of the infection, will always be more scurfy than the rest, and attended with an ophiass: For since the humors dry up, and become clogged in the hair, the concealed virus cannot be discharged; must therefore not only accumulate the fardid scab, but corrupt the stamina and nutriting vessels of the hair; destroy their root, and consequently make them fall off.

Furuncles, of whatever kind, if their roots are not deeper than in the cutis or membrana adiposa, are for the most part confined to the muscular brawny and tendinous parts of the extremities, the arms, legs, knees, elbows, loins, and shoulders; but very seldom to the softer parts of the body. If they are near the glandulous

dulous parts, they are apt to occasion scrofulous tumours, and give birth to many evils. If these furuncles are venereal, they are the true pox; though of the cutaneous kind; of which more hereafter.

Gummata are sometimes cutaneous; they are the most sluggish, but likewise the most obstinate kind of tumefaction in the skin; whether they are the atheromata, meliceredes, or steatomata, they generally take their abode near the glandulous parts, about the neck; particularly about the parotid glands. How cutaneous soever they may appear to the touch, they frequently have a strumous foundation; and if they are encysted, the extirpation of their bag, as well as their contents, (when it is practicable) is the surest remedy. If their origin is venereal, they are generally steatomatous, and stubborn enough to the most experienced surgeon, let him go to work which way he will.

Here I shall beg leave to break off in the catalogue of cutaneous diseases, that may be occasioned by the venereal virus. Let it suffice once for all, that whatever cutaneous eruptions or diseases, any other acrimonious virus may occasion, such may also be effected by the venereal poison.

What the yaws is with the negroes, may happen to be the pox with an European; and when the pox attacks a patient of a dry choleric constitution, so that he becomes crowned with a venereal laurel, and his body loaded with a fullsome, fordid, scabby scurf; he is exactly in the

the state which answers to the description of the leprosy; and one method will cure them all.

OF GLANDULAR DISEASES.

WHEN the venereal virus is admitted, and circulated with the blood, it is of course very apt to affect the glands; and this happens so general, that it is very seldom they escape. If we consider the glandulous parts in a general sense, there is scarce any one single part of the whole body exempt from having something glandulous in its composition; for the glands are the elaboratories of the very particles of which every part of the body is composed; insomuch, that the whole animal fabric may be considered as a gland composed of an infinite number of other smaller ones. But the enquiry here, concerns those glands only, which are evident to the external parts, come under surgical considerations, and require sometimes manual operations and topical applications.

It is not only the continual natural glands which become affected by the virus, which tumify, inflame, and ulcerate them; but what is remarkable, and worth a serious consideration, is, that when the habit is loaded with virulence, whether venereal or otherwise, spurious glands will adventitiously arise, where nature in the sound state never designed any: And these last are always of the strumous kind. This we experience not only in the external parts, but also universally in the viscera, and even in the more nobler

parts. If therefore, such preternatural glands, may arise *de novo*, it is easily imagined, that in the glandulous parts, they themselves may be encreased, in the very formation of the substance of the glandulous stamina; and even the natural be intermixed with preternatural.

This consideration will naturally lead us to make a rational distinction, betwixt that kind of tumefaction, which arises from an obstruction and accumulation of humours; and that kind of tumour, which has actually a secreting and excreting excrescence, or preternatural gland for its foundation.

Whatever is against the common course of nature is a disease; and such glandulous tumefactions are evidently diseases; which may have many evil tendencies: But notwithstanding, when we duly consider the wonderful self-preserving principles of the animal œconomy, we shall find that the first onset of these tumours are the salutary efforts of nature, in order to accumulate the obnoxious humour, with an intent either to imprison them, or if possible to expel them; to this we must add, that the weaker parts must always yield to the resisting of the stronger. And whilst the enemy is wandering in the animal territories, equally abhorred and resisted by all, it fixes at length where it finds least resistance; and if repelled from thence, either by some accidental effort of nature, or aided by some other agent, the virus is sent wandering again, till it finds some other abode. Hence we find in venereal and other virulent diseases, that pains and indispositions, will be drove from one part to another till

till at length, some province is sacrificed for the good of the whole, where the virus accumulated is expelled; or else, if the virus becomes the strongest party, the whole animal state is massacred.

Every gland is composed of arteries, veins, secretory and excretory ducts; of these necessary tubuli consist their elaboratories: But in regard to their peculiar arts of manufacturing the various humours, is to me a profound mystery; and I must leave this to the explanation of those, who know the art to account for every thing.

Whilst the venereal virus is merely confined to the genital parts, a bubo, hernia humoralis, &c. will interchangeably make their appearance; but when the whole mass of blood is tainted, all the glands are equally liable to the attack. The inguinal, axillary, maxillary, &c. are generally the first sufferers. At the attack they become hard and indolent; and proceed in their progress much as in the recent bubo; but with more stubbornness, indolence; and are point blank strumous.

At the approach of strumous tumours, (whether they are venereal, or from other latent virulency) the adjacent members are generally partakers. The first appearances are generally in the natural glands; as for example, if in the tonsils, the axillary, glands, &c. the virus takes up its abode, and if either by repulsion, or otherwise a spreading of the virus happens, the neighbouring muscles will partake of the infection; thence phymatic swellings will arise, between the muscles of the neck, and sometimes extend to the arms, making the surface of the part hard and knotty; which

by intervals will disappear and come again, till at length the whole neck will become strumous: So, that the natural glands, and the preternatural tumefactions, will have a go-between communication with each other; till at length one, or the other ulcerates, and becomes supplied by a fistulous conveyance with a perpetual running from the neighbouring tumefactions. And this malady, if it is from any other cause than from a venereal virus, is called the King's evil. In like manner, acts the latent pocky bubo; which will be liable to generate corresponding phymatic tubercles, between the neighbouring muscles of the thighs, &c. and form fistules, of deep extension; which render such strumous, or scrofulous ulcerations very difficult of cure, particularly in acrimonious or universally tainted habits. These scrophulous tumours and ulcerations, will sometimes be of a malignant nature; extend themselves towards the joints, where not only the synovia is liable to become callous, but the ligaments affected and tumefied: From whence cold indolent tumefactions, called white swellings, will arise; cause anchylosis, caries, hyperostoses, and other diseases of the bones; and sometimes unfortunately end in incurable maladies.

These strumous or scrofulous evils, so called, in non-venereal patients, are branches of the confirmed lues in the venereal; and if they are equally proceeded with, the fate of the patient, venereal or not, either in the successful cure, continuation of the malady, or total destruction of the whole animal fabric will ever be alike.

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If we seriously examine scrofulous disorders, and the remedies prescribed for them in general, we shall be surprized at the gentleness of the method, and the strenuous abstinence from mercury, and salivation: On the other hand again, if the same ailments and the same symptoms are pronounced venereal, we must be equally astonished to find the patient immediately plunged into the deepest salivation; where he either must perish in the experiment, or if he survives, continues the same, except receiving an addition to his former evils. The difference of the two extremes is, that the first remains uncured from want, the latter from too much of the proper means; the medium however, would ever give satisfaction to all parties.

There is no one part in the human body, but what is glandulous; yet in the plentitude and delicate structure thereof, there is a material difference in the various parts. The texture of the fauces, the roof of the mouth, the uvula, &c. correspond so exactly with that of the genital parts, that the venereal ulcers will act almost alike in both, which we shall here consider.

The lining of the mouth, throat, nose, and all its various corresponding cavities, is of a perfect glandulous substance; and whose surface is porous, nervous, and delicate; besides the various assemblages of conglomerate salivary glands, variously distributed in the walls of the mouth, as the maxillares, parotides, sublinguales, and the tonsils, which furnish the aliment in mastication with saliva: The whole surface is provided with innumerable lacunal ducts, which

exfude a lubricating mucus, by which the mouth and all its various parts are kept moist, pliable and slippery.

The various organs in the mouth are for the most part of the same substance; the tongue, the uvula, and great part of the larynx, to which we may also add the gums.

The salivary glands being continually in action, and doing much business in the animal commonwealth, have consequently great correspondence with the sanguinous mass, and therefore very subject to be infected. And whilst their branches extend to the neighbouring organs, they of course, one with the other communicate the infection.

The lips, the roof and uvula resemble the internal parts of the pudendum muliebre in texture as much as may be; and therefore, when infected, with the venereal virus, ulcers will arise, which in themselves are of the shankerous kind; and if the habit is acrimonious, they are liable to occasion the most malignant, phagedænic and putrid ulcers: Hence the lips, the cheeks, and the uvula, are liable either to become cancerous, or totally consumed, by the corrosive ulceration: And whilst the lining of the roof is but thin in substance, and the bones which it covers, thin and spongy, a caries frequently ensues; attacks the various spongy bones of the upper maxilla, and destroys the whole natural texture, and formation of those parts.

The membrana pituitaria, which lines the internal surface of the nose, and the various communicating cavities, is also peculiarly apt to imbibe

imbibe the venereal virus; and from hence, subject to many malignant and stubborn maladies. The peculiar texture of this glandulous tegument partly for secreting the viscous mucus, voided by the nose, and partly to lubricate the parts, and to preserve the delicate texture of the olfactory nerves from external injuries, is remarkably subject to fungous and phagedænic excrescences, and putrid ulcerations, at the attack of the venereal virus, or other virulent injuries: For since the mucus is more pituitous, it confines the virus from attacking with that rapidity, as in other delicate parts; though in time becomes for that reason more pernicious. Hence in those parts arise gradually fungous, foetid, and phagedænic excrescences; which soon degenerate into polipous, carcenomatous, and putrid ozænæ; which corrosive ulcers, soon attack the neighbouring bones, render them carious, and totally destroy them: Hence also, when the ossa nasi and the septum is lost, the nose falls flat to the face, obstructs the former passage, and occasions snuffling. When the ossa palati and os vomar, &c. are destroyed, the tone becomes hollow, sonorous, and unintelligible, &c. the frequent dreadful consequences of such malignant ulcerations.

The uvula is also subject either to be enlarged with an excreffential, and inflammatory tumefaction; sometimes even so as to choak up the very fauces, or else to be totally lost by the phagedænic exulceration.

The tongue, particularly the root, is also a principal seat of venereal ulcerations; the glandulæ

dulæ sublingualis are sometimes in the same state; affect the whole tongue, swell it up to a great bulk, and make it not only painful, but burthen some and ufeless.

Frequently the muscles of the uvula, the sphenoſtaphilin, and the pterygoſtaphilin, &c. will be ulcerated; this, together with the ulcerations of the tongue, (as frequently is the caſe) particularly the muscles, whereby the os hyoides becomes corroded, occasions a lameneſs of the tongue; a hoarſeneſs, incurable difficulty of ſpeech, and a defective deglutition, are the abſolute remainders even after the cure.

But the moſt deſtructive ſeat of the virus in thoſe regions, is in the larynx. This moſt curious and complicate organ is compoſed of four kind of ſubſtances; namely, cartilages, muscles, glands, and membranes; whilſt theſe different parts are ſo intimately connected with each other; add to this, being plentifully interſperſed with nervous ramifications, and theſe communicating with the various neighbouring parts; it is eaſily conceived, that a virulent attack, in that part, muſt be attended with pain, malignity, and danger.

If the attack is with an inflammation and immediate ulceration, it proceeds in its progreſs like a malignant angina or quincy. Frequently however it will come on more ſlowly; and from the continuation of the pituitous membrane, fungous excreſcences will ariſe; which gradually will become malignant, foetid and phagedænic ulcers. Sometimes theſe excreſcences will choak up the bronchia, and the whole fauces with excreſcences

crecences and tumours, so that the patient is unable to be supplied with sustenance, and sometimes forced to the operation of bronchotomy, to prevent a total suffocation.

A putrid sore throat, whether venereal or not, is always to be considered as the most malignant and alarming malady in its nature; for whilst the parts of the larynx is of so complicate a form, the ulceration is hurried on with great rapidity, and the inflammation liable to obstruct respiration, a function absolutely requisite to the existence of life. But besides these inconveniencies; whilst it is in the state of ulceration, the phagedænic discharge is liable to fall down the aspera into the lungs; attack the vesicles, and then plunge the patient into a mortal consumption.

The gums also, are equally with the former subject to become infected, grow spongy, soft, and tumefied, filled with little phlyctenæ, which gradually become so many ulcers; the teeth become black, will corrode, and at length fall out; together with the alveoli becoming carious and will exfoliate.

From all that has been said, it follows, that the breath of such pocky patients, with any or all these phagedænic and fœtid disorders, in the mouth and nose, must be highly offensive to themselves and every one about them; and if not immediately assisted, the virus must from thence be transported to every part of the body: For since the aliment in mastication and deglutition must partake of the ulcerating matter, it

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is demonstratively plain, that the very nutrition must become poisoned.

The worst condition of ulcerations in the mouth, which the patient possibly may fall into from a venereal infection, and with all the dreadful consequences, we find frequently brought on by salivation; nay even where there was not the least symptom of ulceration in those parts before; and how frequently do we not find, that when the patient has had strength enough to survive this severe touchstone of his constitution, that instead of being cured, he has only augmented his evils!

The eyes are also very liable to attract acrimonious humours from the body, whether venereal or otherwise; but whilst the body is generally rendered most of a bad habit, in the venereal infection, the virus, wherever it is propelled to, acts with more virulence than in other cases. In pocky patients we frequently find (at the first attack of the eyes) that the eye-lids become beset with hordeola, which inflame, ulcerate, become scurfy and scaly, and are attended with a lippitude; the canthus major also inflames, ulcerates, and frequently occasions an obstinate encanthis, fistula lachrymalis, caries in the os unguis, and other evils.

Sometimes an aegilops will appear in the canthus major; which will spread itself over the albuginea, and even over the cornea; cause a number of fiery nubeculæ and inflammatory phlyctænæ: And in this consists frequently, the venereal external inflammatory ophthalmia.

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If the virus gains admittance into the various humours of the eyes, whether the aqueous, vitreous, or crystalline, they will of course lose their transparency, become viscid, turbid, and confounded in their secretion: Hence will arise a glaucoma, or a suffusion; if continued, a fugillation attended with a dull heavy pain, gradually brings on an hæmalops, and an internal inflammatory opthalmia; which at length will end in an hypopion, or else in an exulceration of the whole eye.

When however the venereal virus has attacked the optic nerve, a gutta serena must consequently follow, either with or without inflammation; and other attending maladies.

The ears likewise partake of the wandering virus; either as it passes through the sebaceous glandulous lining of the meatus auditorius, or its containing implements of hearing; or whether it is conveyed thither through the eustachian tube, from the affected parts in the mouth; in either case, the various parts of the internal ear are liable, not only in the venereal, but any other wandering virus, to ulcerate.

The ear-wax seems a secretion, different from all other productions of animal fluids; the nearest resembling to it, seems to be the sebaceous viscosity, exuding from the sebaceous glandulæ which unite the cuticula to the reticular plexus on the surface of the cutis, and makes the skin more or less greasy; which is most conspicuous in the face, in the morning, particularly after a gentle perspiration. Whether the ear-wax is the same, and only accumulated more in these parts,
unable

unable to be cleaned away, I cannot determine; certain however it is, that the smaller the quantity secreted, the better are the organs of hearing; and that its encrease attend most diseases in those parts.

When the secreting tegument in the ear is affected with the venereal virus, the wax becomes hard, scaly, furfuracious, sharp and foetid; when it also corrodes the tegument, and occasions at times the most phagedænic ulcers: Which always turn out carious to the bones: Hence arise sharp and foetid burnings of the pus and ichor from the ear; attended with frequent exfoliations.

If the miasmatic virus is introduced to the inner parts either by the aqueduct from the ulcerated mouth, or from other conveyances, so as to attack the auditory organs, the tympanum, the semicircular tubes, or the little bones themselves, the incus, stapes, malleus, os orbiculare, or all together; exostoses, hyperostoses, caries, malignant, phagedænic and foetid ulcerations, together with a consumption of these parts, and loss of hearing, must be the consequences: Hence an exquisite painful and tumultuous inflammation, with a variety of apparent sounds, attended with a heavy pressure in the temples, and an inflammatory tumefaction of the external ear and the neighbouring parts; which sometimes extend even to a hyperostosis of the os temporale; which at last burst out with a phagedænic ulceration, and running of foetid pus from the ear, with frequent exfoliations, till the whole

whole organ of hearing is consumed and destroyed.

The breasts of women, from their complexed and elaborate texture, are subject to many ailments; either from accidents, a default of their appropriated function, or from the attack of acrimonious humours; whether infectionously attracted, or of inveterate standing in the body; the venereal virus consequently subjects these organs to many grievous maladies, and makes them often the repository of complicated evils; even the most terrible of all, incident to human affliction, an ulcerated cancer.

Suckling women are subject to receive the infection from pocky children: when sometimes the nipples or the areola, will give notice, with acrimonious rhagadies or malignant chaps; at other times those and the neighbouring parts which come in close contact to a pocky child, will be strewed with phlyctænæ, interspersed with efflorescent furfurations; at other times the miasm will be absorbed by the returning vessels, and be received into the circulation of the blood, and make those organs the attack of chance, equally liable with any other part of the body.

We should however with the greatest circumspection and caution form our opinion, concerning such infection; but particularly in communicating our sentiments of these matters; for a child may labour under many afflictions besides the pox, though equally as grievous, and which is apt to be communicated to the nurse; however, whatever it may be, that the child labours under, unless it utters itself by external appearances,
either

either in blotches, tumors, or external exulcerations, of any kind, I cannot in my opinion allow of any infectious communication. But the case is materially different in regard to an infected nurse with suckling a child; for since there is a continual afflux to the lacteal glands in the breast, and the secreted milk continually drawn off by suction, the communication of any acrimony is demonstrative; insomuch, that frequently the cure of the one has been the death of the other.

Women have many periodical infirmities, to which men are entire strangers. They are subject to many more, and even more malignant ailments than men: But they are at the same time provided with many more outlets, to prevent, and evacuate them; so that on the whole, in regard to the laws, manners, œconomy, and the government of their animal state, they are quite a different set of beings.

The breasts are principal members to the act of gestation; as such there is a continual correspondence with the remaining organs of generation. At the approach of the catamenia, the breasts are more than ordinarily turgid; and whatever ailments they are subject to, utters itself most at that time: But when the menstrual drain is opened, oppressed nature finds immediate relief: Hence women, whilst they are regular in their menses, are the least subject to ailments in their breasts. An occult cancer may remain there for a long time dormant, and without disturbance, if not injudiciously irritated; but experience shews us, that, at the disturbance or discontinuation of the menstrual

stirual evacuations, the sleeping fiend awakes, and threatens misery and destruction.

On the whole, whatever ailment may befall the glands, and the glandulous parts, from other wandering malignities, such may also be effected from the venereal, and vice versa : And so true it is, that proper and rational remedies will be equally successful, whether the origin of the evil be venereal or not ; let pedants and sophists say what they will to the contrary.

What has been here related in regard to external evils, will comparatively hold good with internal diseases, subject to the venereal virus ; and which we shall take a cursory view of, under the title of the dry pox. We will therefore proceed to the destruction of the bones themselves.

Of DISEASES of the BONES.

THE bones, though the hardest of animal substances, are subject to undergo as many destructive changes, in proportion to the nature of their texture, as the softer and glandulous parts we just now left, from any wandering virus ; particularly the venereal, the subject we are now treating of. They are subject to tumefy, inflame, ulcerate, corrode, dissolve, and be converted into another kind of substance ; become soft, flexible, and even lose entirely their ossified stamina.

The formation of the bones, or ossification, has employed the speculation of many ; however still we remain in the dark. I will therefore ven-

ture to fet, with few words, this matter in as clear a light as I expect it ever will be to human comprehension; namely, that the bones are formed of the same materials as all other animal substances, only differently modified, and connected. This will sufficiently answer our purpose as man-menders, man-makers we must not pretend to be. Yet as far as effects lead the way to assign causes, we have the undoubted right of searching for causes, which may have salutary effects; but no sooner do we pretend to supernatural wisdom, but we make ourselves useless, and compleatly ridiculous.

In the natural state of the bones, they are the hardest in substance, but the least endued with sensation, except the periostium, and the medullary substance in them. They increase in hardness with age; till at length they lose their tenacity, and become quite brittle. All, except some part of the teeth, are covered with a thin tendinous and nervous membrane; which in one continuation glides along, over the whole bony frame, including the various articulations. Over the scull this membrane is called pericranium, all that covers the rest of the bones, periostium. The great bones of the upper and under extremities, are narrowest, hardest, and hollow in the middle; largest and spongy at their ends: All the rest are partly solid and spongy. Those designed for motion have their extremities covered with cartilages. The articulations are strongly connected with the periostium, assisted with strong tendinous ligaments. The internal parts, whether hollow or spongy, are filled with marrow,

marrow, which is a subtil fine oil, invested with a delicate, nervous, and sensitive cellular tegument. The bones are variously perforated, where sometimes sanguineous vessels, and sometimes nerves inclosed with the periostium, penetrate; which sometimes are lost in the substance of the bone, at other times in the medullary substance in the bone, particularly in the medullium. The joints are lubricated, and move in a transparent glutinous liquid. In infants the bones are large and thick, but soft; at the ends cartilaginous and the heads of the moveable articulating bones, large, soft and spongy, and easily separable from the harder part; the whole of a reddish hue. In the prime of life, the bones become hard, tenacious, stronger connected, and in colour inclining more to a white. In old age the bones become small, hard, but brittle, and inclining to the yellow. When a bone is fractured, there will ooze out from the fracture, a glutinous liquid, resembling the synovia, which will gradually ossify and cement the fractured parts, as strong as before; and this is plenteist in young subjects. These are some of the natural properties of bones; but let us now proceed to their diseases.

Whilst the blood, and other circulating humours, must have their course through the various bones and their connecting parts, it is natural to suppose that the venereal virus, as well as any other acrimony, must become obnoxious; and prevent the course of the animal fabrication and œconomy in these substances, as well as all others; and in proportion to the distribution of the ner-

vous ramifications of the parts attacked, pain and inflammation must ensue.

An exostosis is the general term of a protuberated unnatural bump perceivable on a bony part. These tumors are generally slow in their progress. If the tumor is soft from its commencement, it is generally termed a gumma. This excrescence has various origins; sometimes it takes its commencement in the cutis, sometimes in the periostium, sometimes on a tendon, and sometimes sprouts out with a steatomatous excrescence from the substance of the bone itself; either at the spongy extremities, or the hardest parts thereof. Wherever be its origin, this is a true venereal pock, (though other wandering virus may equally give birth to it) and has always something malignant and stubborn in its composition: Sometimes its contents will be steatomatous and encysted; sometimes callous; and sometimes ossified; though distinct from the bone. Sometimes this kind of tumor is inflammatory and painful; at other times, indolent, and insensible; yet sometimes all on a sudden begins to rage. Let these kind of visitors act as they will, they may always be considered in suspected patients, to be the scouting forerunners of the whole army of pox laying in ambuscade.

The exulceration of these kind of tumors are generally attended with a caries of the adjacent bone, particularly if it is adherently connected; for from this, and from their steatomatous fungosity, together with their aptitude of ossification, it appears plainly, that their origin is from

a virulent extravasation of the callus, from the bone itself.

The true exostosis however, proceeds from the very substance of the bones themselves, and are protuberances of ossified matter; and those are called nodes. Sometimes a node is a protuberation of a hard and solid bony substance; at other times, it will, as it were, be a bony pustule, or knot, filled with an irregular fleshy excrescence, either of the steatomatous kind, or the carcinomeus. Sometimes the bone on that part will be more solid than usual, and the tumor in appearance will be like the hardest ivory; at other times rough, prickly and spongy, filled with a variety of irregular bony, cartilaginous, and fungous cellulæ and substance. These tumors will sometimes come singly, small, large, and sometimes, irregularly scattered over the various bones, both hard or soft; either without, but generally attended with nocturnal pains.

The spongy bones are most subject to these excrescences and tumefactions; and sometimes the whole bone will be equally every where distended and swelled; And this is termed a hyperostosis. When however this tumefaction extends to the harder bones, without any other external appearance, it is called a spina-ventosa.

A hyperostosis, at the extremities of the bones, are sometimes attended with very acute pain; but at other times, with a slow, heavy, and dull sensation. The spina ventosa however, as it is generally a production from an internal ulceration of the marrow, either in the cavity of the hollow bones, or in the cellulæ of the spongy substances,

cannot fail of giving the patient the most exquisite torture; and this malady is perhaps one of the most deplorable a patient can be afflicted with, except the cancer; especially in the tibia, or any of the greater bones; and particularly if it increases so, as to bore its way by an external corrosion. In this miserable case, inflammations, phagedænic, foetid, and stubborn ulcerations ensue, attended with fungosities and repeated exfoliations, till nature has formed an entire new bone, in the place of the old decayed one. But such a fortunate result of renewing the decayed bone is not always the consequence; for sometimes the whole bone will become as if worm-eaten, or perforated like a honeycomb; add to this, that various bones may be affected at once: Nay, I have (and no doubt other surgeons have too, particularly in hospitals) seen whole skeletons mangled in the most miserable manner, by the venereal and other diseases.

An exostosis may proceed from a contusion, or a sudden wrench of a joint, but this is materially different from that proceeding from any virus; for the former is merely a simple extravasation of the callus, either from the tendons, or from the bone, (for there appears a great similarity in their nature) whilst the latter is a confused jumbling of an unconcocted and depraved callus, drove out from the texture of the bone: But how this happens in the various forms, we may indeed jar, but we cannot reason or account for, at least with any satisfaction.

There has long been a famous question in debate, whether the bone takes its origin and support
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from the periostium, or the periostium from the bone. There let the question remain: To me the very question appears absurd: But this, from experience in surgery I know, that when a bone is carious, and labours under an exfoliation, the sound part encloses itself in a new periostium before it pretends to push forwards the carious scale; and till this may be performed undisturbed, the ulcer will remain malignant, and the caries, and repeated exfoliations will continue: For the delicacy of the bony substance is so great, that even the least air will affect it, without any other cause. I have often blushed for some of my brother surgeons, on account of their over officiousness in scraping the bones; and they themselves must at times have been confused, to find that an old woman (skilfully, though ignorantly, letting nature have its way) sometimes has performed a cure, while the educated surgeon, by fine finished scraping and perforating instruments, only disturbed the salutary efforts of nature, and augmented the evil.

Nodes attack all the bones in general; but remarkably the hard lamina of them, and those least covered with muscles: Hence when a venereal patient complains of nocturnal pains, the tibia, ulna, &c. feel rough and knotty, nodes and bumps, like young calves horns, sprouting out about the scull, you may safely pronounce him poxed to the back-bone.

An hyperostosis may likewise proceed from various other causes; ricketty children are subject to it, which frequently throws them for the future in a different decrepid form, to what nature first designed. Young people at the age of

puberty, even sometimes from a leucophlegmatic habit, will be subject to this disease; and from whence they will shoot up with pain and awkwardness, and have remarkable large and clumsy joints.

A simple hyperostosis may, and is sometimes the effect of a venereal virus, when the ossified matter is stimulated to a greater congestion to such parts; but in the general course of virulent diseases, the tumefaction is of a corroding nature, and which frequently is attended with a scrofulous swelling of the ligaments, and the whole joint. Such swellings are sometimes grievous in their nature; the synovia will alter its nature many different ways; sometimes turned into pus and ichor, the joint becomes apothumous, corrode the cartilages, and the heads of the bones; in consequence of which, a most malignant ulceration and exfoliation must ensue; sometimes the synovia will be degenerated into a fungous excrescence, become callous, bony, and occasion an ankylosis, with a troublesome deformity of the articulation, and the adjacent limb. And sometimes the synovia will be converted into a variety of calculous substances, where it will obstinately remain with pain and distortion of the parts.

A spina ventosa, is a terrible disorder, especially when it continues and attacks the whole bone; this is a true inflammation and exulceration of the very ossified parts of the bone. And as it is universal, it cannot fail of attacking the passing and repassing ramifications of the nerves; as well in the periostium, as the medullary substance,

stance, and the adjoining tendons of the muscles fixed to the various parts of the bone, and consequently the pain must be very extensive. Hence the patient feels a continual gnawing in the bone, as if it was bruising and grinding; and in the muscular parts, as if being torn away, &c. which lasts, with repeated intermittent paroxysms, till at length the external parts become aposthumous, opens and bursts, into a most foetid and phagedænic ulceration; which continues, attended with exfoliation, till nature has supplied the place with new ossification; and replaced another bone. But to such a salutary consequence, it requires not only very judicious treatment, but also a young, and good constitution of the patient.

This dreadful exulceration of the bone, will sometimes, not only in its fury, reduce the bone it attacks, to a mere mass of mouldring corruption, but spread its dreadful infection farther to all the neighbouring bones; and sometimes even attack the whole ossified frame: Such a skeleton have I seen, as has filled me with horror.

But amongst the various diseases of the bones, that of their becoming soft, appears, and indeed is, very extraordinary; yet so it is: They will sometimes become soft, flexible, and appear more like a piece of confused flesh, than the substance of bone; and this is called osteosarcosis. This may be produced from the venereal virus, as well as from other causes. Instances have been where this extraordinary disease has crept upon patients without much pain or other inconveniency, than that their limbs have bent under the support of
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their body, and at length rendered them useless: But in the general course, it comes on with an inflammation and heavy pungent pain, the same as a spina ventosa; at length the bones swell up into a bloody puff'd-up mass; and then become subject to the various kinds of ulcerations, as all other fleshy parts: As a specimen of which, I have seen an injected bone, (where this disease proved mortal) which was not only greatly beyond the natural size in bulk, but plentifully distributed with very large blood vessels; otherwise of a rough, spongy, cellular, and farcolous texture.

In fact, there is no part of the body suffers more from the circulated venereal virus than the bones; insomuch, that when a patient has received the pernicious poison, and circulated it in the blood and other humours, he generally carries for ever some remarkable certificate of his faithful service in that rough campaign. Hence a flat nose like an ape, or perhaps an artificial one; sore and lippid eyes, perhaps squinting; running of stinking matter from the remaining nostrils, and from the ears; rotten teeth and consumed gums; stinking breath; large scars about the chaps; dry and knotty neck; huge shoulders; stiff and large elbows; decrepid wrists and fingers; stiff knees; bandy legs; a virulent gleet, and strumous issues; a ghastly look; superannuated in constitution, &c. &c.

But though these are the remaining decrepitudes of an invalid, half pay, or superannuated venereal hero; yet we have daily instances, that some of such deformities, are the providential lot of others, whose parents as well as them.

themselves have been innocent, and free from venereal diseases; notwithstanding which they have been equally as great sufferers, from other wandering humours.

There are many other surprising diseases incident to the human machine, which a wandering virus, or other accidental default of nature, may give birth to. Instances have occurred where the whole bony frame has degenerated into a soft spongy mass; on the contrary, we have cases of universal ossifications; nay, of petrification: But what is yet more astonishing, a conflagration from an intestine self-kindled fire; the patient alive, and reduced to ashes, in the space of a few hours! These are facts surprising to the human imagination; but they are in reality no more mysterious than all other phenomena in nature, and every other disease; except on account of their accidental scarcity. We may philosophise as learnedly as we please, but the deeper we dive into these subjects, the more we shall perceive, that all what we have said, and can say, amounts to little more than nothing. But to return to the ordinary effects of the venereal virus.

When a patient has from bodily experience served his apprenticeship to the pox, and has had the virus circulated in his animal frame for any time, particularly in the bones, it never fails of reducing the whole constitution, and bringing on old age in a short space of time; for since the virus is a perpetual spur to hurry on the vital functions, natural wear and tear must of course increase, together with various remain-

remaining drains. Hence we see the forementioned remains, or at best, find a diminished statue, brittle and small twisted bones; and all the decrepidness, witheredness, and incapacity of infirm old age; at the years of natural bloom, health, and vigour,

Of the WANDERING, or DRY POX.

DRY pox, is rather a popular, than a physical term; but since custom has brought it into use, in order to signify a latent wandering venereal poison, that torments the patient with a variety of hidden, sudden, and unexpected ailments, from which he must expect, sooner or later, to fall a sacrifice to the confirmed pox, I shall here make use of the term in that sense; and under that title, consider such disorders proceeding from a venereal virus, as make no material external appearances.

In the first place, it is obvious from reason and experience, that the venereal virus, will be as mischievous to the internal parts of the body, as to the external; but in general, this is not so frequently: For there is a natural propensity in the animal œconomy, to expel what is noxious in the viscera to the external parts. Whether this is from a natural superiority of effort ordained by nature, to preserve the principal animal functions, as much as may be, from fatal injuries; or whether, the internal parts are supported by the vital heat of the body, and thereby strengthened to such an expulsive effort, I shall not take upon
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me to confirm; though I am inclined to think, both share in giving this superiority of power of self preservation. Yet notwithstanding, when the first efforts become unsuccessful, they are subject to become equally liable with the external parts; and when once they have imbibed the poison, and yielded to the oppression, they labour under many difficulties, to shake off the noxious burthen.

A virus in the animal œconomy acts as a stimulus; when therefore the venereal miasm, by whatever cause, is introduced into the blood, it makes not only a disturbance in the fluids themselves, but, as the infected mass passes along, it irritates the internal nervous spiral sensitive coats of the arteries, by which they are provoked to an increase of their diastolic and systolic function; and hence ensues a fever. Whilst the irritation lasts the fever continues; either from an increase of the virus in the circulating mass, or from having attacked some nervous part, whereby the stimulating sensation is communicatively continued: And this makes the distinction between an essential and symptomatical fever.

When the internal organs of circulation are successful in their attempt, and turn the virus either entirely out of doors, by perspiration, urine, or stool, or to the external frontiers, where it is taken up by the weaker, and less powerfully resisting lymphatics of the skin, and thence farther banished from the animal state, the crisis is as fortunate as might be wished for. This is always the first effort of nature, in every disease whatever, but the ill success of this sacred attempt,

attempt, may either be owing to the malignity and quantity of the virus; habit of body; accidents; neglect; error in judgment; but most, to the baneful attack of medicafters of all ranks, forts, and fizes.

There are difeafes afcribed peculiar to the fluids, and others peculiar to the folids; thefe diftinctions are proper; but not more arbitrarily fo, than that either folids or fluids may claim only the greateft fhare; for in fact, folids and fluids are fo intimately united, that the whole is but one mafs, and differs only in various degrees of folidity, or fluidity, whichever we fhall please to call it. We boaft with pomp of our fuperiority of knowledge to the ancients in the circulation of the blood; which great difcovery however, on a ferious confideration, we muft be modeft enough to own, is barely at the dawn. Our microscopes are aftonifhing great inventions; but was it poffible to fee a drop of blood, as it is in its circulation, magnified to the bulk of the whole globe, perhaps we fhould then ftand as much in need of a microscope, as we may feem to do now; and what figures the animalculifts would cut, I know not. However, fortunately by the help of reafon, and thofe valuable inventions of inftruments, we have abolifhed many fantaftic notions of the ancients. But thefe vacancies which we have made, feems to fill up pretty faft with other abfurdities, equally ridiculous; and it is but juft, that our pofterity, fhould have fomething to alter and cenfure as well as we.

Since the folids and fluids are in one continuation, and fo intimately the fupport of each other,

other, it follows to a demonstration, that they must ever be partakers of each other's malady : Yet one of them must carry the predominancy : And in this sense I would always be understood. When the blood is affected, the indisposition must of course be universal ; the wandering virus therefore which has gained its admission in the sanguineous mass, must make the patient liable to as many different diseases, as various parts the blood passes through ; and the patient must, if left to nature, depend principally on the vigour and ability of each viscus, or part of the commonwealth, which the noxious virus passes through, to oppose and propel its attack : But to this, we must not forget to add, that since the blood contains the nutriments of all the different kinds of solid substances, it may be variously affected by the attack, so that one part of the mass, may be contaminated more than another ; and therefore, make such corresponding parts of the solids most liable to have their natural course converted from the order of health : This last, together with the first mentioned cause, must principally depend on the nature of the constitution of the patient. Add to all this, that the venereal virus is peculiarly subtil, and penetrating, it is not easily shaken off from any part, and will unawares insinuate itself into every part of the animal frame.

The first symptoms of a poxed blood, is an universal weariness and lassitude ; cold shiverings, succeeded with an inward heat ; and though in general not a very high fever, yet a disagreeable, piercing, burning, intermittent heat, and
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an acrimonious chapping in the palms of the hands, and soles of the feet: This fly lurking fever, with intermittent chills, and universal lassitude, exchange with anomalous paroxysms. A dull head-ach, pain in the limbs, and in the bowels, intermittently, pay also their attendance; particularly as the patient is getting warm in the bed.

Whilst these complaints are wandering and shifting from one part to another, it acts much like a slight intermitting fever proceeding from catching cold; or from a surfeit; in general with little acuteness, but with more wandering indispositions; and the mind labouring under a wretched dejection.

If these symptoms are attended with ulcerations, excrescences, or tumours, either about the genital parts or elsewhere, there can be no room left to doubt the suspected patient labouring under the approach of the pox; but what I chiefly here hint at, is the pocky internal symptoms, without external or local appearances; and can only be judged to be the effects of a wandering virus, from preceding impure coition, or ill managed local diseases, from the first infection.

These universal wanderings however, don't in general continue long; but some particular places become gradually more permanently the suffering parts; when the wandering pains will decrease in proportion.

If the lymphatics attack the virus, a venereal itch, and all the variety of the cutaneous diseases, before described, will ensue; which, if not cured, will

will spread its infection back again, till the body is reduced to a most horrid and putrified carrion.

A venereal itch will sometimes in a moderate degree, pester the patient for a long time; appear with great itching and furfurations, then disappear, and occasion nocturnal pains. In this itch (under the name of the scurvy) many have laboured, till suddenly, they have been plunged into the confirmed lues, and seen, but too late, their mistake.

If the virus circulates in the glands, it occasions, at times, many tumefactions, and disperses again, before it attacks them in good earnest; and then what havoc it makes, or is subject to make, we have already considered in its proper place: From hence the patient will sometimes, a good while before hand, have off and on, a sore throat, the palate tumefied, the neck all knotty and stiff, &c. and all again on a sudden disappear; till at length the virus becomes fixed and breaks out in some part or other, or perhaps becomes universal.

But when the tendons, ligaments and muscles become the habitations of the virus, the patient is then under a severe discipline; for from hence proceed the cramp, spasmodic and other rheumatic pains.

A cramp very frequently attends venereal pains; and which makes no small addition to the accompanying torments. A venereal opisthotonos, or emprostotonos, has at times given trouble enough; particularly till the origin of that troublesome disorder was properly examined into and found venereal, when mercurials, the properest remedy

proved successful. When the membranes of the muscles are affected with the venereal virus, an obstinate rheumatism ensues; which is either particular, or sometimes becomes universal, and sometimes wandering from one part to the other. Whilst the virus is wandering, it is undetermined, and no part is safe from the attack. Hence such patients, will, all on a sudden, have flying pains, from the head, to the arms or legs, and from thence perhaps to the bowels, stomach, and other viscera: In which rambling attack, an acute head-ach, a sudden apoplexy, and even an epilepsy, is liable to cut off the patient, with very little or no notice.

The rheumatic pains of venereal patients, generally are severest when they are become warm in bed; particularly, if they are accompanied with pains in the bones. When the seat is in the muscular membranes, there will be a stiffness, inactivity, and incapacity of motion; sometimes the parts will swell and be hard, sometimes quite senseless, and at other times again become inflamed and painful. But the pain and trouble is still greater when it is arthritic and in the joints; the ligaments become tumefied, sore, and inflamed; add to this, the synovia degenerating into a bony, cretaceous, or fabulous matter; whereby the joints not only become stiff and gritty, but attended with a continual torture, as if the joint was trepanned, grinding, gnawing, and many other supposed tortures.

A sciatica, is also very frequently the effects of the venereal virus; as also the lumbago: These two are frequently fellow tormentors. Sometimes they

they appear in their symptoms and proceedings, as gouty as the rankest gout itself; either with anomalous, or else with more regular paroxysms; at other times again in one continuation. We have before considered the diseases of the bones; and therefore here only take notice of the preceding symptoms; namely, the nocturnal venereal pains in the bones. These are sometimes fixed in some particular parts, or become more universal. If the bones, which ach, have exostosis, nodes, or gummata, coming on, the thing is plain enough; but such nodes or tumefactions, are liable also to come within the bones, or the inner surface of them; though not so general, as on the external parts: Hence a heavy punging and throbbing head-ach, particularly with a gnawing in the bone, and likewise in other neighbouring parts, which always increase in the night when the patient is warm in bed; and occasion a disagreeable restless effect on the patient; till at length all these evils increase to greater and deplorable heights, if not timely prevented.

When the wandering virus, either is repelled from the tegumental, muscular, or other external part; or meets with the least opposition in the viscera, it is apt to attack those nobler parts, and proves very noxious.

The stomach has a wonderful communication with the whole animal fabric; even so, as in delicate constitutions, to partake of the slightest indispositions; this is particularly conspicuous in the female sex: If therefore the venereal virus should attack this great organ, as sometimes is the case, many very bad consequences, we must

expect to ensue; if it is not drove soon away from thence: A painful nausea, attended with an apepsy, bilious eructations, vomiting, and other disorders, followed by a general and malignant dyspepsy; together with a loathsome atrophy, or else a bulimous greediness; till at length a marasmus, general atrophy, and a hectic ends the scene with death. Nay, sometimes it hurries on with more rapidity; an inflammation, and a vomica will form, which will break, ulcerate, and in the most deplorable manner make quick dispatch.

The intestines however are more frequently subject to be the seat of the virus; and these parts are very apt to be infected on many accounts; for since they are the excretory channel, into which the cystic, pancreatic, and various other ducts empty themselves, whose fountain heads may have received part of the venereal poison; add to this, the many other disorders they are subject too: But besides, injudicious purgatives, are sufficiently capable to bring on a deflux or a venereal dysentery or diarrhoea, and many other evil and fatal consequences.

This is a particular circumstance under this head, well worth some serious consideration; since it occurs very frequently in the latent pox. And I have reason to believe, that this is too generally produced from ill treatment. I have mentioned often as a fixed maxim, supported by experience, that wherever the virus meets with the least resistance, there it is apt to attack, and fix its habitation; now, from the influx of a contaminated bile, pancreatic juice, unwholesome and ill fermented

mented aliments, &c. an acrimony may be generated, and infect the intestines; and thus occasion a bilious cholic, iliac passion, inflammation, diarrhœa, dysentery, or other disorders of the bowels; whereby they become sore, weak, and subject to attract any virus, whether venereal or otherwise, wandering in the body. But such a deflux is too generally occasioned by drastic purges, or the profuse administering of mercury, especially in salivation; add to this, the pernicious adulteration, and even intended admixtures: By such injudicious and mal-practices, a most obstinate venereal diarrhœa, or (if I may so express myself) an intestinal clap has been too often brought on, and attended with a train of shocking consequences.

Amongst the various noxious preparations given to venereal patients, none are more so, than any of the various preparations of lead; which for internal uses, is point blank, a slow but sure poison; which shall be further considered in another place.

In the venereal diarrhœa, the patient is seized with a pungent, inflammatory, and cholicky griping, succeeded with acrimonious, cutting, and foetid stools, attended with a painful tenesmus, and spasm; this flux ebbs and flows irregularly, but with small intermissions, till either it hurries the patient away with the greatest agony, or at length it becomes merely habitual; and by slow degrees, attended with a universal and malignant dysentery, atrophy, hectic, and death.

If the intestines suffer from saturnine preparations, a most melancholy, and heavy contracting

pain in the bowels steals upon the patient; attended with an irksome contraction, suppression of nutrition, and function of the intestines; till at length the reduced half animated skeleton sinks into the earth.

The lungs partake not seldom of the venereal poison; frequently such patients become asthmatical, phthifical, and are hurried to their grave by a galloping consumption: And this particularly, immediately after they have been pronounced cured by salivation.

The heart itself is not exempt from the attack of the virus; a polypus, palpitation, spasmodic contraction, and sudden death, must be and are frequently the consequence. A pleurisy, a peripneumony, or other diseases peculiar to the various internal parts, are liable to ensue from the attack of the wandering venereal acrimony in such parts.

The most destructive attack however, the venereal virus is capable to effect, is in the brain. This part is universally allowed to be the first organ and the sensorium of animation in the existence. As it is the most incomprehensible, most complicate, and most delicate organ in the animal œconomy, so consequently it must be subject to the most alarming and fatal diseases, when the virus has gained admittance to act upon it.

The brain is conspicuously divided into two material parts; the cerebrum and cerebellum. The cerebrum is considerably the greatest part, and takes up the fore and upper cavity of the skull: The cerebellum lays immediately underneath, and behind in the os occipitis. The cerebrum
seems

seems to be principally the preparatory part ; but the cerebellum is the sensorium, and primum mobile of life itself. Certain it is, that on a pressure of the cerebrum, a stupor of the senses ensues ; but at the least pressure of the cerebellum, immediate death. Notwithstanding this, both parts are subject to many disorders, in their nature different from those effects, though for the most part they soon end fatally.

The cerebellum is the fountain head of the medulla oblongata, and the whole nervous fabric ; whose branches and ramifications penetrate into every part of the human body. The whole is encompassed with two tendinous teguments, the dura and pia mater ; these membranes continue their covering of the whole oblongata spinal marrow, and all the branching-out nerves, even to the most minute ramifying extremities, till they are intirely lost. Ten pair of nerves spring out from the medulla oblongata and cerebellum, some of those make out the external senses ; thirty pair from the spinalis, which spread themselves in every part of the animal frame. The cerebrum is divided, longitudinally, in two hæmispheres ; which division is carried on throughout the whole stem of the nerves, even to the extremity of the spinal marrow, so as to prevent the communication of sensation of any of the branches from either side to the other ; yet notwithstanding this, it is so contrived, as to have an immediate correspondence of sensation. The cerebrum and cerebellum consist and are divided into a great number of other parts, cavities, glands, ventricles, &c. and very plentifully

interspersed and interwoven with large arteries, veins, and lymphatic ducts.

This is not the place, or indeed the subject, to examine minutely into this wonderful and mysterious organ; since the variety of diseases occasioned from a wandering venereal virus is here barely intended aphoristically to be treated of; however there is no organ belonging to the animal, where we are more at a loss to trace the manifold intentions of sacred nature, than in this; the ventricles, the pons varoli, corpus pyramidale, corpus olivaria, &c. serve more in the examination of them to augment our wonder and admiration, than to discover their various uses in the animal œconomy. We may suppose the glandula pinealis, or the fourth ventricle, or any other part to be the seat of the soul, or the sanctum sanctorum of the intellects; but what must we say, when we find such parts, together with many others contaminated, and even consumed by ulceration, and yet the patient to have retained his senses in his last moments! We may ascribe madness, or any other defect of understanding, to some disorder in this or that part of the brain, and yet we find sometimes the brain of a madman and that of an idiot, as sound and perfect (according to our examination) as that of the most sagacious. The truth of the matter is, how deep soever we may appear to argue on that score, our conclusions will amount to little more than idle conjecture; yet facts may lead to trace causes, supported by experience; and those may lead to similar ones, where we cannot be mistaken in pointing out inevitable consequences.

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We know from experience, that the venereal virus has caused a cephalalgia, megrim, scotomia, vertigo, catalepsy, apoplexy, phrenzy, or even a raving madness, &c. therefore it may do so again. Now from the disposition of the various parts of the brain, we may pretty near give a guess, how those maladies in general happen. If the virus attacks the dura mater, pia mater, or any part of the cerebrum, an inflammation must be apt to ensue; by which the various passing and repassing blood vessels must be distended, and compress the various parts of the brain, by which the vital functions of the brain must necessarily be impaired; add to this, the noxious stimulation of the virus; and this cannot fail of producing various complaints; a comea, somnolentum, scotomia, vertigo, catalepsy, apoplexy, cephalalgia, hydrocephalus, hemicrania, phrenzy, or mania, &c. according to the constitution of the patient, habit of body, the different parts, and manner of the attack. A simple pressure of the brain occasions symptoms attended with a stupor; but if that pressure is accompanied with irritations from any acrimony, the symptoms must of course be more ardent, and as it affects the nerves, consequently the pain must be more or less violent; produce spasmodic contractions, either in part or of the whole frame; or paralytic lamenesses, either of particular parts, on one side, or universal.

Nothing is more common with venereal patients than head-achs; sometimes only symptomatical; sometimes periodical; sometimes fixed in one particular spot, with a piercing throbbing pain; others

others again, will have a dull gnawing continual pain, attended with a stupor and coma; and some again have been attacked with a phrenzy or mania; either periodically or remained so for their miserable lives. Anatomical examinations have often surpris'd us, on finding what havoc the venereal virus has been capable of in the brain; farcocele and schirrhous tumefactions, nay, even large ulcerations have been found; and sometimes calculous, and even ossified substances have appeared in the very cerebellum.

The spinal marrow is properly a part of the brain, or rather, an elongation thereof: As this is the main trunk of the nerves, which are very liable to suffer much from the venereal virus, it follows, that that part is also liable to the virulent attack, which is also sufficiently evident, from the hemiplegia, paraplegia, or universal palsies, venereal patients sometimes fall into; as well as other dreadful diseases from the same cause.

These, and many more diseases, the venereal virus is capable to give birth to; and in common to both sexes. But women being naturally subject to many diseases peculiar to their sex, they must consequently labour, in general, under more maladies, when their habit is become tainted with a wandering venereal virus.

In men it seems rather improbable that a wandering virus should occasion a virulent gonorrhœa de novo, independent of impure coition; but in women such a case is very likely to come to pass; and I am persuaded, that this must very often happen. At the time of their menstrual discharge, there

there is a very great afflux of humours to the organs of generation; and that the wandering virus, may be attracted to the pudendal parts, in the time of such congestion, and discharge of humours, is more than probable; add to this, a natural acrimony in the habit, which alone can subject women to such fluors, which differ very little from a virulent gonorrhœa.

The organs of generation in women are so subject to attract the venereal poison, that a woman of a tainted habit is seldom or never free from complaints in the internal genital parts, notwithstanding all external appearances to the contrary. The uterus, the ovaria, the fallopian tubes, will sometimes be strongly affected; hence they will complain of heavy burdensome pains in those parts; from which they become subject to violent attacks of the hysterics, furor uterinus, mola, ulcerations, or even the cancer in the uterus, and its various parts.

Women may have the dry or latent pox, for a long time in their habit, as long as their menstrual discharges continue regular; but the moment this salutary course is disordered in the unimpregnated women, the whole animal frame falls into confusion; and besides the wandering or latent venereal virus, lurking in the habit, other malignant humours are from the suppressed menses generated; which all joining together, hurry the whole body headlong, into the most deplorable destruction.

When the ovaria, tubæ, the uterus, and their principal appendages, requisite to the act of gestation, are disordered, tumefied or ulcerated, barren-

barrenness must of course ensue; but a woman may labour under a great variety of pocky maladies, and yet conceive; and what is still more astonishing, even sometimes, against all expectation, she may bring forth a healthy child. However, this is very rare indeed.

When a woman has conceived, a new œconomy, or animal state commences; a wonderful congection of fluids from every part of the whole animal fabric, is attracted, towards the forming of the foetus; and consequently it becomes liable to partake of the intermingled acrimony: In the state of its action, and from its situation, it is strengthened, warmed, and supported by the surrounding viscera, as much as any other viscus in the body; and perhaps may from such support, sometimes, though rarely, have strength enough to repel the approaching poison, wandering in the habit; but generally the virus becomes too powerful, and not only ingrafts itself in the very stamina of the new forming foetus, but even destroys it before its natural prescribed period of entering into the world. Hence, such unfortunate women, who labour under a latent or confirmed pox, are frequently liable to heavy and severe abortions; bringing forth withered, pocky, and sometimes a half putrified foetus. And when they even go their full time, 'tis then but too frequently, they bring forth an innocent sufferer of its parents guilt, in whose stamina are deeply ingrafted misery and disease.

Here then I will conclude this aphoristical ætiology of the various attacks and mischiefs the circulated venereal virus is capable of; we will there-

therefore proceed to a conclusion, and survey the deplorable and horrible dissolution of the fatal conflagration of the confirmed and universal pox.

Of the CONFIRMED LUES VENEREA;
Or, the VENEREAL POX.

AFTER the preceeding examination into the most principal of the various methods, and the various parts of the animal œconomy which the venereal virus is liable to attack, I shall beg leave to conclude this ætiological subject, with a concise repetition of the many different steps, and the gradual progress of this dire disease.

It must be evident to every judicious and unprejudiced practitioner, that almost every malady, which the venereal virus is capable to effect, when it is once admitted to circulate in the body, may also be produced from a variety of other malignant humours; and it is also as conspicuously confirmed by daily experience, that the venereal virus will appear under as many different diseases, as may be enumerated in the whole body of pathology: At least there is so true a resemblance of the one kind with the other, that unless we have incontestable proofs of their first origin, we must, if we are candid, own ourselves incapable to judge properly whether they are venereal or not. If this be so, what shall we do to form a true diagnostic distinction? True; I own the difficulty of the task; but at the same time declare, such diagnostics useless, whenever they become difficult to form.

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If we trace the study of physic from its remotest antiquity, we shall find, that when that noble science was most mysterious, laborious, intricate, and perplexed, it then abounded also, with the greatest absurdities : And as these darkening clouds clear away, simplicity and truth will gradually appear clearer to the eyes of reason and understanding.

A true diagnostic of a disease consists in knowing its nature and effect, and the habit it works upon ; this is materially necessary for the cure ; in regard to its origin, that may be various, and materially different, and yet the effect the same : And the too nice distinction in this particular, has too often served as a misleading ignis fatuus, instead of throwing any light on the rationale of the cure. What reception this doctrine will meet with, among pedantic critics, I know not ; and that I care not, is plain from my having throughout the whole, without fear or hesitation, written the sentiments of my mind. But I must beg, not to be understood to reject all distinctions and enquiries, into the origin of the disease, that a patient may labour under ; far from it ; yet, the nature of the distemper, and the habit of the patient, should always claim the first attention.

This premised, I shall now select the most material pathognomonic signs, from which we may be most enabled to form a rational diagnostic, whether a disease that a patient labours under, may be pronounced venereal or not.

In the first place, a candid confession of the patient, may best be relied on, affirmative or
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negative, to the following questions: Whether the patient has been guilty of impure coition; or subject to any other impure contact with infected persons? Whether the patient at present labours, or lately has laboured, under any local diseases of the venereal kind; as the virulent gonorrhœa, bubo, shankers, hernia humoralis, or venereal excrescences; whether they yet remain, or have suddenly disappeared; and whether after such local disorders, wandering pains were brought on, or other symptoms ensued? And lastly, whether the patient has had former venereal injuries; or whether naturally subject to acrimonious, gouty, or rheumatic pains, fluor albus, stone, piles, &c.? What diet, regimen, connections, accidents, &c.? When these questions are candidly answered, all doubts may easily be removed. In the next place, there are indeed univocal signs, which require no questions to a farther explanation; as an old virulent clap; fistulous bubo; scirrhus testicle, &c. particularly with that class of people who are guilty, and have richly deserved it. On the whole, after all our enquiry and signs, whether they are universal, equivocal, or commemorative; or whether the patient is innocent or not, the effect may be the same in like diseases; whatever appears like the pox, must be treated as such in the cure; if we have a right to expect success, whether pox or no pox. But that such a cure does not consist in giving mercury by spoonfuls, or heaving the patient into a profuse salivation, and that such rash methods, in most cases, are more pernicious

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than the disease itself, I hope to prove in another place.

Let us now trace the shocking malady from its commencement, till the end of its fatal period, when it has gained its full power of destroying the body.

We must however previously observe, that the various manner of its operation, differs not only according to the period in life, but according to the difference of constitution, habit of body, and disorders the patient is most subject to contract. Thus, for instance, a child whose juices are in general very plenty, and whose solids are soft and flexible, will, in that disease, be subject to be hurried into an universal pustulous corruption and ulceration; the bones become tumefied and osteofarcous. A middle aged patient, or one in the vigour of life, is more subject to exostoses, nodes, phymata, ganglions; all which tumefactions will soon break into phagedænic ulcerations: Whilst patients in more advanced age, will be more inclined and subject to a dry scurfy leprosy, elephantiasis; universal caries, spina ventosa, and a mouldering brittleness of the bones, &c. But all these circumstances are variously altered, by tempaments, climates, habits, regimen, and an addition of other infirmities and diseases: Thus a child, who labours under this disease, attended with an inward hectic fever, will be affected like those of a far advanced age; whilst elderly patients of pituitous habits, have their condition altered accordingly. We must also recollect, that such parts as first received the infection, are apt to suffer most; and where there
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has been formerly an infirmity, such parts the virus is apt to attack the severest also. However, these rules are not without exceptions, as I have before demonstrated.

The first symptom which a patient feels of the universal infection, is a slight irregular intermitting fever; attended at first with a slight pain in the head, arms, legs, knees and ankles; together with a heavy irksome lassitude and depressed spirits. These symptoms come and go irregularly; but gradually the pain increases, and particularly at night when warm in bed: The nights become more and more restless, and are spent, with tumbling and tossing to and fro, till at length, a little sleep in the morning, refreshes the worried patient, and strengthens him to support the next night's torment.

The head-ach gradually grows heavier; sometimes with a dull heavy pain, sometimes more acute: Some have their pain fixed in one spot, called the clavus, seeming as if a nail was drove into the head, or being bored either on one part of the skull or the other. Gradually little bumps are felt on the skull, arms and shins; which, together with the joints, becoming painful, take it by turns to torment the patient continually.

A scurf and furfuration in the mean time comes gradually on; the eyes are lipped and sore; an inflammatory tettery furfuratious eruption begins on the eye-brows and forehead, works itself all round the temples, the hairy scalp, down the neck, and thus crowns the patient with the venereal laurel. The tettery eruption creeps gradually farther about the face, and into the

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ears, infects the ear-wax, corrodes the auditory organs, fills up the cavity with sloughy, scabby and stinking matter; from hence partly ensues a tinkling, hissing and ringing in the ears, together with a heavy dull pain in the temples, and a defect of hearing. The tettery eruptions encrease; the lips become sore and scurfy; the crevices of the mouth and nostrils crack; these rhagades fester, become hard and callous, and issue a sharp corroding ichor.

The whole skin becomes rough, covered with small yellow branny scales, attended by turns with a sharp burning itching; the eyes look dull and heavy, red and staring; the face becomes bloated, scaly and livid; interspersed with efflorescent spots and tubercles. In the mean time the almonds swell, become hard, and throb with a dull pain; the neck becomes hard, stiff, and all between the mastoideus, coraco-hyoideus, and other muscles, phymata are variously interspersed of divers magnitudes. The mouth begins to grow sore; the cheeks within become strewed with fiery phlyctanæ; the tongue swells, becomes covered with a hard rough slimy slough and crust; the palate and throat are swelled, and sore; the roof of the mouth is beset with hard tubercles and nodes; the nose swells; the nostrils are widened, and stuffed up with scab slough and offensive ichor.

The scurf in the hairy scalp grows crusty, the hair loses its natural colour, swells thicker than ordinary, turns white, and gradually falls off. The wrists, hands, and fingers, swell; the nails grow large, thick, rough and yellow, fester, and
drop

drop off. The phymata, gummata, grow picked, inflamed, exsudes a viscid ichor, which scale and cover them with branny crusts. The bones swell, particularly at the joints, and become rough. The nodes inflame, the joints grow stiff and sore; the voice hoarse; the language unintelligible; the respiration difficult; the lungs oppressed; the appetite depraved; the mouth stiff and half open; the breath loathsome and foetid; and the mind is loaded with melancholy, wretchedness, and despair.

This is the true venereal pox, ready to burst out; and in this state it appeared in general, when it made so great a noise in Europe; and of which we lately have had, and perhaps at this time may produce specimens, particularly in some of our hospitals. We are blessed in having discovered some of the incomparable virtues of hydrargyral preparations, particularly in this malady; but we shall still be blessed more, when we learn the proper and discretionary use of this sacred drug. It is to the virtues of this universal medicine (if there be any such in nature) that *we* (even the innocent with the guilty) do not fall so often martyrs to this infernal disease as the antients; since our high rank of finners are (if not superior) at least, equal to the antients in luxury, lasciviousness and other vices; our lower class, humble imitators of their superiors, added to slothfulness; and the middling rank partakers of both. And I beg leave to add, that notwithstanding our physical knowledge is in such glory, it is yet clogged with absurdities equal with those of the antients; to which, I

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humbly conceive it is owing, that though this dire malady is feldom in its former aspect, yet it is often converted into others; though not so horrid to the sight, yet equally as fatal to the patient.

If we seriously examine the pox, the yaws, the leprosy and elephantiasis, we shall find they are different kinds of the same species of malady; and differ only according to the habit, climate, and manner of contraction.

If this was the affliction of Job, (as undoubtedly it was, if such a martyr existed) and particularly if he was innocently infected, or that perhaps the disease was bred in his own body, either from grief, sudden shock of his misfortunes, and the sudden fall from his prosperity; (if I may be allowed to cite natural causes) he was heartily to be pitied in his calamity; and no wonder that the agony of his mind, together with the weakness of his intellects, added to the pain of his body, should tire his patience, and make him burst out in an exclamation against his existence. But to return to the lues.

If the patient laboured under an inveterate remaining purulent gleet, at the commencement of the symptoms, of the approaching pox, that will by this time be aggravated in a most malignant and phagedænic clap; added to shankers, phimosis or a paraphimosis; together with porri, verrucæ, cristæ, mariscæ, fici, &c. which excrescences will be strewed over and about the tegument of the penis, scrotum, perinæum, groins, and anus in man; and variously within the pudendum of women; which will encrease, become confluent,
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and reduce the whole pudendal parts into a state of a putrid and phagedænic ulceration.

Buboes will also arise; become hard, scirrhus, cancerous, and have fistulous communications with phymata, interspersed between the femorine muscles, and communicate the ulceration to all the neighbouring parts.

The patient now intermits anomalously, with (apparently) a variety of fevers; sometimes he is cold and shivering; then in a piercing heat; now again, a full and heavy pulse, with a palpitating throbbing of the heart; which is exchanged with an irksome, stinging and colliquative sweat; then again, a feeble tremor, small depressed pulse, with a universal weakness, dimness of sight, scotomia, and syncope; till struggling nature retrieves a little, and roused by the gnawing virus, stimulates the animal fabric to its confused and distressed functions, till the various forementioned irregular paroxysms, are anomalously repeated.

The crisis is now at hand. A continual gnawing pungent pain is in the whole head; the forehead, the eyes, the bridge of the nose, the temples, the roof of the mouth, together with a grinding pain in the bony part, and an inflammatory burning ardour in the softer takes place; add to this, a burning dysentery, stranguary, or ischury, difficulty of speech, swallowing, and respiration. The patient in this deplorable condition experiences all the torments, (added to that which is still greater, a guilty conscience) which human ideas may conceive to be the lot of the damned.

At length the tumours, nodes, exostoses, phymata, gummata, crack, split, and break open, into malignant, phagedænic, and a confluent universal ulceration. The crusty scab of the skull bursts variously, and flows with fœtid pus and ichor; the nose bursts into an ulceration, the cavities become filled up with excrescences; the eyes are clogged up with matter, and sometimes one or both in an open ulceration; the ears run with a most offensive ichor; the mouth is ulcerated, the roof corroded, and opens a wide corrode passage into the nose; the throat is in an external and internal ulceration; the teeth drop out; and the breath becomes insupportable to the patient, and all about him. The exostoses ulcerate; the bones become carious, brittle, rotten, and exfoliate, with a sharp phagedænic, and an offensive ichoric matter.

Finally, the animal fabric becomes one continued meer mass of stinking, loathsome, putrid, and pestilential corruption. If the malady proves mortal; the putrid ulceration continues; limb after limb mortifies and drops off; till at length the vitals are attacked and corrupted; the putrid mingled pestilential carcase expires; the offensive carrion is hurried into the grave; and nature is relieved from the obnoxious struggle.

PART III.

ON A Rational and True METHOD of CURE OF THE VENEREAL DISEASE in General.

HAVING thus in the preceding parts examined into the true state of the various destructive degrees of the venereal disease in general, we will now proceed to an examination, and an impartial inquiry into the true method of cure.

It is not enough to know, that such and such medicines, are remedies for such and such diseases; the benefit we must hope from their quality, depends entirely on the knowledge when to apply them, the constitution they work upon, and their quality, strength, and operation in the animal œconomy: Add to this a suitable regimen and proper diet: For without such pre-examination, and judicious indication of cure, the most salutary and effectual medicine, must be liable to prove an additional poison to the disease it was intended to remedy.

On this plan I intend to pursue this medical part; founded on experience, and guided by principles of candour.

C H A P. I.

On Constitutions and Temperaments.

ONE of the greatest considerations concerning the efficacy of medicines, should be the subject they are to operate upon. For the more we reflect on this great maxim, *Medicamentum non agit in cadaver*: the more we shall find, that the laws of motion, quantity of matter, or the peculiar form of the particles of medicines or aliments, can have the least share towards their operation in the animal œconomy.

Mathematics and chemistry, may become highly conducive to prepare the understanding, in forming some rational ideas concerning the animal œconomy; but they must both stand neuter, in the explanations of the various functions themselves: Though undoubtedly they contribute their share together with the various other principles of every kind of phænomenon, and action in the whole chain of nature.

That mankind differ in their constitution and temperament is evident to the meanest capacity; and that they will be affected differently from one and the same cause, must be equally obvious. Since this observation is manifest, even in a perfect state of health, it follows, that it must be an object of the most serious consideration in the state of a disease.

Constitution and temperament, have, for the most part one and the same meaning, having much the same cause for their effects: Yet the constitution in a stricter sense, considers the present state of the body only, whilst temperament implies a natural aptitude and disposition to particular effects; the first becomes more universal, and the latter more particular.

The antients divided temperaments into four kinds, viz. phlegmatic, sanguinic, choleric, and melancholic; and ascribed the origin of such temperaments, to a predominant proportion of certain humours in the subject. The distinctions of the temperaments, and their characteristics must still remain in some degree true; though we have with propriety exploded the ancient doctrine, concerning their origin; as also their strict characteristics in this singular existence in a state of health; for that such temperaments depend as much on the state of the solids, as on the fluids, and are so variously blended, that every subject shares of them, or is liable to the extreme of all in turn, will appear, on a just enquiry in the animal œconomy. But to come gradually to the point aimed at; let us first examine man in his natural course of health, as designed by nature from his birth to the grave: When we shall find the various temperaments vary, with the different stages; at the same time we will find, if they remain undisturbed from this natural course, that such temperaments are conducive to health.

In infancy, (the first period) the solids are remarkably lax, and small in proportion to the
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great quantity of fluids contained in them; by which the fibres are distributed from coming in closer contact.

In youth, as the acmé of life advances, the body becomes more in due proportion; the fibres are more tense and irritable, and the blood of a richer consistence. Activity, perception, liveliness, passions, and good humour, become gradually stronger, and more and more interesting.

Manhood is the meridian of life and the acmé of growth, vigour, courage, strength, passions and understanding. The solids are tense, inclined to rigidity, together with the former share of sensibility; the fluids begin to change from a richness towards a rankness, or alkalescent acrimony.

But now when old age appears, the solids become more rigid and stiff, and lose gradually their exquisite sensibility. The fluids, not only become less, but also less humid, and the circulation gradually becomes slow and languid.

These are the natural periodical temperaments, and in health must consequently follow: according to the course of the commencement, increase, height, and decline of life. But when there is a peculiar propensity for the increase of one kind of humour, more than another, or rather, a laxity, tenseness, or rigidity of fibres, these periodical temperaments, will incline more or less, proportionally from the periodical stage of life, which the present constitution is in.

A phlegmatic temperament will abound with a viscidty and a plentitude of humours; the fibres will be flaccid, weak, and dilatable, with little sensibility,

sensibility, irritability, have a sluggish motion, and the circulation languid and slow.

The sanguinic temperament has the laxity of the solids with the former, but with more sensibility, irritability, and consequently more activity; a redundancy of fluids, and of a rich consistence.

The choleric is the forementioned, in a greater degree of irritability and sensibility, added to a tenseness and rigidity of the solids; and hence, the blood lessens, and becomes rich to excess.

The melancholic temperament has the tenseness and rigidity of the solids stronger than the former, but with less irritability and sensibility; the fluids less in quantity, thicker, and perhaps sharper.

From hence we see that there is a wide distinction with respect to temperaments and constitutions, which should ever be taken notice of. For whilst stimulants may prove beneficial to a phlegmatic, in order to excite the languid circulation, it would prove mortal to a choleric habit: And hence we see the reason why purges, especially if drastic, are liable to produce so very different effects in these two habits. Whilst it may be salutary, to spur on the animal function, and evacuate superfluous humidity in a phlegmatic habit, it will excite an acute fever, promote redundancy of bile, consequently bring on a bilious choleric, diarrhœa, &c. in the choleric and rigid fibred constitution. And so likewise with the rest; the same medicine will have opposite effects, obnoxious or salutary, according to the temperaments, constitution or habits, they are intended to work upon.

We must likewise consider what great effects the climate, regimen, occupation, emotions of the mind, and custom is capable to produce in those particulars.

When we examine the various climates, we must own that every zone characterizes their inhabitants, and the various nations living in them; not only in peculiar diseases, but likewise in custom and manners.

In regard to regimen and manner of living, it is beyond all doubt, that gluttony and scant allowances or indigence, must produce different effects, as also different temperaments, and different diseases. Our occupation likewise must subject us to many good or evil effects, which either corresponding with the natural aptitude, or acting in opposition thereto, must consequently be of great force in the animal œconomy.

But if we consider the emotions of the mind, we discover a field of the most extensive reflection indeed! Soul and body are so absolutely dependant on each other, that the effect of the one must be the effect of the other.

Hitherto we have examined the temperaments of mankind in general, but if we consider the separate sexes, we shall find the general structure of women peculiarly different from men. Whilst men were designed by nature to be strong, robust, and bold; women, on the contrary, are flexible, weak, and timorous; man therefore inclines more from the sanguinic towards the choleric and melancholic temperament; and women from the choleric towards the sanguinic and phlegmatic.

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Besides their structure, independant of the organs of generation, they differ from ours in many respects; particularly, in the make of the skeleton; so that it can only be said, their make and dispositions resemble ours; or, as a just compliment to the sex, we rather resemble them. Add to this, there is something very original in women, which ought at all times to claim particular attention; namely, their periodical menstrual discharge; as we have considered before.

Thus then I have given the various outlines of the constitutions, temperaments, and habits in the general state of mankind, sufficient to point out the various circumstances, relating to different subjects, under physical operations.

To sum up the whole: It appears, that a pituitous blood, together with a flaccidity of the solids, is subject to a dull circulation; and is defective in irritability and sensibility of the solids, and consequently also, of a good crasamentum in the blood: This is the state of a phlegmatic. In the sanguinic, there is too great a redundancy of blood, and too much irritability: as also too little tensesness of the fibres. In the choleric too much irritability for the tensesness of the fibres, and too rich a consistence of the blood for the quantity of it. In the melancholic, the blood is too little and too sharp, the solids too rigid, and not a sufficiency of sensibility.

From hence we may form a proper judgment, why such medicines as may be deemed proper for one, will be pernicious to another, and vice versa. And this ought to be strictly attended

tended to, not only in the venereal disease, but every ailment incident to human nature.

CHAP. II.

On Regimen and Diet.

THE next article worth, or highly requisite to enquire into, is the regimen; the most essential means, not only of preserving health, but to restore it when lost.

Order and regularity are the great preservers of nature; and whatever is obnoxious to that sacred law, becomes destructive in the chain of creation. Custom indeed may work miracles, and make what is most obnoxious to become habitually agreeable; but still, the first onset, and the breaking of it, is always attended with pain. Custom, though powerful, is limited; and whilst we learn to feed upon poison, we may expire in the experiment. Those who hold with the doctrine, that we should accustom our constitutions to every thing, still neglect the best of customs, namely, that of reflecting. And hence they find, that all their wrong chosen customs, together with life, become soon an obnoxious burthen to nature, and their feeble constitution.

Eating and drinking, sleeping and waking, rest and motion, are the necessary external agents for supporting the animal œconomy: each must
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be in a due proportion to maintain tranquility and health. Moreover it is requisite they should have their stated periods: And so true is this, that whenever such habitual periods are broken through, we find our frame disordered. These rules nature points out, whilst custom establishes them; and the nearer they are to the dictates of nature, the more they are consistent with a true choice.

Temperance is the source of health and virtue; without which we cannot attain true happiness. But temperance is not the characteristic of my venereal clients; yet, since I have interested myself in their cause, it is but just to admonish them first of the principal object towards their preservation; and what they stand most in need of.

Before however I begin, it must be observed, that by temperance, I mean not a rigorous abstinence from the enjoyments of life; nor can I see the propriety of condemning a patient because he is sick, to the miseries of want, slavery, wretchedness, and imprisonment: Let a person in a perfect state of health be suddenly plunged from a wholesome diet, the enjoyment of air, and society, into a close confined room, there to feed upon contaminated air, deprived of motion the foundation of life, and a total change in diet; and let us see, whether such a fall, is not equally as powerful as gluttony and debauchery, to ruin the best constitution? Common reason dictates it, and experience confirms it.

Temperance is the medium between superfluity and want; the extreme of either, nature abhors, and must be equally pernicious as well in a state of
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of health as that of sickness. My opinion therefore is, that the same rule which is good in the one, will be so in the other, and let nature point out the difference, which ought to be made.

Air is the principal element, requisite to our existence; and what necessity is there to prove, that our health depends almost entirely on its purity? The state of health pants for the enjoyment of it; why should patients then be deprived of it? No, ye sick, under whatever malady ye are afflicted, quaff this heavenly fluid in its celestial purity! I am so extravagant in this particular, that I would rather lay in the open air, rain, hail, snow, or sunshine, than in a small, close, dark, and confined bedchamber, otherwise ever so elegant.

Light is also requisite to the growth of animals and plants; a plant will wither and decay, if deprived of light, and the animal œconomy can not subsist long without it.

Fire, in a due proportion, not only becomes absolute food, preserves the humours in their proper liquidity, and the solids in a due proportion of flaccidity and tenseness in the animal œconomy; but is also the greatest generator, circulator, and purifier of the air, of any thing we know.

Hence I would always chuse my bed-chamber (sick or well) to be light, lofty, and somewhat spacious; a free admittance for the circulation of air; but so, as not immediately to affect my bed, or person, in whatever part I might be. An open fire-place, and fire in proportion to the coldness, dampness, and condition of the air; but

but fire always, in time of sickness, in whatever disease, season, or climate. My bed should be placed so, as neither to be in the current of the door with the fire-place, nor subject to the direct rays of light. No warming-pan; no close fire-stove; and I would rather have a sow with a litter of pigs, than a close-stool with confined excrements in my room, to breed a contagion; but if I needs must be compelled to such a nuisance, then it should always be kept clean and sweet.

Cleanliness is to the body, what virtue is to the mind; and whilst water could be had, I would wash and bathe, warm or cold, as nature should dictate, as well in the state of sickness as in health. My linen I would shift as often when sick, and if my disease should require it, even oftner, than in my state of health; it should be clean, without starch, well aired by the fire and cooled again; but of nobody's previous wearing, as some have advised; for I have no notion of adding any body's filth to my own.

Sleeping and waking, are the intermittent rest and motion, ordained by nature, to give an agreeable relief and contrast of variety in the animal œconomy; and which seems to be proportioned according to the stages of life, temperament, season, and climate.

As balmy sleep refreshes our body and mind, so motion and activity, the voluntary functions and occupations, give an edge to life; each is therefore requisite to support the tranquility and enjoyment of our being; but each in excess, or deficiency, either disorders, or deprives the human

mechanism of its order, and proves destructive both to body and mind.

This should be attended to, both in health and sickness; and let kind nature for ever be the guide.—Exercise your body and mind gently till you are tired, and no longer; sleep till you are refreshed, but no longer; when the bed becomes irksome, get up, if circumstances permit; and when this again becomes painful, and nature calls for rest, follow her dictates, regardless of the time or hour. In the state of health, custom rules; she assumes regulation, and will be obeyed; but when sickness takes the helm, custom must yield, for nature here will not be troubled.

Passion and emotions of the mind should studiously be guarded against at all times, particularly in sickness. As mildness of disposition and evenness of temper greatly will contribute towards a recovery, so on the contrary, discontent, sudden emotions, but above all, anger and an habitual peevishness, will oppose the most salutary means of health; being sufficiently powerful themselves, to ruin the best constitution. Discontent dwells only in the weak mind, and proceeds from a habit of thinking wrong: For reason and prudence will ever strive to be contented, and look forwards for future blessings; whilst the fool, regrets only what is past, without drawing lessons for present good. Sudden emotions result also from weakness, which may easily be lessened by a custom, of being indifferent, about unforeseen casualties, and in endeavouring to preserve a presence of mind.

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Our food are either vegetable or animal; we civilized nations however have introduced a third from the mineral kingdom; namely, salt. Vegetables, are fruits, herbs, roots and grain; and animals are of every kind. If we consider plants in general, perhaps they were all designed for food, for particular animals; for our food however, nature and experience teaches us, that they must be agreeable to the palate, and yield a saccharine, glutinous, and oily substance; either in their recent state, or incorporated with any humidity. Those however, which are to the contrary, and have an austere, sharp, bitter, or disagreeable smell or taste, do not seem to be appropriated for human food, unless deprived of such acridity either by nature or art: and if any advantage can be reaped from them, it must be from their stimulating quality, on which account many of that class have been introduced into culinary uses, as condiments.

All vegetable substances, which may be deemed nutritious, contain a saccharine quality, and an oily substance; which, as they become properly blended and modified, have a more or less tendency towards acidity or alkalescency; and as they become more or less proportioned in those qualities, they also become suitable to the texture and nature of the stomach; may be deemed more or less nourishing, agreeable and beneficial. And hence the nutrition they yield, depend not so much on themselves, as their proper quantity and the nature of the stomach they work upon.

In regard to fruits, I must previously make this observation, that the production of each climate, is best adapted to its own inhabitants;

and to whatever degree art has arrived, or may arrive, in imitating exotics, it will never be equal to nature in this respect. To judge properly of that most delicious, and most grateful of all fruits, the ananas, it must be cut from the ground, and eat on the spot in the West-Indies, its native soil. I remember, (and perhaps ever shall) with an idea of the most exquisite delight of taste, the first time of such a repast; to which I was led by kind nature, and believe that by this I was saved from the jaws of death; labouring then under a malignant bilious fever.

Fruits, herbs, roots and grain, in proportion as they are saccharine and oleous, become more or less nourishing. Their assimilation is principally effected by the vegetable acid they contain, actuated on a principle of fermentation; by which they are converted into animal substance by chylification. The nutrition they yield is mild, less acrimonious, but more languid than animal food, and therefore suits best in acute diseases.

Let us now consider animal food; wherein they have the advantages and disadvantages from the vegetable. Whilst vegetables have in their nature an acidity, on which principle their operation of change chiefly depends; likewise their solubility on the various modification of fermentation is rendered more or less nutritious, and thus by stimulation converted into animal substances; the animal food acts from a principle of alkalescency; and its solubility is actuated by changes tending towards putrefaction. On this very account they yield more nourishment, and give more strength and vigour than vegetables:

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But for the very same reason too, they are more liable to create acrimony, breed diseases, inflame the blood, and assist to dispose the habit to bile and putrescency.

Tame cattle are chiefly our choice for food, and particularly the ruminating tribe. Our beef and mutton is perhaps the finest in the world; the ox feeds best in low ground, and on succulent plants, whilst sheep thrive best on high land; both which are most happily blended in this kingdom. Our game is also inferior to none in the world. But amongst the rest of the esculent pecora, the filthy hog is introduced as food for our table; which, indeed, is all that the beast is good for. Though this animal may suit many conveniencies, yield great nourishment, and please the palate, yet its flesh is as alkalescent, and as subject to create diseases, as any carnivorous animal whatever: in which class it may justly be reckoned, more than in the granivorous kind.

Meat, as it inclines from a state of rawness to the various preparations in cookery, loses in proportion its solubility and nutriment: insomuch, that raw meat is easiest digested, and yields most nourishment. But on the other hand again; it requires more exercise, to promote a proper perspirability in the animal system to discharge the superfluous alkalescency, in order to preserve the fabric from its acrimony: Whilst boiled or roasted meat, though less nourishing, and not so easily digested, has less alkalescency, and aptitude to putrescency; and therefore not so inflammatory.

Meat, kept some time, is likewise better for digestion than fresh killed : But take care, Epicures, lest you prepare your food to become as pernicious as your own poisonous excrement ! In nature there is no stand. From the moment the animal ceases to live, putrefaction takes place ; and though fresh meat is longer in the stomach than stale, yet its juice is sweeter ; and nature designed the great guts for particles of putrefaction ; but neither the stomach, nor the lacteal vessels. As I would wish to enjoy health, fresh meat shall always be my choice. This is exact to the dictates of nature, to which tainted meat and stinking fish is equally noxious. Yet according to the climate and season, with moderation, and some constitutions, a staleness may be chosen, but never so far as to become sensible to the nose.

Roast meat is preferable, in regard to nutrition, to boiled ; because in the first the gravy is more concentrated, whilst the juices are more apt to be extracted in the latter. In both, however, there ought to be a medium observed ; and this medium, suited according to the constitution, climate and season.

Young meat is most gelatinous and tender ; middle aged, most rich and succulent ; and old, more tough and rank. If young meat is more tender, it wants more spirit to digest it ; and what the old meat has in toughness, is made up in rankness to make it suitable for digestion. These are the reasons why experience contradicts the supposition, that young meat is easier digested than old and tough ; and hence we see
clearly,

clearly, why veal and lamb will become burdensome to many stomachs, whilst roast beef and plumb-pudding, or a boiled leg of mutton and turnips, the best and properest dishes in the whole universe, will agree with all mankind in general, in a state of health; and even exhibit the best medicine in some diseases. But so much may yet be said on this head, that the age of the animal which is designed for food, suits best the digestion of those, at the same proportioned period of life: And this is confirmed by experience.

Having thus briefly given my opinion on the various foods common to our table, I will cursorily consider drink. Pure fresh water is the simplest, and undoubtedly the best; and the greatest promoter of solubility; since it easily enters into the substance of the aliment, intermixes, and has no antiseptic quality; but at the same time, whilst it is void of a stimulus, little only is required to digestion, as a superfluity would be apt to lax the tone of the nutritious organs.

All fermented liquors have their accescent and saccharine quality rarefied, and the subtle essential oil heightened into an alcohol; hence they become not only partakers of an acidity and sweetness, which are intimately and agreeably intermixed within themselves, but acquire a brisk, poignant, stimulating and warming quality to the palate, stomach, and bowels. From which qualities they are highly nourishing, and from the alcohol heating to the system. These are the general effects, more or less, of wine, cyder, ale,

ale, beer, mead, &c. The difference of their quality is principally in their separate and different preparations. I shall not enter here on an enquiry which are the best wines; it would be equally absurd to prescribe the quantity; all are beneficial, used with moderation, but a poison in excess.

A glass of generous wine, nobody in his senses can object to; as thereby the animal faculties are enlivened, and the functions strengthened; in this however, I conditionally agree with the celebrated writer of the Spectator: "The first glass for myself, the second for my friend, the third for good humour, but the fourth for my enemies."

In regard to spirituous liquors, they are downright pernicious, taken by themselves; and the more so, as they are more or less strong, and inflammable: Since they may justly be deemed a highly rectified aetherial oil, of the plant from whence they are produced. Hence they become a resinous, powerful antiseptic, insoluble, and inflammatory spirit to the animal system. When however previously diluted, so as to have its oleous stimulating particles thoroughly blended, it is subject to a new assimilation, and will yield nourishment.

It remains now to be considered, whether cold or hot diet is the wholesomest: In the first place, hot victuals are noxious to the brute creation by nature; a hot bit of meat is as agreeable to the cat as if it was seasoned with mustard; and hogs are apt to be poisoned by hot victuals, at the first experiment. But custom, by repeated trials, will

will gradually reconcile their stomachs, and even make them fond of it, as well as the human species. For custom will work wonders: A dyer will with impunity put his hand into a boiling kettle; the glass blower, the anchor-smith and founder, seem almost fire-proof to astonishment; and I have seen a man drink scalding water without a wry face. Certain it is, that by warm aliments, whether eating or drinking, we promote digestion, chylification, circulation, and what is highly beneficial to the animal œconomy, perspiration. Thus, as a spur to the animal function, it may supply the place of condiment, and have its many great and beneficial advantages. But this does not prove it beneficial always; for to insist on having every thing warm, when the system glows with heat in a fever, is exactly adding fuel to fire, and contradicts both reason and nature. It must also be observed, that hot diet greatly relaxes the tone of the whole system; and though it may assist towards obesity, and promotes perspirability, yet it opposes robustness and vigour.

Here then I shall conclude, and only beg leave to observe, that, a regimen, in order to preserve health, must be guided by temperance, the voice of nature and the basis of human felicity; and, a regimen required in a state of sickness, must consequently be founded on the same principle.

Wholesomeness of food consists not so much in the nature of the food itself as the proportion of its quantity, and the subject it works upon, or the stomach that digests it; for it is sufficiently experienced,

experienced, that whatever aliment, whether vegetable or animal, whether raw, roast, or boiled, &c. if taken according to the inclination of the stomach, or is proportioned to its strength, will produce equally good chyle and nourishment. But there is nothing more obnoxious to the animal œconomy than superfluity. Gluttony breeds confusion and diseases, and poisons the best constitution. Gluttony, in a state of health, is the overloading the stomach; and to eat against appetite and inclination, in a state of sickness, where is the difference with the former? Are not the consequences the same, added to the first disease? In fact, there is not a more dangerous rock for a patient to split upon.

Therefore let temperance be your guide in health; let temperance be your guide in sickness. Eat and drink what suits your appetite and inclination; but take heed not to pall its relish. Finally, follow the dictates of nature and conscience, in all your pursuits; which ever will point out to you the true road that leads to health and felicity.

C H A P. III.

On Medicinal Indications.

IN our ætiological enquiry of the venereal disease, we have seen the destructive branches of this malady spreading themselves into the whole body of pathology; hence it is evident, that in order to perform a radical cure, it requires the aid of all the various indications, and the efficacy of the whole *Materia Medica*. But when we duly consider such indications, and make an impartial examination into medicines in general, we shall find such egregious absurdities introduced into this noble art, proceeding from the ignorance of the mechanical causes of diseases, that we must blush at our weakness in having been so long mistaken in the real effects of ailments as well as their remedies.

My business here is not to point out all the dangerous errors of physic, that offer to my view in that light, and must stand condemned by reason and experience; yet whilst my subject is of so extensive a nature, I will endeavour to remove such stumbling blocks as obstruct my passage, without reproach to their authors, or fear of the displeasure of such as are guided by prejudice. How ungratefully soever this office may be received by some, yet I am sure of meeting with approbation from others of superior principles; but my
greatest

greatest reward is self-approbation, in acting as a faithful member of society.

When physic was most mysterious and obscure, it was loaded also with most absurdities; and the most ridiculous notions that ever could enter into the brains of a mad-man, were sophistically taught at schools, in order to account for maladies, in a manner mysterious and intricate; for natural causes were too vulgar to be adopted. The planets and heavenly motions were not only brought to their aid; but witches, and even the devil himself sometimes was supposed to have a hand in it. It is natural to suppose that their indications and the virtues ascribed to medicines were equally ridiculous. Peculiar veins were opened for peculiar disorders; and medicines received their commission to march either to the head, the heart, liver, lights, or to some other parts, to do their offices, according to their conjectured qualities. Hence proceeded a swarm of unmeaning terms, as cephalica, hepatica, antimagica, &c. which served only to obscure the road to truth, to puzzle the understanding, and mislead the judgment. How far those unmeaning terms have been abolished, and how many yet remain, I leave writers and readers of the *Materia Medica* to judge, and determine their propriety.

My indications here are antivenereal; which must consequently be as extensive as the various branches of the venereal disease. But whilst the venereal virus is an introduced acrimony, productive of evils which other acrimony, though differently

differently generated, may also occasion; it must be an absurd notion to suppose that antivenereal medicines are confined to the lues only; or that the lues is exempt from receiving benefit from such medicines nominated for other indications; common sense must dictate the contrary, and experience confirms it.

I shall not say more on the various improprieties which have ever been a veil to the beauties of physical truth, but pursue my plan, by which I hope to lay a solid foundation to a safe and lasting cure; not only of this dire malady, but such as are similar in their effects, though materially different as to their causes.

To begin then, I will first examine the principal indications in physic, such as have a real existence, and a true medicinal operation for their foundation: And in describing their proper and improper effects in the animal œconomy, I shall point out the most effectual methods, and the best medicines endued with such virtues; as are confirmed by experience and authentic observations.

In the first place, we must establish it as a maxim, that diseases and their opposite remedies, act on the solids as well as on the fluids. This I have mentioned before, and cannot see what feasible objection can be made to this proposition, as it is sufficiently proved by experience; which we shall farther illustrate. Secondly, medicines either act as stimulants or sedatives; that is, they either increase the irritability in the system, or else lessen it. Thirdly, medicines either produce acrimony or destroy it. Fourthly, they are
either

either attenuating or inspissating. And lastly, they either increase or diminish the system.

These are the principles of all the indications of medicine; and which, on a proper examination, we shall find to be the basis of the various operations. Hence we find, that such medicines as are most powerful to produce such effects, must consequently be salutary or injurious to the system, according to their proper or improper application. Let us now proceed to particulars.

Of E M E T I C S.

VOmitting is a convulsive evacuation of the contents of the stomach by the mouth; occasioned by a stimulus of its nerves, either from noxious particles contained in the stomach, or from a symptomatical irritability of the nervous communication of other suffering parts; and continues this evacuation as long as such irritation stimulates the nerves in the stomach.

There is perhaps not a more tender organ in the human body, and which has so universal a connection in the animal system as the stomach. It is subject to draw a sympathetic sensation from the remotest part of the body, and vice versa. When the stomach is affected, there is not a part of the whole body, but what becomes interested, and shares the sensation of its agony.

Medicines afford us many kind of emetics; but of all, the ipecacoanha is the safest, simplest, and best; which, as a vegetable substance, extends not so far as the second passage; and not

apt to vellicate the nerves in the stomach beyond the time of the operation. The dose should be regulated according to the constitution from ten to twenty grains *; and I hold the substance in powder prepared in a draught, with some pure water and balsamic syrup, or made up in any other form, to be the best vomit of any. The emetic tartar †, and the antimonial wine §, I have an objection to as an emetic, particularly in delicate and sensitive constitutions, as they are apt to insinuate themselves into the nervous coat of the stomach, and continue their emetic quality to too great an excess. Yet they have their uses as emetics in robust and sluggish habits; but as diaphoretics in very small doses, in fevers, they often prove very successful.

But more pertinent to our subject is the turpeth mineral, generally used in venereal cases. This medicine, if applied with great caution and circumspection, and truly prepared, may have its good effects; which is chiefly owing to the forcing the mercury into the mass of blood. But as it has often very suddenly brought on salivation, together with an emaciated stomach, I disapprove of it entirely, particularly as an

* Not long since it became fashionable to believe, that one grain of ipecacoanha would be as effectual as twenty: this was harrangued on with much eloquence, and taken for granted by those, who consulted the fashion more than judgment; but such philosophy could not subsist long, as having nothing but sophistry for its foundation.

† The dose of emetic tartar is four grains, and should previously be dissolved in some warm water.

§ An ounce of the antimonial wine is a dose. It is a neat, but a precarious emetic.

emetic;

emetic; since we have more effectual methods than to have recourse to such a poisonous medicine.

A vomit is best taken in the evening; and the operation should be assisted with drinking copious draughts of warm water, after every evacuation: oil or butter, mixed in the water, (as is customary with some) may indeed increase the operation, but from the nature of the thing, it must be hurtful to the stomach itself. But instead of all the various customary drinks, bare warm water, or sherbert is the best; if there is a redundancy of bile, sherbert is proper; but that should be weak. The draughts should be increased and decreased in proportion to the beginning, height, and end of the operation; four, five, or six evacuations are sufficient; and particular care should be taken to avoid catching cold; for which reason I should (if circumstances do not prevent it) prefer the bed, properly prepared.

After the operation, rest is proper; and, if it is requisite, an analeptic may be given; but no anodyne, unless the greatest necessity requires it. A glass of generous wine, or good rum punch, accompanied with a little pepper-mint water, (the best of all the califacients) may be administered with success. No slops of any kind; water-gruel, sago, falop, &c. &c. they serve only to ruin the stomach again. If the appetite craves, a little crust of bread, or dry toast exceeds them all; which will recover the tone, and prepare the stomach for its future functions. And it should be religiously observed, that the first meal

meals after emetical evacuations, should incline rather to be sparing and temperate, and proportioned to the strength of the stomach.

To conclude, vomiting is one of the most powerful operations in physic, but ought to be chosen with great judgment and circumspection. In venereal cases it has also its benefit; but is in general very seldom required. When however it is requisite to call in its aid, it shall be mentioned as I proceed, in the following chapters.

Of CATHARTICS.

Purging is a successive evacuation by stool; occasioned by an increased peristaltic motion of the intestines. This stimulus may be produced variously; either from a bad digestion of aliment, or an attraction of morbid matter in the intestines; but our enquiry is here the effect of medicines.

Purging produced by art is generally divided into three different kinds; the gentle, the moderate, and violent. The ancients had a notion that they could purge away every thing obnoxious; they succeeded so well, that the life of the patient frequently went in the last stool; and I am afraid purges are thought too much of yet by the modern practitioners, for the welfare of patients.

That purging drains the humours, is beyond all dispute; but when we consider that such draining is from the whole mass promiscuously, we cannot, with just reason, maintain the notion,

that it should affect particular humours. The doctrine of cleansing the body by purging has a very rotten foundation; it has been the ruin of many patients; and is yet one of the greatest stumbling blocks to physical indications: For, when we consider the intimate combination of the solids with the fluids, and that both share in the attack of a virus or morbid matter, we see at once the impropriety of that scheme; except indeed, that by the irritation of the intestines, the means by which purges act, a revulsion may be brought about, and the grievance thus perchance be carried off. But this is owing more to lucky chance than good conduct.

If purging could cleanse the body from acrimony, no time would be so proper to put it in execution as in the rheumatism and the gout; which however is now from sad experience well known to every practitioner, to be improper. But why is it so, and from what cause? If the acrimony is conveyed by the fluids, why is purging more improper in those cases than in the itch, or other chronical distempers, where purging is administered with impunity? If the fluids contained and were the conveyers of the virus, or other acrimonies, unexceptionably, (as has been erroneously established as a principle of physic) I apprehend there could be no better means, to recover a patient in every ailment, than bleeding and purging; and Dr. Laet's maxime of *driving out the enemy at both doors*, would undoubtedly be the best. But reason must dictate, and experience proves the contrary. For not only purging by its irritation weakens greatly the

the abdominal viscera in general, but impoverishes the blood, and renders the stamina of the solids which are oppressed with acrimony too feeble to expel the noxious stimulus. Add to this, that instead of draining the fluids, it frequently causes an absorption of the acrimony into the whole mass; and how often do we not see bilious diarrhoeas, malignant fevers, &c. brought on with purging in common cases; and the pox sometimes produced from a simple clap, by what is called a good dose of physic?

I would not be understood by this to condemn purges intirely, far from it; in gross and leucophlegmatic habits and chronic distempers they are of singular service, and frequently very beneficial to women and children, being very powerful as anthelmenticks. But in hot, choleric, and acrimonious habits, I do not know a practice more baneful than purging, except where mercury accompanies it; for mercury may indeed prevent mischief from the purge, and by frequent repetition may do some good; (that is to say) the mercury may at length do more good than the purge does harm: and upon that basis stands the reputation of your alterative and cathartic pills, draughts, electuaries, &c.

There are very few cases where I would recommend purges; and these should always be of the gentle kind. Draftic purges may indeed cause a revulsion, but they always border upon inflammation, and even in the coolest habits are liable to do mischief.

A purge is generally taken in the morning, but this is very immaterial, provided the stomach

is not loaded; for in that case, it first will have its play as an emetic, or perhaps not work at all, becoming absorbed by the aliment.

Rest is undoubtedly both agreeable and proper after a purge; therefore if the stomach is tolerably empty, in the afternoon, I should prefer that time for this operation as much as for the vomit; as a good night's rest upon it would greatly put nature to rights again. In the operation there should be very little exercise; and there is no drink I would recommend more than bare water; which should be drank moderately after every stool. A crust, or a piece of toasted bread, with a glass of generous wine or punch, will feel as comfortable as it is proper, after the purge has fully operated, when the spirits are flat, and the bowels are weak. Temperance, after a good sweeping of the belly, is absolutely necessary to be religiously observed; and as much as health, or perhaps life, is worth.

In regard to the various stages of the venereal disease, there are but very few cases where purges are necessary; which I shall point out in their proper places. In the general course however, a slender regimen is attended with less risk, less pain and trouble, and answers the purpose much better; for all the difference of a purge, let the portion be what it will, or as fine as it will, differs from a diarrhœa in this only, that the one is from an accidental, the other from an intentional disturbance in the belly.

I shall now say something of purgatives of another kind, namely, by the anus; and this is the properest way, and the only way I would have
purgatives

purgatives administered, where there is an absolute necessity of emptying the bowels. But at the same time, I should not chuse to be poisoned that way neither. Let a physical man of judgment and candor, in the morning when sober, examine our dispensatorial formula's of clysters. It is needless to point at particulars; the generality of them, however, I should be very loth to have administered to my horse or dog.

When we consider the delicacy of the villous lining of the intestines, and the absorbing lacteals which have almost an immediate conveyance to the blood, we shall immediately be convinced of the necessity of having the most innocent clysters; and experience shews that they are also most effectual in a judicious indication. Boiled milk and water should be the fixed standard of the vehicle; a little Castile soap will always promote the peristaltic motion to an evacuation, nitre will prove a diuretic, diaphoretic, antispasmodic, and antiphlogistic; sugar will be nutritive; and lastly (accept it as a valuable present) some few drops of the spirituous solution of sublimate mercury* in the above vehicle, will radically cure the most inveterate exulceration in the intestines, whether proceeding from venereal virulency, inflammatory dysentery, or other malignant acrimony. The quantity of milk and water in the clyster should be proportioned to the patient; from a pint to a quart, tolerably warm, but not hot; and repeated occasionally.

* The proportion of the solution is one grain of the sublimate to one ounce of the rectified spirits of wine.

We will now proceed to other indications; which nature has pointed out to us, as more effectual drains of the acrimony in the system; from whence, if we act with care, many benefits result.

Of DIURETICS, DIAPHORETICS, and ANTISPASMODICS.

I Have placed diuretics, diaphoretics, and antispasmodics under a general title; since their operations have always a friendly connection with each other, when administered in a degree beneficial. I am not ignorant of the exceptions to this rule; nor a stranger neither, to the precariousness of each operation when separate. Stimulating diuretics are inflammatory; sudorifics may melt down the whole animal system into an alkalescent serosity; and antispasmodics may be carried to a degree of palsy. Wherever either operation is required, the assistance of the whole should be partly employed; particularly in the disease we are here treating of.

Temperantia is the most effectual indication; and of all the saline preparations, let them be ever so curious and elaborate, the depurated nitre is the only one that can be depended on. Of all the various antispasmodics, the truly prepared factitious cinnabar is the most powerful. These two are the principal ingredients of the PULVIS ANTISPASMODICUM STHALII, to which (very justly) so many virtues have been ascribed.

But

But, as in all fevers, where there is a spasm in the fibres, there must in consequence be an acrimony in the system, from whence an acridness of urine, or obstruction of perspiration is produced; it is requisite therefore to have this acrimony corrected. This is effected by mercury alone; the cinnabar contributes much towards it; but as it is deprived greatly of its activity, by its being intimately combined with sulphur, it acts principally only as a sedative; whence therefore I have, with the greatest success, added a small proportion of calomel, not only in venereal cases, but in all kinds of fevers whatever. This is however diametrically opposite to the general established principles of physic; but I must beg leave to observe, that my ideas of mercury differ widely from those gentlemen, who never administer it, but to excess; no wonder therefore, they should maintain a bad opinion of it: However, on a little closer examination, we shall find the fault not in the mercury, but in the manner of applying it.

The powder composed of the above ingredients (according to the proportion I shall give hereafter) may be with justice esteemed the superior and most effectual of its kind. By virtue of the nitre it is diuretic and diaphoretic; from the cinnabar it is antispasmodic; and by virtue of the calomel, it corrects acrimony; so that what acrimony remains in the system after the discharge by urine and sweat, is corrected by this *panacea medicamentosis universalis*.

Since I have now given one effectual medicine, what need is there to enumerate more? I

shall therefore mention those diuretics and diaphoretics, which nature dictates; namely, to drink plentifully of that best of all drinks, in fevers, pure water, particularly if nature craves it; and cold too, if agreeable. A copious draught of warm wine-whey or punch is highly recommendable, but the nearer it approaches to weakness, the more effectually it will assist a gentle discharge of the stimulating acrimony.

To conclude, the indication of expelling a virus either by stool, sweat, or urine, is very precarious and uncertain; and the more we force such evacuations, the more we are apt to increase the very acrimony we intended to expel. Nature indeed may perform and frequently does it; but art in that respect can do no more than open the passages; since the virus may be ingrafted in the very stamina of the fibres themselves. But to correct it, or in other words, (though not strictly physical) to neutralize the virus, is the greatest perfection we have arrived at; with which, if we act skilfully, we may perform all what is requisite to the cure of most diseases.

Thus far I thought proper to prepare my reader on this subject, in order to avoid a multiplicity of words when I lay down the methods to be observed in the various stages of that dire malady here treated of, requisite to perform a rational and successful cure.

Of ANODYNES.

THE utmost wish of a patient who is excruciated with pain, is ease; this becomes absolutely necessary at times, in order to give nature a respite, that it may have a chance to free itself from the obnoxious stimulus it is entangled with.

Opium is one of the most powerful, at the same time the most precarious medicine in the whole *Materia Medica*.

In the first place, opium should never be had recourse to, but in great extremities of pain.

Secondly, it should be entirely rejected in universal inflammatory fevers, or great exulcerations; since from its relaxing power on the nervous system, it prevents the natural efforts of the various secretions, by which the morbid matter, either by urine or sweat, may be expelled, and thereby aids the increase of the virus contained in the inflamed blood; which, when the nervous system has recovered its natural tone, acts with more violence than before.

Opium however may be administered, in strong spasmodic contractions, proceeding from meer irritability only, an obstinate nausea, cholic, dysentery, ischuria, hysteric, furor-uterinus, or the like; but with the greatest caution and circumspection. In regard to the dose and the preparation, I shall defer this to another time, and here only observe, that opium may be greatly deprived of its narcotic and deleterious quality,
and

and yet retain its anodyne. On this principle depends the preparation, which I shall give hereafter.

Of ANTACRIDS.

I AM apt to think, that this grand indication has remained hitherto in obscurity; for the established though erroneous principles, of expelling the noxious acrimony by evacuations, have given birth not only to many grievous mistakes, but prejudiced the mind with so many absurd notions, as to obscure the nature of antacrids, and confound them with opposite and destructive effects.

By antacrids I mean such medicines as correct the acrimony in general in the animal œconomy, whether proceeding from the venereal virus, or from other virulent humours; and such a medicine is mercury. But I am at a loss to express my surprise, at the so long remaining erroneous notions, concerning the efficacy and operation of this excellent drug. Its effect to salivate is equally powerful in health as in disease; and equally apt to generate the most malignant ulcers in the mouth; and how the absurdity of relieving one evil, with that of bringing on another, should yet remain in vogue, and even be continued by such great men as this age can boast of, is actually, on serious reflection, astonishing. I shall here say no more on salivation. I do not know one single practice of the antients, in which they erred so grossly against reason, as the moderns have

have done in this abominable practice; and it will ever remain a stain on physick, to the latest posterity.

Mercury, if skilfully administered, is the greatest and most universal medicine in nature; as there is not perhaps one ailment incident to human nature, that has an acrimony for its basis, but what may be cured with this most excellent drug, if the malady is at all curable. It is therefore erroneous to confine it to venereal disorders; for how nearly all disorders of acrimony are connected in their effects, I have demonstrated before; and it is manifestly confirmed by experience, that their remedies must be alike.

There is not an acrimony in the animal œconomy but what mercury absorbs, corrects or annihilates. But so powerful is this universal antacrida, that if it overbalances the acrimony it is intended to correct, it becomes obnoxious itself; and hence it follows, that in many cases the smaller the doses can be administered, the more we may hope for success; as thereby it may enter into the ramifications of the vessels, search every minute part in the animal frame, and effect the success we may hope and wish for.

Of EXTERNAL INDICATIONS.

And first of BLEEDING.

THE first under this head worth a serious enquiry, is bleeding. There is nothing more common in fevers than the prescribing of this operation,

operation, and I will venture to affirm, that in general, nothing is more improper. By bleeding we may reduce the irritability of the system, since we lessen the system itself; but it is ridiculous to suppose it capable to produce an evacuation of the malignity itself. Yet, absurd as such a notion must appear to common sense, it has had its established fashion, and been followed to the destruction of many millions of lives. At this time however (fortunately) this operation has lost much of its repute, and it is high time it should; for my own part, I am apt to think that in Europe more have perished by the lancet, than by the calamities of war.

I shall not dwell on the various improprieties of bleeding in fevers, and other maladies, or take notice of the few benefits that it can possibly afford; suffice it to observe, that it must effectually check the salutary efforts of nature, enfeeble its powers, and obstruct perspiration. This is but one of the many evil tendencies of bleeding; but our enquiry chiefly relates to the venereal disease, where, of all others, it cannot be admitted.

All that we can possibly hope from bleeding, is lessening the quantity of fluids, and relaxing the tone of the solids; but at the same time whilst the sanguineous vessels are thus emptying, it naturally follows, that the whole system must suffer from such evacuation, and that the veins must absorb from the lymphatics and every other part. In such an act it cannot fail, if there be any infection, and if ever so externally, but that the whole mass of blood must become infected; and
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this reasonable demonstration is too frequently confirmed by sad experience. I will even maintain, that the very method laid down by some of our physical writers on the treatment of the first stage of a virulent and recent gonorrhœa (viz.) to bleed freely and repeatedly in the arm, to administer gentle and cooling purges, and to forbear the use of mercury till the fever is abated, is the most direct way to infect the whole mass of blood: And hence we generally find that those unfortunate patients are headlong plunged into all the consequential calamities of the pox, before a proper cure is attempted. It is asserted that mercury rarifies the blood, and therefore is apt to augment the inflammation; this is absolutely false, unless given to excess.

Experience and reason confirms there is nothing more effectual to alter the whole constitution, and to ruin it for ever, than great hæmorrhages; and that which is the same, excess of bleeding; and that many are thus ruined (that have escaped the grave) is better known than acknowledged. I could say much more on this head, but I think it needless. I shall therefore reserve this till a more proper subject.

Of BLISTERING.

THIS application it seems the venereal patient has had the good fortune to be excluded from; which I very much wonder at; as there might be as much said in favour of that kind of punishment, as many others even more

more absurd, that have been generally inflicted on them.

I shall be short on this head, as it does not seem to come immediately under my present subject; suffice it, that those who have supposed blistering would drain off the bad humours, have been grossly mistaken. All the benefit we may hope from it, is to attract the humours towards the external parts, or to introduce acrimony in the system, whereby the whole fabric receives an additional spur to exert its various functions.

There are cases where blisters have their benefits, and perhaps may bring on a favourable crisis; but in the general course of practice, nine times out of ten they are applied improperly; and the remedy too frequently proves worse than the disease.

Of BATHING.

BATHING has ever been esteemed as highly pleasing and conducive to health; for my own part, I hold it the most beneficial of all physical operations. It is not only on account of the cleanliness, but from a quality it must naturally have, of correcting acrimony, becoming antispasmodic, increasing the quantity of humours, and consequently promoting the various secretions: And this answers almost all other medicinal indications. The benefits of bathing are so universal, that there cannot possibly be an ailment incident to human nature but what must receive benefit from this grand operation. This

was well known to the antients, and practised even to abuse; which is not less the case with the moderns. But unfortunately mankind will ever do so, and abuse their greatest blessings, if they are so prosperous as to be unrestrained in their luxurious pursuits. We cannot, without astonishment, read of the voluptuousness and numbers of public baths in antient Rome; with us the city of Bath is Rome in miniature.

But to come to the subject itself: The effect of bathing must be different according to the degree of heat and cold, and according to the composition.

Hot baths, like cataplasms, fomentations, or hot diet, have something emollient in their nature; and hence, though they at first, partly from their additional heat to the system, seem to brace up the solids, and irritate them to an increase of their functions; yet whilst the heat rarifies the fluids, attenuates them, and thereby expands the most minute ramification in the whole fabric, add to this, the real increase of humours, it must of course greatly relax the whole system, and render the fibres flaccid: But not only this, the repetition of hot baths is liable to accustom the habit to an over natural heat, and expansion of the whole system, and hence apt to reduce a rigid, fibred constitution into a leucophlegmatic habit, unless the accustomed unnatural heat and stimulus is continued. These are the disadvantages of a hot bath; from which it follows, that it should be used in cases of necessity only, and with moderation.

Cold

Cold baths, on the contrary, must have very different effects; for as the refrigeration reduces the natural heat of the blood, in which it is kept liquid, it must in consequence consolidate the fluids, lessen the bulk, and diminish the flaccidity and circulation of the fibres.

The temperate bath, however, as it is in the same degree with the natural heat of our body, can have no such effects in regard of heat and cold, either to rarify or consolidate the mass of blood.

But all these effects are of the least consequence in bathing; it is the humectating qualities which ought to be the principal object; especially in all acrimonious cases; add to this, the washing the external surface from its obnoxiousness, which not only obstructs the pores, but is apt to be introduced into the blood.

Next we will observe, the effect of particular baths and wherein they differ from the universal; suffice it, that warm particular baths will occasion a congestion to the part immersed in the bath; whilst on the contrary, a cold bath will cause a revulsion of humours. To bathe the feet repeatedly in warm water, has long been recommended as a menagogue, from the ascribed power of drawing the humours downwards, to which it may contribute: And that the cold bath, either applied to the feet or hands, will prove diuretic, I have experienced with success, even in desperate cases.

But universal baths are preferable to every other; for, whatever particular part of the body is ailing, the rest, from a sympathetic sensation, share

share and partake of the ailment; so that the whole system stands frequently in equal need of assistance with the part affected.

On the whole, there is nothing which is so conducive to the preservation of health as cleanliness and bathing; and nothing more beneficial towards the recovery of health when lost.

In regard to composition, I esteem sea-water the best bath of any, and would always recommend it to be moderately cold, particularly in fevers and in cases of inflammation; and the longer the patient is in such a bath, so as not to be chilled, the more benefit he or she will certainly receive. In lieu of sea-water, where such cannot be had, I would advise an addition of salt and nitre added to fresh water, previously boiled and cooled again.

Where the skin is scurfy, a good soap-suds, or bran-water should be used first, in order to soften the skin and to open the pores, that the bath may operate more effectually; and this should be frequently repeated; at least once every day till the patient is relieved.

OF CHIRURGICAL INDICATIONS.

WHEN we maturely consider the animal œconomy, it will plainly appear, that physic and surgery are so intimately connected, and dependant on each other, that he who is ignorant of the one must needs be so of both. It is indispensably necessary likewise, that the self-demonstrative principles of unprejudiced natural

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tural philosophy, should lay the foundation, throughout every acquirement in the art of healing; for without such uncontrouled liberty of inquiry into the true nature of things, our indications are only guided by blind prejudice, and chance our whole dependance. How far I am just in this, I leave to the consideration of the judicious.

My examination here relates only to the applications of medicines externally, and the nature of their effects. The first indication of surgery in external inflammations or tumefactions in general, is to discuss and dissolve. Resolvents and discutients have merely been understood in the light of repelling only, it is no wonder therefore that emollients and suppurants are preferred, where the peccant or obstructed matter is in the foundation, as in venereal cases. In this, as well as many other phænomena in the animal functions, true philosophy, and self-demonstrative experience, have not been enough consulted. We experience, that the various methods of resolving tumours have very different effects; but those which are most salutary are generally the gentlest. I shall not enumerate the various remedies which have been applied to inflammatory parts, and their different success; certain it is, though spirits and camphor, &c. have sometimes proved successful, yet many times they have not only augmented the evil, but removed it to some other part.

To correct and annihilate the acrimony, should be the sole indication of all discutients or resolvents;

solvents; and which is the never-failing effect of mercury.

From what I have said, it may easily be conceived what opinion I have of suppuration. I am surprized that that indication should continue to mislead the judgment of so many men eminent in the practice of surgery as we can now boast of; for, if we examine into the nature of this effect, we must plainly perceive, that it is only an increase of the peccant matter, and of the evil we endeavour to remedy.

I am not more a friend to digestives than the former; for, as suppuration depends principally on promoting and increasing putrefaction, digestion only serves to stimulate to inflammation, and irritate the ulcer to a copious and superfluous discharge.

In the next place follow detergents: These are indeed admitted, and requisite in ulcerations, but not in the sense of mundifications, as has been generally taken for granted; namely, the cleansing the wound from foulness by wiping, or washing away the matter only; for whilst the stamina of the ulcer remain disordered or aggrrieved, the acrimony will ever flow as from an inexhaustible fountain. From the detergent indication, founded on the principle of correcting the acrimony, we have every good effect to hope. Escharotics have often proved an additional poison to the ulcer they have been applied to; yet perchance their composition has sometimes proved beneficial; but from other causes than has in general been supposed; for example, the lunar caustic, or the phagedænic water; which,

in the former, from the solution of silver, and in the latter from the sublimated mercury has acted as correcting the acrimony; but those who have ascribed their virtue to the caustic effect, and in lieu thereof applied the common caustic, have found themselves greatly disappointed, to the no small aggravation of the disordered part.

And lastly, the indication of healing has abounded with too gross absurdities to be received by our modern surgeons; namely, the renewing the lost substances by what are called sarcotics, agglutinants, and cicatrifants; these indications must appear to the eyes of reason to be the intire works of nature only; so that the filling up an ulcer, to agglutinate and heal it, requires no more when the acrimony is corrected, than keeping it clean from any external injuries; that nature may undisturbedly replenish it with new substance, and heal it up. This is best performed with dry lint in general; but as in all venereal cases, the acrimony is too apt to continue to the last, a mercurial detergent or demulcent is requisite.

On the whole, wherever there is an acrimony in the system, either internally or externally, our principal indication should be to correct, or destroy the acrimony; for all our endeavours to expel it, either by forced evacuations, suppuration, or other more violent methods, are too precarious pursuits; and if ever we should happen to succeed, it will be but the work of meer blind chance. Metals in general have more or less such a power, but none more effectually so than mercury. When we however consider the manner of its operation, we shall clearly be convinced,

vinced that the use of the universal antacid, requires of all medicines the most judgment in the application; of which I shall say more in its proper place.

Yet from what has been said, it does not follow that I entirely disapprove of all other medicinal evacuating indications; this is far from being my sentiments; I only mean to point out the too general use that is made of them, where nature must unavoidably suffer injury instead of being relieved.

I have here spoken only in the general; and I shall by and by have a more pertinent opportunity to be particular; as my endeavour through the whole treatise is to be as concise as the subject will admit.

Here then I shall conclude this chapter; and beg leave to observe, that the hints which I have offered to the consideration of the judicious, are the simple dictates of reason and experience, without any other motive than that of being useful. I am well aware of the many disadvantages the simple manner of delivering my sentiments lays me under, in an age when pomp and elegance of diction are so much admired. But to be understood, and throw new light on the subject, is the summit of my ambition.

C H A P. IV.

The Cure of the First Infection.

AS every action of our lives ought to be guided by reason, and not blind prejudice, so it is but just that every man, who has any thing to offer for the good of the community, should display his principles, that they may be freely examined, how far they are consistent with simple truth. Without this, no man has a right to pay any regard to his assertion. On the basis of this sentiment alone, I desire to stand or fall. My motive is utility; and I hope the effects will verify my intention. Without any farther preface, I will conduct the candid reader throughout the rough paths of this dire disease, with all the ease and fidelity that unprejudiced reason, and experience to the utmost effort of my abilities, together with an upright heart, may suggest.

But, that the whole course of the cure throughout the various stages, may be carried on in a manner clear to the conception, concise to the memory, and open to the conviction of truth, I shall suppose a previous attentional perusal of the foregoing; as this is only a short extract of those principles brought into form and order; or in other words, a well founded theory reduced to practice, and authenticated by happy success.

THE CURE OF THE VIRULENT GONORRHOEA.

THE first symptom of a virulent gonorrhœa is an agreeable sensation in the genitals, gradually increasing into an irritating, sharp, disagreeable pain, attended with a puffy ichorish discharge from the penis in men, and vagina in women; this is soon followed by a sharp scalding of urine, a fever, obstruction of perspiration, head-ach, universal lassitude, &c. according to the constitution and age of the person; which are most acute in the first time of the infection; as has been fully described under that title in the second part.

The first indication must be to promote a gentle perspiration; to correct the acrimony in the urine; to lessen the spasmodic constriction in the urinary organs and the nervous system, and to protect the body from a general infection.

Bleeding might lessen the quantity of the fluids, and from that, cause a flaccidity of the solids for a little while; but as it would unavoidably cause an absorption into the emptied vessels of the virus from the external parts, it should be avoided as highly pernicious. Purging might evacuate the contents of the bowels, and perhaps drain from the whole mass of blood; but as by its stimulus it would increase the spasm in the system, retain the acrimony which ought to be expelled by perspiration and urine, and cause a revulsion of the virus to the innermost parts of the body, it ought

also to be rejected as pernicious, and a hindrance to the cure.

To answer the above intention, together with correcting the acrimony, use the following powder:

ANTISPASMODIC POWDER.

PULVIS ANTISPASMODICUS.

Recipe nitri purificati uncias duas, cinnabaris antimonii drachmas duas, mercurii dulcis sexies sublimati scrupulum unum.

Lævigentur simul cinnabaris et mercurius dulcis super marmor cum paulolo aquæ, donec fiant pulvis impalpabilis; hunc more præscripto exiccatum nitro admisce, deinde fiat pulvis in viginti quatuor partes æquales dividendus.

Capiat unam bis de die, sive pro re nata; admiscendo seil, syrupi balsamici cujus libet quantum sufficiat ut fiat haustus exiguus; sive utcunque aliter in vehiculo quovis idoneo.

This powder, by virtue of the nitre, promotes gentle perspiration and urine; by virtue of the cinnabar, it is antispasmodic, and gently relaxes the constriction of the solids; and by virtue of the calomel, corrects the acrimony in the blood.

Besides, the combination of calomel (or any other mercurial preparation) with nitre, has many advantages; being thereby readier to be introduced universally into the whole system, and prevented from going to the salivary glands; whilst nitre at the same time gently promotes perspiration and urine, the only conveyances nature designed to expel the acrimony in the system, without violence. Hence this powder is not

only the most proper in the inflammatory symptoms, here proceeding from a venereal virus, but may with equal success, be used in every other inflammatory disease, where there is the least spasm and acrimony in the system, for reasons before mentioned *.

Our next attention is to the seat of the gonorrhœa itself. This is generally within two inches up the urethra in men; but variously seated in the pudenda in women, and is in fact a commencing ulceration, as before fully explained. As this is the case, it is but just that it should be treated with judgment as such; and an immediate application must doubtless be the most proper; which consequently can be performed only by injection. But as injection has been condemned as injurious by medical writers, it may be requisite here to enquire into the cause why it has been censured.

One error is liable to bring on another; and where the foundation is bad, the whole superstructure must of course fall to the ground. Whilst the absurd notion prevailed that ulcerations should be treated with escharotics, corrosives, &c. &c. injections were accordingly made use of for this purpose, of white vitriol, Roman vitriol, lime-water, &c. which could but by their stimulus vellicate the tender nervous coat of the urethra; consequently aggravate the ulceration, cause in-

* To prevent it from griping, (which it will sometimes, in irritable constitutions) two or three drops of the essential oil of peppermint, previously dropped on a lump of sugar, and mixed up with the draughts, will prove very beneficial as a carminative.

flammation,

inflammation, and increase the evil with all the attending symptoms and maladies; and to this injudicious practice many patients have fallen a sacrifice. Others again, have supposed that the gonorrhœa should at all times have its seat in the prostaticæ (a notion not quite out of fashion yet) and have concluded, that if the clap could but be stopt up at any rate from running, it might soon be carried off by purging, bleeding, vomiting, &c. Full of these absurd notions, they have injected with a variety of compositions; as white troches, allum, and other styptics, added to stimulatory liquors, &c. I leave every man to judge what might be expected from such treatment. Sometimes again calomel, sometimes æthiops mineral, sometimes sublimate, and sometimes a mucilage with crude mercury has been added; however, not with an intention to correct the acrimony, but to attenuate the matter, to take away proud flesh, &c. and whilst those ingredients, in their nature pernicious, were predominant in the composition, they destroyed the good effects which the little they contained of proper and useful things might perform. Such and many other injections were invented, but could serve only, besides their bad effects, to prejudice weak minds against those which might for the future prove really beneficial; ignorantly supposing all injections to be alike: For mankind are too apt to fall into extremes, and to be led away by prejudice, either from mistaken notions, or being duped by cunning to stray from reason, truth, and simplicity. When however an injection is properly adapted to correct and destroy the

the venereal virus, in the small ulcer whence the clap arises, common sense must dictate it to be an immediate remedy.

What I am here going to offer has, by many years experience, proved successful even to my most sanguine expectations; and I sincerely confess, that the communicating this valuable and experienced method of curing the gonorrhœa with ease and safety, to quench this destructive fire in its first kindling, and to prevent the ruin of many youths of both sexes; nay even of families, and the unborn innocents, who often share the punishment of parental guilt, has been one of my principal motives for publishing this treatise. It is not applause I covet, (though pleasing) but the innate satisfaction of contributing to the welfare of my fellow creatures.

ANTACRID INJECTION.

INJECTIO CONTRA ACRIMONIAM.

Recipe mercurii dulcis sexies sublimati genuini quantum libet; lævigetur cum paululo aquæ super marmor donec fiat subtilissimus, ita ut prompte suspendatur in aquâ, deinde in vase idoneo, aquâ multâ affusâ circumagitetur; postea reponatur dum aqua limpida fiat; aquam effunde, et gradatim mercurius exiccetur. Mercurius dulcis hujus scrupulum unum, misce cum aquæ unciâ unâ et in phialâ servetur.

This is the injection which is to be shaken when made use of; and injected once, twice, or thrice a day, or as occasion requires, immediately
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after the patient has made water. A small matter will suffice, which by help of the præpuce should be kept in as long as possible, and let to go round the corona of the glans before it is let out. If the urethra is very tender, or the glans inflamed, as is frequently the case for the first time; or in young and fiery subjects, the pipe of the syringe may previously be rubbed with a little mercurial ointment, that it may the easier pass.

By this injection the most malignant clap may in a very short time be radically cured; the carnosities removed, the acrimony totally destroyed, and the ulcers perfectly healed up. It is equally applicable to all the strumatic fistulas, exclusive from no part in the whole animal fabric. It assuages the most gangrenous inflammation, by correcting the acrimony, and relaxing the spasmodic constriction of the solids. It assuages the most putrid fœtor and phagedænic acrimony, by its truly antiseptic and antacrid quality; from the same virtue, it changes the corrosive ichor into a mild and well-digested pus; and as it is mild in its nature, and freed from the stimulating saline particles, of the corrosive mercury, it acts gently, and becomes absorbed in the animal acrimony without any perceptible irritation in the system. Thus the whole operation is performed with ease and effect.

This injection is not confined to time; the sooner it is applied, the more effectual, the easier the malady is removed, and other evils prevented, whether in man or woman. And whilst it is innocent, and inoffensive to the sound parts,

parts, it follows that its application should be made immediately on the first symptoms;—nay, if immediately after impure coition, the infection is effectually destroyed in its first bud. If I am blamed for this openness, I answer in my defence; my task is to endeavour to do good; I cannot prevent abuse. It cannot be a snare for the virtuous; but it may be the means, though unknown to themselves, of preserving the innocent from calamities, which too many have been basely plunged into; (I mean the wives of unfaithful husbands); and as to the vicious, who knows, but perhaps they may reform the sooner for it*; I have charity enough to think they will.

In women, this injection, not only cures the most inveterate purulent gonorrhœa; but it is the most effectual method to remove any acrimonious and disagreeable fluor albus. This is a circumstance hitherto neglected, or rather not properly understood. What the fluor albus in reality is, I have sufficiently examined in its proper place; and from thence it must appear evident, that restaurantia, or analeptica, are insufficient to remove it; for it is the acrimony which is to be corrected; (the weakness has the least share,) and nothing will do that so effectually as the forementioned injection; as for your isinglass, gum arabic, snails,

* The diabolical practice of machinery (besides that it differs but little from detested sodomy itself) is so far from being a preservative, that numbers have been unawares plunged into the most confirmed pox, in the midst of their supposed security.

viper broth, or asses milk, &c. they may perhaps have virtues, because they are somewhat out of the way of common food; but laying aside all nonsense and fantastical whims, a good mess of eels, roast, fried, or boiled; or what is still better, roast beef and plumb pudding, will be full as efficacious, if not more so. Where however there is a feebleness in the system, flaccidity in the fibres, together with pitiuity in the humours, instead of using either entirely insignificant supposed analeptics, or else on the other extreme, astringents and acrimonious stimulants, I recommend the following.

RESTORATIVE TINCTURE, OR BALSAM.

TINCTURA, sive BALSAMUM ANALEPTICUM.

Recipe balsami canadensis uncias tres; gummi guaiaci semuncim; spiritus vinosi rectificati libræ mensuram. Digerantur simul leni calore, sæpius agitando; deinde facibus subsidentibus, tincturam limpidam effunde sive percola. Huic adde olei menthæ piperitidis essentialis drachmas duas (et si purum sit oleum coibunt statim) Hujus tincturæ cochleare minimum in cyatho vini, aquæ vel haustu secundum artem facto cum paululo syrupi balsamici pro lubitu bis, vel ter de die capiendum.

The ingredients bespeak the indication and the virtues that may be expected from it; namely, that by virtue of the Canadian balsam and guaiacum, they are gently diuretic from a restorative stimulus in the whole system; and
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by virtue of the essential oil of peppermint a subtile nervine; not only to the weak stomach, but to the whole nervous system. Hence this tincture is not only adapted to weak female constitutions, but to phlegmatic habits in general. It is therefore perhaps the most efficacious remedy not only to correct the most vitiated appetite and digestion in the first passages, but to recover the tone of the urinary and genital organs, and of the whole system. And I'll answer for it, it will contribute as much towards propagation, cure the most obstinate feminal gleet in men, as well as the equivalent weaknesses in women, at least as much (if not more) than all the boasted restoratives of modern quackery.

With this gentle, easy, though effectual method, the most malignant virulent gonorrhœa may be removed, and all other evil consequences prevented; (provided, the antispasmodic powder and the antacid injection are immediately applied) and thereby prevent shankers, priapism, chordee, bubo, swelled testicles, &c. and the whole train of evil consequences. But when these, or any of these, actually appear, they must be got rid of; and necessarily require more aid than hitherto given.

In the first place, it sometimes happens that the seat of the gonorrhœa is higher up in the urethra, than an injection with a syringe in the common form may possibly reach; for how strong soever the force of injection may be, it will seldom or never reach but very little beyond the pipe of the syringe: But when the seat of the clap
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is thus high up in the urethra, it is not natural, from the first infection; at least I never met with it, unless they had been quacked with, and an ulceration brought on in those parts by injudicious treatment. However, when it is actually beyond the reach of common injection, what is to be done? In this case I have made use of a flexible catheter, contrived in such a manner as to fix it to the syringe*, and thus I have administered the injection with the desired success. The flexible catheter for such purposes should be as slender, as limber, and as smooth as possible. When however, either from neglect or ill treatment, the urethra is filled with carnosities, or callosities, even so as to obstruct the urine, and that it should be absolutely necessary to have bougies, I say absolutely, for unless the carnosities are callous, and the passage choaked up, so as to make it difficult for the flexible catheter to be introduced, or that a catheter is not to be had, in such cases, I here give the method to make bougies, that have greatly the advantage to those commonly made use of.

To make BOUGIES.

CANDELAS MEDICAS FABRICARE.

Recipe emplastri mercurialis uncias duas; laccæ optimæ pulveratæ drachmæ dimidium terebinthinæ venetæ drachmam unam; mercurii dulcis sexies sublimati et more præscripto præparati drachmas duas; mercurii corrosivi rubri eodem modo præparati scrupulum

* See the fifth plate.

unum; leni igne liquefiat terebinthina, et laceâ injectâ coeant; proxime emplastrum adde, postremò mercurium dulcem corrosivo mistum. Misceantur omnia probe agitando, ne separatio contingat, et mistura fervida fiat empyreumate vitato.

Denique assumantur panni lintei tenues decem circiter pollices longi duosque lati in cylindros leviter convoluti. Hos in misturâ, (despumatâ ut bullæ tollantur) adhuc calente immerge, ita ut extrahas ab uno latere tantum a liquore tunicatos. Pannis frigefactis, singuli juxta longitudinem in sex partes æquales accurate secentur, quarum unaquæque ad alteram extremitatem pyramidata super marmor politum (et sapone delinitum) digitis primo, deinde ope corporis cujuscumque duri et lævis, sicuti vitri vel spatulæ, &c. convolvenda in formam idoneam, ita ut superficiem habeat belle complanatam. Experienciâ opus est tum respectu spissitudinis, tum caloris misturæ, ut fiant candelæ concinnæ læves et ad normam exactæ.

These are the best bougies I know of; for besides that they are effectual in correcting the acrimony, in reducing fungosities, and to heal the most inveterate exulceration, they are nevertheless gentle and void of stimulation, and not liable to attack the sound parts. The shell-lac and turpentine are requisite to give the composition a tenacity, and the small quantity of red precipitate loses its escharotic quality entirely, from its being so very finely prepared, and so intimately intermixed with the whole, yet will effectually attack the callosities, if there be any, without attacking the sound parts.

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However, in regard to bougies, I have this observation to make, that the most innocent, or the best that possibly can be made, should never be employed unless absolutely necessary; and they should be left off as soon as the obstacle is removed; as they are liable to leave a weakness behind from the continual dilation they must needs occasion.

These kind of gonorrhœas are of a very stubborn nature, as we have before considered; for where they have formed sinuosities into various parts, but particularly in the prostate, the deferentia, and vesicule seminales, bougies can do but very little service. Here I have however succeeded to admiration with the injection by the flexible catheter; and relieved patients who have been afflicted with grievous complaints, even for years, though salivated more than once. In this case, and similar ones, bleeding or purging may be highly proper, according to the constitution or habit of the patient: Not with the view of evacuating the virus, but to absorb the more of the injection, that the particles of the calomel may penetrate into the fistulous canals; which it actually will, when a revulsion of humours is caused either by purging or bleeding, or other methods, and thus do much good; taking care, at the same time, to guard the blood with proper medicines. A purge for that purpose may be as follows:

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CATHARTICUM.

*Recipe pulveris radidis jalapii sisquiscrupulum;
(plus aut minus) mercurii dulcis sexies sublimati
grana tria, olei anisi sive menthæ piperitidis guttas
duas. Fiat secundum artem cum syrupi balsamici
quantitate sufficiente, bolus aut haustus, ad libitum.*

But where the habit will admit, the following pills are of singular service, in such and various other cases; they are also a very convenient medicine to the patient.

CATHARTIC PILLS.

PILULÆ CATHARTICÆ.

Recipe gummi gambogiæ, sacchari purificati, singulorum drachmam unam; mercurii dulcis sexies sublimati scrupulum unum; olei cinnamomi guttas duas. Misce, fiat pulvis subtilis, denique cum paululo aquæ formentur inde pilulæ quadraginta, involvendæ in pulvere cinnabaris factitii puri lægati.

These pills are excellent in themselves; particularly for sluggish constitutions, and where the body is absolutely required to be kept open. They are a safe and powerful anthelmintic for children, and highly beneficial in the cachexy; they are most excellent scourers to that class of patients, who have no other notion of temperance than what they are forced to by drugs; for these

pills will be very active when first admitted into the maw of a glutton, clear the house at both doors of all the evil spirits, and impose health upon the brute, whether he will or not: but particularly in the case we were just now mentioning, and all strumatic evils of the same nature, though otherwise situated.

The basis of the composition is this; the sugar distributes the cathartic particles of the gamboge, by which means a less quantity does; the calomel is a corrector of acrimony; the oil of cinnamon corrects the griping; and the rolling them in cinnabar, is to protect the stomach from an immediate nausea. I have used them with singular service, particularly in the army and at sea; as well to those who were actually sick as to those who had a fancy, without cause, to be on the list as such. But to go on; when the patient in the above circumstances is emaciated, feverish, or of an acrimonious habit, I would by all means abstain from bleeding, and all violent evacuations; for with a little patience, and proper regimen, the injection and the antispasmodic powder will do as much as any other method that I can possibly recommend with any certainty and safety.

Sometimes the neck of the bladder, and even the bladder itself, contains the seat of the gonorrhœal grievance; in which case, I have nothing better to recommend than the injection with the flexible catheter.

In like manner, if the uterus should be ulcerated, occasioned either by the barbarous hands of midwives, or instruments of murder sometimes
used

used in midwifery, or proceeding from other causes, this injection is the most effectual to repair the injury. But that such injection may be done more effectually, I offer a syringe of a peculiar form, copied after nature; as such a one must appear obvious to common sense, to be superior to the customary trifling inventions of little effect. For since the injection reaches very little farther than the instrument, in the vagina, as well as in the urethra in man; it follows that if the injection must touch the lacunæ, within the rugæ, or come to the os uteri externum, it is requisite the vagina should be somewhat distended; moreover, if an injection in the uterus is needful, it becomes requisite to make the instrument reach to the os uteri, otherwise it is ineffectual.

Before we leave the subject relating to the gonorrhœa, and all purulent discharges, I must observe, that the injection should, by all means, be nothing but calomel and water; and I insist upon it, there is not an addition of any thing whatever, but what becomes detrimental, or takes away from its efficacy. And I think it necessary to add, that those who suppose that this injection acts as an astringent, are very much mistaken. I recommend it from experience, and I am so confident in what I say, that whoever should oppose its being introduced into general practice as here directed, for the benefit of mankind, I cannot help thinking that they either must be actuated by ignorance and prejudice, or by a far worse motive, that of malice, and the preying on the credulity and ignorance of mankind.

To conclude, I have this direction in general to give in regard to injections with this composition. Let this injection be used three times a day, till the discharge becomes thick and ropy, which it will very soon (in some subjects, I have seen this change in twenty-four hours) then let it be done twice a day, morning and night, till the matter loses somewhat of its yellow hue and becomes whitish, more ropy and less in quantity; once every morning will then suffice, till the matter becomes transparent, and appears only in small filaments in the urine; when every other or third morning is enough till all disappears. This relates only to a long standing gonorrhœa; for in recent cases, if taken in time, and temperance observed, the cure by this method may be performed in eight or ten days; very rarely longer, unless by ill conduct, but generally in less time: I have had many patients cured to all intents and purposes of a most virulent clap in five or six days; and others who have taken it in time, in twenty-four hours. Bathing contributes greatly to the cure; which, with an abstemious regimen, is the most essential towards preventing inflammation and the spreading of the virus; purging and bleeding however, in a recent clap, serves only to infuse the infection into the whole animal system.

The CURE of SHANKERS and VENE-
REAL EXULCERATIONS in general.

IN regard to shankers, if the injection is applied at the commencement of the gonorrhœa, they will perfectly be prevented from making their appearance. But if they actually appear, particularly if they are inveterate, and have been so for any time, they may require some farther assistance to facilitate their cure; though in fact it is seldom, but that the composition of calomel and water will be sufficient. What shankers are in general I have explained in its proper place.

I shall only observe, that I am happy to think, the method I here offer for the cure of these unwelcome guests, is fully as concise and, as effectual as in the foregoing.

The phimosis which attends the gonorrhœa, proceeds either from concealed shankers, or it will undoubtedly produce them. Poultices and steeping in milk, or fomentations for that purpose, are meer nonsense; and the injecting between the præpuce and glans, with sharp solutions, as white vitriol, Roman vitriol, &c. serve only to increase the evil. The injection however above described will soon correct the acrimony, so as to reduce the phlegmosis of the præpuce, that the glans may be uncapped, so that the nature and seat of the shankers may be examined into.

Let them be where they will, and ever so malignant, there is no necessity for lunar caustic, Roman vitriol, or other escharotics; surgery suc-

ceeds at all times better without them, but especially here, they are abominable. And all digestives, &c. are equally absurd and useless.

I shall here present the reader with a cerate, which will answer all the indication a surgeon may possibly wish for; not only in shankers, but in exulcerations of whatever kind, and of whatever magnitude or malignity; by virtue of its antacid, detergent, and epulotic qualities.

ANTACRID CERATE.

CERATUM CONTRA ACRIMONIAM.

Recipe mercurii corrosivi rubri semunciam; mercurii dulcis sexies sublimati uncias duas; sacchari saturni unciam unam; cere albe uncias quatuor; olei olivarum optimi uncias sex; essentiae bergamot guttas viginti. Lævigetur mercurius dulcis corrosivo mistus super marmor planum cum paululo aquæ, ut fiat pulvis subtilissimus; exsicca, misce cum saccharo saturni, iterumque lævigetur. Liquefiat cera cum oleo igne leni, insperge pulverem, adde essentiam, et agitentur simul omnia donec frigescat ceratum.

Among the various felves, plaisters, and cerates which hitherto either have been kept as specific secrets, or published for the benefit of mankind, for exulcerations, or cutaneous disorders, under what denomination soever, this cerate will substitute the place of them all. It is needless to mention particulars here concerning its extensive virtues in every malady which the venereal virus, or any other acrimony may give birth

birth to, whether exulcerations, or cutaneous eruptions, as have been before described; this, and this only, is the best application to perform all we can possibly wish from an external medicine.

I have therefore only this to add, that it may be applied without any restraint or regard to the parts affected, a capite ad calcem, either by rubbing it on the skin in cutaneous disorders in general, or by a pledge applied with lint; in all which cases, I would have recourse to this cerate alone.

The CURE of the PHIMOSIS, PARAPHIMOSIS, CHORDEE, and PRIAPISM.

HAVING considered the nature of these evils in the ætiological inquiry, I shall omit a repetition of it here. Suffice it, that the venereal virus being introduced into particular parts, occasions these evils.

When the phimosis, or paraphimosis, is occasioned from open ulcerations; the evil will certainly be removed beyond all doubt, by the foregoing medicines: But sometimes the virus is imprisoned in the lymphatic vessels in the præpuce; there forming gummata, or phymata, or chordlike callosities, which require other aids than have been hitherto given. In such cases, crude mercury has the preference to the other preparations, from its volatile quality; having a superior power of penetrating the pores of the skin. We must therefore have recourse to a mercurial

curial ointment, and other preparations where crude mercury is concerned.

In these I differ nothing materially from those in the dispensatory, except the Venice turpentine, or balsam of sulphur; for though it divides more easily the particles of the mercury, yet I am apprehensive that it destroys the volatile quality thereof, (which here is the material object) and from its stimulus is liable to cause inflammation.

MERCURIAL OINTMENT*.

UNGUENTUM MERCURIALE.

Recipe axungiae porcinae curatae et lotae libram unam argenti vivi purificati semilibram, emplastri diachylon dicti (jamjam describendi) drachmas duas. Ope emplastri, cum paululo axungiae misti, trituretur argentum vivum donec globuli omnes evanescant; deinde adde axungiae reliquum probe miscens, ad finem adjicere poteris olei rhodii guttam unam aut alteram, aut essentiae bergamot tantillum.

DIACHYLON PLAISTER.

EMPLASTRUM DIACHYLON.

Recipe olei olivarum libras quatuor, lithargyri sesquilibram.

Lævigetur lithargyrus super marmor cum aquâ, tum coque cum oleo et aquæ exiguo super ignem lenem perpetuo movens donec oleum et lithargyrus perfecte coeant emplastrique crassitudinem habeant.

* Mercurial ointment affords another preservative against venereal infection, by rubbing a little of it on the groins, &c. after impure coition.

M E R-

MERCURIAL PLAISTER.

EMPLASTRUM MERCURIALE.

Recipe emplastri diachylon libram unam, argenti vivi purificati semilibram. Trituretur argentum vivum cum exigua quantitate unguenti nuper descripti donec omnes evanescant globuli, deinde emplastro immisce cum paululo aquæ liquefacto, bene commovens donec coeant.

EXTRACT OF LEAD.

EXTACTUM SATURNI.

Recipe lithargyri optime lævigati libram unam aceti vinosi optimi libras quatuor, (mensurâ). Digerantur per aliquod tempus, deinde coquendo et commovendo quantum fieri potest solvatur lithargyrus, coctionem continuans donec extractum syrupi crassitudinem habeat. Si lithargyro ad fundum manenti novum apponas acetum, operationem repetendo extracti additamentum habebis.

The mercurial ointment, sparingly rubbed on the tumefied parts that are knotty or stringy, is generally sufficient to make them yield and disperse; and far superior to poultices, unless where some of the unction is intermixed with them, and with that addition poultices are indeed very potent.

The paraphimosis, as before observed, has sometimes a very angry aspect; when it has from the beginning been neglected, or injudiciously treated; however, in its greatest fury it will yield to the following.

ANTI-

THE CURE OF THE
ANTIPHLOGISTIC LINIMENT.

LINIMENTUM ANTIPHLOGISTICUM.

Recipe extracti saturni, unguenti cum mercurio, cerati contra acrimoniam, singulorum pondera equalia. Probe misceantur super marmor aut tegulam.

This liniment spread on lint, and wrapped round the paraphimosis and glans, will have an excellent effect; and will even conquer a gangrene itself. For besides the effects of the antacid cerate and the mercurial ointment, the sedative quality of the lead contributes greatly to the flaccidity of the constricted fibres of the nerves. Though this is a most powerful antiphlogistic or anti-inflammatory liniment; yet I would advise it to be used with moderation; particularly, on account of the lead, which I am always suspicious of, unless it is in no greater quantity than what the tone may be recovered to expel it again. In slight cases the antacid cerate will be sufficient; but this liniment may be made weaker, and particularly with vinegar, which, with a little trouble, soon intermixes, and makes an excellent application for all kinds of external inflammations, proceeding either from scalding, burning, or the erysipelas, &c.

The chordee is soon subdued by the above injection, particularly if recent, and the cause within the contact of the injection. But it will sometimes happen, that this chordee will be obstinate for a while, when the virus is imprisoned, so, that the medicine must have some

some circumvolutions, before it can arrive immediately at the evil; in this case, a little mercurial ointment rubbed externally, for some time, will effect the purpose. A mercurial plaister spread upon leather, laid externally where the place of the chordee is, and extended to the perinæum, together with the injection, will soon remove the complaint.

When however the tumefaction of the præpuce, or the labia of the pudenda muliebria are œdematous, (which is very seldom the case, except in very leucophlegmatic habits, or in emaciated constitutions) the before mentioned medicines will want an additional stimulus and volatility, to make the mercury penetrate, in order to become more effectual.

VOLATILE MERCURIAL LINIMENT.

LINIMENTUM VOLATILE CUM MERCURIO.

Recipe unguenti cum mercurio unciam unam, olei ex radice sassafraſ guttas viginti, camphoræ ſcrupulum unum, ſpiritus volatilis ſalis ammoniaci ſemunciam.

In pulverem ſubtiliſſimum, ope guttulæ aut amplius ſpiritus vinoſi, redigatur camphora; dein adde oleum, poſteaue unguentum; quibus in unum corpus redactis, gradatim injice ſpiritum volatilem ut fiat linimentum.

This liniment will ſpeedily reduce œdematous ſwellings, and be of ſingular ſervice in many other caſes, as we ſhall hereafter mention.

A pri-

A priapism, in ordinary cases, will subside equally with other inflammatory symptoms; but when it is violent, and has an universal inflammatory constriction, and the consent of the whole nervous system for its foundation, it must have more aid than what can be given from external application. Bleeding here is requisite, and may be safely undertaken in plethoric habits; but in this case the antispasmodic powders should not at all events be omitted, as thereby the mass of blood is saved from an universal infection; which bleeding will ever expose a patient to. Clysters are also in this case of service, as thereby the system will become reduced, and a revulsion promoted; this, together with an abstemious regimen, and the application of the antiphlogistic liniment, cannot fail of success, unless death is beforehand with skill.

THE CURE OF A BUBO.

TIS seldom a bubo appears immediately on impure coition, unless from a suppressed gonorrhœa; which is either occasioned from bleeding, purging, or other improper proceedings, as has already been enquired into. But let what will be the cause, when a bubo appears, the patient is on the brink of an universal infection. If the foregoing method is observed in a recent clap, a bubo will never appear from thence; but when it has actually appeared, it must be got rid of. If taken
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in time, the task is very easy. A mercurial plaister upon leather, the bigness of a crown, applied to the groin, the hair previously shorn away, and the part rubbed with some mercurial ointment, will settle the whole in a very short time, particularly if the antispasmodic powders are made use of; or to facilitate it, a purge is administered. But when the inflammation is already arrived to a considerable height, so that the formation of matter is expected, the following poultice may be applied with great advantage.

AN EMMOLLIENT and ANTACRID POULTICE.

CATAPLASMA CONTRA ACRIMONIAM EMOLLIENS.

Recipe cataplasmatidis ex lacte et pane confecti semilibram, linimenti antiphlogistici semunciam; misce.

Inguini applicetur tepidum ter de die, sicque brevi certior eris dispersio an suppuratio eveniet.

But if matter is actually formed, it should be opened, but not too hastily; and if opened, the gentle dressings with the antacid cerate will be sufficient; but with the recommended application, an effectual dispersion will generally be the case, and should at all times be the sole object in view. The common method of treating a bubo, has been the most irrational possible, and diametrically opposite to a curative indication; the endeavour to bring it to a speedy suppuration, with an intent to draw the venereal virus from the whole body, is exactly

exactly as rational, as in case of fire, to burn a whole street with a view to save the city, by drawing the fire from all parts to the place of conflagration; and the success is exactly alike in both: And I'll venture to say, that the greatest number of the poxed, have been plunged into this malady by such mad proceeding; particularly if it is farther aggrieved by caustics, and kept open against all reason and nature. What the nature of a bubo is, I have sufficiently described before; it is needless therefore to repeat it, and whoever will let their reason overcome their prejudice, will sufficiently be convinced, that the above comparison is just. Extinguishing the fire must not be attempted by increasing the flames, and the venereal virus, exactly like fire, should be annihilated wherever it can possibly be attacked. Nature and art differ greatly in this respect; the wind may possibly drive the fire this or that way, and perhaps in our favour too; but if we mean to extinguish it, our business is to oppose it with water, wherever it is exposed to our attack; and so with the virus, nature may endeavour to throw it on this or that part, but our business is to destroy the virus wherever we can act upon it. Whilst therefore the medicines here recommended disperse the bubo, they destroy the virus at the same time; on which basis the dispersion should depend. This differs widely from repellents, where the virus is only transposed; whilst by bleeding, and purging, without the assistance of mercury, (the only antidote) the virus is only transposed
from

from place to place. For my own part I am so fully convinced of the efficacy of the simple method laid down, I will venture to say that of a thousand buboes, scarce one needs be opened; and that one too, must have been neglected before proper remedy were applied.

The pestilential bubo we have here no business with; I have reason to hope however, that from the knowledge of the good efficacy of mercury, in the present state of physic, we shall for the future have little to fear from that dire calamity.

As to the scrophulous bubo, it will always yield to the cataplasm before mentioned, as much as to any other medicine whatever; but in general the mercurial plaister will be sufficient; the œdematous as well as the schirrhous, will find the volatile mercurial liniment a powerful antagonist. But with all these stubborn tumours it should be observed, that according to the time they have been forming, and in proportion to the habit wherein they reside, time is also required for their removal. And that the gentle methods in these evils, as well as all others, are the most effectual, I shall prove to satisfaction hereafter.

THE CURE of the HERNIA HUMORALIS, or SWELLED TESTICLES.

THIS is a more difficult task than any hitherto mentioned; for since the situation of the testicles is such, that the external applications

A a

plications cannot immediately penetrate into them, on account of their separate teguments; add to this the many convolutions of the elaborate tubuli in the texture of the testicles themselves; this case sometimes requires more internal aid. But besides all this, what has contributed greatly to the difficulties in the cure of this case, together with the improper applications, has been the inattention to the spermatic vessels and vasa deferentia, by which the testicles are suspended, as I have before demonstrated. In order therefore to lighten the burthen of the testicles, that the vasa deferentia may not be strained, and thereby become irritated, and increase the tumefaction, a suspensorium should be the first consideration, by which not only the scrotum is suspended, but the application had recourse to, kept better on the parts. For this purpose I have contrived a bandage though simple, yet seemingly to me the best adapted for this purpose: But that I may not be too tedious here, I have delineated it in TAB. v. where the form, together with the explanation of it, will at first sight be easily understood. If assistance is had in time to the swelled testicle, a mercurial plaister, (and a purge, if need requires) together with the suspensorium, will very soon remove this painful and troublesome complaint. If this however seems insufficient, and the inflammation still continues, we are obliged to have recourse to other aid. And here it is, where emetics may prove of singular benefit; particularly if combined with mercury, or by

mercury itself; where in some constitutions the turpith in three or four grains may to advantage be given. The following vomit however in my practice I have generally succeeded with, and it appears to me the safest.

A V O M I T.

E M E T I C U M.

*Recipe pulveris radice ipecacuanhæ scrupulum unum;
mercurii dulcis sexies sublimati more præscripto
præparati grana quatuor; misce. Fiat secundum
artem bolus aut kaustus.*

This vomit, particularly if the patient has taken some of the antispasmodic powders before, will not fail of forcing the mercurial particles throughout the whole system, and bringing by the emetic straining, the whole body into universal perspiration, and is the only aperient medicine in such cases. This method, together with a discretionary use of the cathartic pills, and if the inflammation is great, the antacrid poultice, or the antiphlogistic liniment applied, will subdue the most stubborn swelled testicle; unless indeed, it has arrived to too great a height before proper remedies were applied. If there is an actual fluctuation of matter, then it is but reasonable to let it out, with an incision-lancet only; and apply dressings with the antacrid cerate; but without escharotics, or tentings of any kind whatever.

The CURE of VENEREAL, and EXCRESCENCES in general.

VENEREAL excrescences are of three kinds; callous, or of a horny texture; carcinomatous and concealed under the skin; and lastly, open and in an exulcerated state. According to these differences, they vary in their treatment; for all depends on the immediate operation of the topic applied to them. Hence we see that in regard to their cure, their form is of little signification, for in that, chance, and the situation have the greatest share.

The porri, and verucæ, if the situation admits of it, may with safety be snipt off with a pair of scissars to the quick, and the antacid cerate will prove sufficient for the cure; or if their basis seems of a stubborn nature, the antiphlogistic liniment may be still more advantageous, particularly if there is any inflammation attending them.

The condylemata, phymata, gummata, &c. are much of one nature, and the speediness of their cure depends entirely on the introducing the mercury. Hence the volatile liniment will in this prove effectual, and particularly if a little sublimate mercury be previously dissolved in the volatile spirit of sal armoniac; for example, one grain of the sublimate to an ounce of the spirit; and in this treatment I have succeeded to admiration.

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The fraga, fici, mora, &c. if they are open and in an ulcerated state, the antacid cerate, or if they are very stubborn, the antiphlogistic liniment will soon subdue them; and in a very short time destroy their foundation, make them scale, fall off, and heal up.

In regard to the phagedænic lotion, the antimonial butter, the lunar caustic, the strewing the precipitate on them, are not only needless, but serve to give the patient unnecessary pain. The ligatures are shocking remedies; and after the great pain given to the patient, with the attending inflammations, and even the risk which accompanies such symptoms, they remove them but temperately, and the excrescences never fail of sprouting out again anew; since the roots remain, in the state as before. Fumigations are still more hazardous, and I will take upon me to affirm, that they never are used but with the greatest injury to the whole constitution.

Here however it is requisite to observe, that venereal excrescences too generally discover a latent pox in the habit; external remedies therefore are not sufficient: but internal remedies are requisite in order to clear the system of the virus, from whence such excrescences are produced. In what manner this is best effected I shall point out in its proper place. All I would here mention as an observation of consequence is, that salivation, as many have advised, is not only needless in this or any other state whatever, but deserves to be exploded as one of the grossest errors, ever committed in

the practice of physic; and as such, together with caustics, escharotics, fumigations, ligatures, &c. should for ever be banished from the healing art, by every good and judicious man.

In regard to the piles, I think it necessary here to observe, that amongst all the variety of nostrums which have been given as remedies, and the many more curious than true distinctions of these excrescences, (if I may so call them) but few have amounted to any thing beneficial as to the relief of the patient. What they in reality are I have enquired into before; here I shall only treat on their cure; and this is performed with as much ease as truth, with the antiphlogistic liniment; by which not only the pain is immediately alleviated, but may be entirely annihilated; particularly if the antacid tincture is occasionally given.

And lastly, the same method will ever hold good in other excrescences, as well as the venereal: But particularly what I would here hint at, is the yaws amongst the poor negroes. I have cured many of them without confining them an hour from their business, unless emaciated by the disorder itself; and never made a jot distinction betwixt that and the confirmed lues; for though the causes differ, yet the effects are the same. Such are the simple methods, though fully sufficient to remove the complaints and disorders proceeding from the first infection in general: And the earlier applied the easier the malady is removed, and others more dire prevented. The antispasmodic powder, together with an abstemious regimen, will at all

all times (if properly regulated) destroy the acrimony, subdue the inflammation in the system, whilst the other remedies will effect the same externally ; and perform all we can hope and wish for.

C H A P. VII.

The Cure of the Second Infection.

THOUGH the task is infinitely more difficult to eradicate the venereal virus from the system when the malady has introduced itself into the whole animal fabric, than when it is barely local and confined to particular parts ; yet I abhor the notion of all harsh and desperate means, though handed down from father to son ; and I flatter myself that every sensible man, on reflection, must be of my way of thinking.

When the body is emaciated, it is a wrong time to trouble the confused œconomy with additional torments ; but enough of this at present ; I have fully explained my sentiments on that head in the foregoing. I will therefore proceed to the salutary method itself.

The principal object, is to correct the acrimony ; or the virus which is ingrafted in the stamina and fluids of the whole composition ; this must be done gradually ; for though the principal bulk of the sanguineous mass may

soon be impregnated with mercury, yet such an impregnation contributes the least to the cure; it is the circulation in the most minute stamina in the solids, in the nerves, the tendons, and the very substance of the bones themselves that wants the most assistance; and how to come at these very minute parts is the thing in question.

All that hitherto has been delivered to us concerning the circulation of the blood, though ever so just, is merely trifling, in regard to the material knowledge we stand in need of; it is not the rotation of the blood through the ventricles of the heart, the veins and arteries, glands, lymphatics, &c. &c. but it is the circulation through the very stamina of the fibres, of which the heart, the arteries, veins, lymphatics, glands, tendons, nerves, and the bones themselves are composed, that needs the greatest enquiry. Admit that salivation would be the most expedient method to eradicate the virus, (the contrary of which I think I have demonstrated) quære then, what time would be requisite? Four, five, or six weeks are generally the stipulated time; but circulate the humours through these parts, or in other words, are those parts renewed in substance in that time? I believe no physical man of any penetration can think they are. But to make this matter more plain; let us just stop a little, and view the progress of the exostoses, hyperostoses, spina ventosa, &c. and the slowness of their progress will plainly convince us, that their cure must have more time to be performed in, than the stipulated time for salivation.

tion. The discovery of the madder's tinging the bone, might, I think, if properly pursued, give us many valuable lessons in regard to the circulation of the blood through the most solid parts, which would be no small acquisition to physic. All that I would here endeavour to demonstrate, is, that in proportion to the solidity of the parts of the body affected, the more time it will require to eradicate the virus in those stamina.

This being premised, I shall here give a medicine, by the use of which, the most inveterate lues venerea, if at all curable, may be eradicated from the very stamina of the whole animal composition, as being the best adapted to penetrate into the remotest and most imperceptible circulation; for the particles of the mercury being so minutely divided, are capable to be introduced in so very small quantities, as not to affect particular congestions, or to become obnoxious to the system, whereby its universal effects might otherwise be obstructed.

ANTACRID TINCTURE.

TINCTURA CONTRA ACRIMONIAM.

Recipe spiritus vini rectificati uncias octo; balsami Canadensis unciam unam; gummi guaiaci unciam unam; olei é sassafras drachmas duas, mercurii corrosivi sublimati scrupulum unum.

Solve mercurium in spiritus vini dimidio, in reliquo solvantur simul balsamum canadense et guaiacum. Facibus subsidentibus, liquores limpidi per inclinationem effundantur, misce et oleum adde. Coibunt statim si oleum non sit impurum.

Of

Of this tincture, let the patient take morning and night, from ten drops upwards to twenty, in a glass of wine or water; and let them be continued for as long a time as is requisite for the cure; in whatever degree the malady may be, either cutaneous, glandular, diseases of the bones, &c. arthritic pains; all the symptoms described in the dry pox, and the confirmed lues itself: To this I will add, in every malady that may proceed from acrimony; whether from venereal or any other chronic distemper.

If there is an inflammation in the system, the antispasmodic powders may be used as occasion requires; but if there is a leucophlegmatic debility in the fibres, the analeptic tincture may be administered. If there is an obstinate obstruction of perspiration, with obdurate tumefactions, an emetic in such a case proves a beneficial deobstruent; and if the habit is robust, or otherwise sluggish, so that evacuations are required, the cathartic pills may prove of the greatest advantage.

These are all the internal medicines requisite against all venereal or other acrimony in general; which though easy in their application, are by far more powerful to disengage the body from the introduced acrimony than the harsher means; and with all the speed that possibly may be pretended to be made, yet this easy method will ever be quicker in the effect.

It may however be requisite to mention something concerning decoctions, or, as they are called, diet drinks: The saffrafras and the guaiacum may have many good effects in the system,
on

on account of their refinous and penetrating qualities; but the rest of the ingredients as customary additions, I shall pass over as insignificant, for I cannot conceive on what principle they have been introduced; I will however say something in particular of the celebrated sarsaparilla: This, I am confident, is not equal in virtue to the same quantity of common barley; yet much indeed has been said in favour of it: I shall not mention particulars; but I fear those gentlemen who have prided themselves on their inquiry into this drug, wanted the best foundation to work upon; namely, true principles of physic. I don't however condemn it entirely; for sarsaparilla and asses milk may have their benefit too; especially on account of their price; and partly as they may yield some nourishment.

As a medicated drink, I beg leave to offer the following; being agreeable to the palate, and beneficial to the system, at least to as great a degree as any other,

MEDICATED BEER.

CEREVISIA MEDICATA.

Recipe hordei in usum zythepsæ preparati et moliti libram unam, radicis sassafras concisæ semilibram, aquæ fontanæ congiū unum.

Coquantur aliquandiu in vase terreo. Frigescat et subsidentiâ factâ limpidum effunde liquorem, qui servetur in ampullis obturatis.

This may be drunk freely at meals, and at any other time; having an agreeable acescency,
which

which is corrected with the subtile stimulus from the saffraſas, by far more beneficial than hops.

This is the internal courſe in general, in which variation is very little requiſite; yet as circumſtances may occur, where ſome difference is neceſſary to be made, I will point out, as we proceed onwards through the various ſtages.

In cutaneous diſorders, there ſeems at the beginning a ſalutary effort of nature, to expel what is obnoxious towards the ſurface; this effort ſhould be moderately aſſiſted; a gentle perſpiration is here requiſite, promoted by the antiſpaſmodic powders; and externally the antacrid cerate may be applied with the greateſt advantage; to which the tetters, ſerpigo, impetigo, pſora, phlyctœnæ, &c. will ever eaſily yield, being all ſo many different kinds of the itch; for their cure depends only, on having the acrimony rectified.

When however the eruption is not ſuperficial enough, ſo that the cerate cannot immediately act upon the virus itſelf, it muſt be treated with the antiphlogiſtic, or elſe with the volatile liniment as before directed to the cure of the excreſcences; for the gummata, phymata, condylomata, &c. are all of a piece, and are ſomething of the ſteatomatous kind, and of the moſt ſtubborn nature, on account of their tendinous bags; for which reaſon, where they lie ſafe, and it is practicable, I would adviſe to extirpate them by incision, and afterwards dreſs the ſore with the antacrid cerate, which is the moſt expeditious way with theſe ſtubborn viſitors.

The

The branny furfurations which generally are most plentiful about the head and face, are to be treated in the same manner as just now mentioned; even the most inveterate scabby or scald head will yield to this most powerful cerate. When however the scab is of a hard crusty nature, it will not be amiss, in order to facilitate the cure, to soften it with the following

MERCURIAL and SAPONACEOUS LOTION.

LOTIO SAPONACEA cum MERCURIO.

Recipe linimenti saponacei unciam unam; aquæ fontanæ uncias quatuor; mercurii sublimati corrosivi grana decem. Soluto in aqua mercurio, linimentum adde.

With this dab the scabs frequently; by which they will swell, become soft, and peel off; then the antacid cerate will be more effectual. If the furfuration or scab is universally over the whole body, nothing can be more effectual than frequent bathing, and especially with the composition as above; which, for example, may be added to as much water as is sufficient for the bathing tub, and may be repeated once a day at least, as long as it is needful: This, with the forementioned remedies, will be sufficient to cure the most inveterate and desperate leprosy or elephantiasis, if at all curable; as long as its malignity has not exceeded the bounds of the skin.

In regard to the diseases of the glands, the task of the cure is more intricate, as the evil is sometimes

times very deeply rooted; yet the whole, as I have repeatedly observed, depends on destroying the virus. All that is requisite therefore to be observed on that head is, that I would advise every tumefied gland to be treated like the bubo; dispersed, (I mean not repelled) if possible; but if this seems impracticable, as sometimes is the case, where the fountain of the evil is too deep for external applications, particularly in most strumous maladies, and a collection of matter should be actually discernable; then it is consistent with reason to open for a discharge of the malignity. But all caustics or escharotics should be abhorred as precarious and pernicious; for no method is so effectual, speedy and safe, as that with an incision lancet.

If the imposthume after being opened, or the ulcer, be it where it will, discovers fistulous canals, let them be frequently injected with the antacid injection; and this method, together with the dressings of the antacid cerate, I am persuaded will cure many scrofulous evils which otherwise are deemed incurable. With this method I have cured various evils of this nature, but particularly one most inveterate, of many years standing, that was deemed incurable.

We will now consider the ulcerations in the mouth and throat. This part cannot be treated with applications suitable to the nature of its texture, like other parts of the body; as what is applied is apt to go down into the stomach. But fortunately, the antacid injection is here not only safe, but perhaps the best adapted to an exulcerated throat of any yet thought of: The worst

worst that may accrue from the frequent use of it is a ptyalism, and which may easily be prevented by a purge, or the cathartic pills; but when the antispasmodic powders are given, as is always requisite, where there is fever in the system, a ptyalism, from the mercury, will be prevented by the diuretic quality of the nitre.

As ulcers in the throat and mouth are attended generally with a great discharge of slough and slime; which requires frequently to be removed, being not only pernicious to the putrescency of the ulcers, but infectious to the sound parts; I shall here prescribe a gargle in all such circumstances.

ANTIPUTRESCENT GARGLE.

GARGARISMUS ANTISEPTICUS.

Recipe aceti optimi, aquæ rosarum singulorum uncias quatuor; nitri purificati, aluminis rupei, singulorum drachmas duas; mellis fescunciam; mercurii sublimati corrosivi grana quinque.

Soluto mercurio in aqua rosarum, misceantur omnia.

This gargle is a most efficacious one, not only in venereal cases, but in all sore throats, even of the most malignant nature. The Egyptian honey I have no opinion of; copper is too precarious a metal at any time; particularly where there is the least probability of its being introduced into the system: And medicine is at this time much better without it at any rate.

The

The excrescences and exulcerations in the membrana pituitaria, are evils likewise worth a serious consideration; the injection here is the most suitable and effectual, whilst yet practicable; and if the passage is obstructed, room must be made for it; But if taken in time, whilst yet in its commencement, and in slight cases, I here recommend a powder, which then will be very efficacious, applied occasionally like common snuff.

ANTACRID SNUFF.

STERNUTAMENTUM CONTRA ACRIMONIAM.

Recipe florum lavendulae unciam unam, radice iridis florentinae semunciam, mercurii dulcis sexies sublimati (rite preparati) scrupulos duos.

In pulverem subtilem redigantur separatim lavendula et iris, deinde misceantur omnia.

This snuff will remove the acrimony in the various cavities wherever it may be introduced; and as the iris and lavender will irritate to sneezing, the passage may by this be opened the more for the admittance of the mercury.

When the ears are infected, nothing will suit better than the injection; and if the temples are swelled, the antiphlogistic liniment may be used with much success.

When the eyes are affected, externals are requisite; the antacid cerate will prove successful to the eye-lids in general; but as it cannot be applied to the ball itself; and the injection, yet fine as it is, may be too gritty, and not distributed sufficiently, I will recommend the following

UNI-

UNIVERSAL OPHTHALMIC WATER.

AQUA OPHTHALMICA UNIVERSALIS.

Recipe aquæ ex alembico vitreo destillatæ uncias quatuor; mercurii corrosivi sublimati granum unicum. Misce, stent per horas 24 et effunde, sæcibus relictis.

Of this drop one drop or two in the eye at a time, which will remove films, inflammations, and excrescences that may be externally on the horny coat; and as it is of a penetrating nature, it will even correct the more internal evils without the least injury to the sight.

In regard to schirrhous tumors, they are very obstinate; yet with perseverance, a good constitution, and a good regimen, they may oftner be subdued, than what is in general thought, by the antiphlogistic liniment. And how dreadful soever the ulcerated cancer is, yet the antacid cerate will (if not too deep ingrafted) conquer this most malignant of all ulcers; provided the cerate is not intermingled with other ingredients, which may be of a pernicious consequence: At least the antacid cerate is the properest; this I know from experience and success, even to my most sanguine expectations, and therefore strenuously recommend it as an universal application to all exulcerations whatever.

We will now proceed to the cure of the diseased bones. This task is the most difficult; but this difficulty proceeds only from the tediousness,

and the impatience of persevering in the gentler methods, which it actually requires.

In examining the progress of the diseases of the bones, we find the evil generally comes on slowly; and the pain attending them the more pungent, as the contest of the virus with the sound part is the greater. I shall not recount all the maladies here, but suppose the reader to recollect what has been already related on that head; suffice it, that as the different effects may have the same cause, one kind of remedy serves for all. I have therefore only to recommend externally to the nodes, exostosis, hyperostosis, &c. the antiphlogistic or the volatile liniment, as before advised, to the gummata and phimata, &c. together with the internal course before described; by the continuance of which, together with a suitable regimen, will be effected what possibly may be hoped from medicines. If salivation was effectual, the diseases of the bones would be the only time to put it in execution. But in these, it is universally agreed, to be of no benefit, and only augments the evil; and in fact so it does with almost every other malady of consequence.

In regard to the carious, and consequently the exfoliation of the bones, I have this only to observe, that the gentler the means, the better will be the success; the scraping the bone has oftener hindered the good effect intended than promoted it. In vain do we endeavour to remove the carious part, till nature has covered the sound trunk of the bone with a periostium; when the scale gradually loosens, and by degrees separates, so as to drop off itself:

But if too much irritated, the new formed periostium inflames anew, corrodes the sound bone again, and so continues the exfoliation till the whole limb is endangered or lost, which otherwise might have done very well. Here I have likewise to observe, that the customary balsam arcae, or yellow basilicon, are (notwithstanding the antiquity of their uses) improper. They stimulate without correcting the acrimony; whatever is said in praise of their digestive quality, it is a mistaken notion; and an ulcer will at all times succeed better without them. The antacid cerate will answer all that can reasonably be wished for; and no other is requisite. It will sometimes happen however, that an exfoliation will want an outlet; in such a case it is but requisite, to make an opening for that intent; but care should be taken, that the scale is previously separated, and fit to be taken out immediately; so that the operation may be done with as little inflammation as possible: For an additional aggravation is apt to corrode and disturb the tender ossification of the sound bone, and which, together with giving the patient great pain, frustrates all that has already been done towards the cure. From this it is clear also, that for such dilation, the bistoury is the only thing to be depended on.

A spina ventosa is a terrible ailment; the pain is excruciating; and this may easily be supposed, as the shocking exulceration of the marrow, and the bone itself, work their way outwards; add to this the tediousness of the malady's progress, as well as the time which the medicine must require to operate in the confused ossified stamina.

This dire case, as it comes gradually to its height, increases with inflammation of the softer parts.

When the inflammation either proceeds from that, or any other cause, so that a gangrene or sphacelus is either expected, or actually begun, the following fomentation may be deemed as powerful as any whatever to prevent the cadaverous putrescent progress of the sphacelus.

ANTIPUTRESCENT FOMENTATION.

FOMENTUM ANTISEPTICUM.

Recipe spiritus vinosi, aceti, singulorum uncias quatuor; extracti saturni unciam unam; camphoræ drachmas duas; mercurii corrosivi sublimati scrupulum unum. Solve camphoram et mercurium in spiritu, extractum autem in aceto, deinde gradatim misce.

With this, wet compresses and rollers, and foment the gangrenous parts, as circumstances may admit. If a sphacelus has taken place, scarify to the quick, and continue the fomentations, together with other suitable applications; which, if the patient is not entirely emaciated, will prove successful. The exulceration must be treated as before directed.

In regard to the hyperostosis and anchylosis, this may be of an indolent nature, having a depraved synovia for the foundation; they require sometimes, together with a corrector of the acrimony, a stimulus, to promote the action of the solids, particularly when there is a paralytic complaint

plaint combined with it, and forms what is called the white swellings; in such cases the following poultice will prove of singular service.

ANTIPARALYTIC CATAPLASM.

CATAPLASMA ANTIPARALYTICUM.

*Recipe radices raphani rustici semilibram; lini-
menti volatilis cum mercurio, unciam unam. Ra-
phano scisso et contuso, immisce linimentum. Bis
de die applicetur.*

This is also excellent for rickety disorders, and where there is an osteosarcoma to be feared; as also in paralytic cases, applied to the articulations as occasion shall require.

If the articulation comes to suppuration, the aposthume must necessarily be opened; and the matter let out, treating the sinus with the injection, and the exulceration with the cerate: But such a case is enough to baffle the skill of the ablest surgeon; yet gentleness will ever shew the fairest prospect.

I shall not enlarge further on the cure of the diseases of the bones; the maladies vary ad infinitum both in appearance and situation; whatever might farther be said, would avail little without surgical skill; and where that is, the foregoing observations may always be rendered useful according to circumstances.

We will now turn our thoughts again to the application of internal medicines. In all the forementioned disorders, it is easily to be supposed, that the pains are sometimes terrible; and it is a

blessing that we can procure relief to the poor afflicted patient under such distressful circumstances, and with safety too. To judge properly of the nocturnal venereal pains, in the arms, legs, skull, &c. proceeding from nodes, exostosis, spina ventosa, and a caries in the bones, let us suppose it proportional to the tooth-ach, which when proceeding from a decay, is of a similar nature: But as I have observed before of anodynes, first, they should be used with caution, even in the most excruciating pains; and secondly, they should be corrected, so that at the same time they ease the nervous system of the torment, that they may also assist towards correcting the acrimony that occasions it; together with preserving the proper tone of the nerves in their requisite elasticity. On those principles I offer the following anodyne, as the safest and best on all such occasions.

ANODYNE ESSENCE.

ESSENTIA ANODYNA.

*Recipe opii colati unciam unam; spiritus vinosi rectificati * aetheris vitrioli, singulorum uncias quinque; olei essentialis menthae piperitidis drachmam unam; mercurii corrosivi sublimati grana decem.*

Opio in spiritu soluto, cola, deinde adde cætera probe miscens. Dosis sint guttæ decem aut duodecim.

* In the former edition, I had ordered sweet spirit of nitre as well in this as in the antacid tincture; but as it is seldom so spirituous as to admit of a pure incorporation with the essential oil of peppermint, I have substituted in its stead spirit of wine; for the small quantity in the dose cannot have any sensible effect, and sweet spirit of nitre may be added as occasion requires.

This

This anodyne essence may occasionally be administered, together with the antispasmodic powder, or with the antacid tincture, or any other medicine, that circumstances may require.

I shall not here enumerate the many additional complaints which attend the venereal virus, and must consequently follow from a depraved and disturbed animal œconomy, nor specify their separate remedies; as the judicious practitioner will from the foregoing know my sentiments on that occasion, and form a proper judgment accordingly. I shall only add a few observations on some difficult cases, which may serve as a caution against the gross errors of surgery, to which many patients have fallen a sacrifice.

It sometimes happens that venereal or other patients have all on a sudden an inflammatory constriction of the urinary bladder, when the virus of long standing has insinuated itself into the sphincter of the vesicæ urinariæ: In which case the catheter is too frequently made use of; the application of which, is not only the most difficult, but sometimes from the constriction impossible; and if persisted in, only augments the spasmodic constriction, increases the inflammation, and has often proved mortal. In this case I advise a singular remedy; namely, to put the feet into cold water. This I have known succeed in the most desperate malady of this nature, when every other method has failed; and is the safest and most effectual remedy in all inflammatory urinary suppressions. Clysters of pure cold water, with some dissolved nitre, are also very efficacious; but the internal use of the antispasmodic

powders, and the antacid injection with the flexible catheter, after the urine is evacuated, must not be neglected. The fear of chilling the blood with the cold bath, in such constrictive suppressions of urine, is groundless; on the contrary, it is of itself a powerful antispasmodic, and is generally followed with a gentle diaphoresis.

The next consideration is, the abscess in the perinæum. This is an evil of the utmost importance; and too often has been occasioned by the improper application of the catheter, an instrument, which should never be applied in the suppressions of urine, but where certainly the obstruction proceeds from a calculus damming up the passage. But be the cause what it may, we only will here consider its remedy, when being called to immediate assistance. What is the most proper to be done whilst the case is in a state of inflammation, I have considered before; but when there is an actual fluctuation of matter, it is then consistent with reason, that it should be opened. The introducing previously the catheter in that case, as some authors have directed, is not only needless, and additionally painful, but even hinders the certainty of the operation; and the introducing the finger into the anus is equally needless. Let the patient kneel on a bed or couch, and stoop with his head as low between his knees as possible, in which position the parts may with ease and certainty be inspected, and that there is nothing to hinder the operation. If needful, an assistant may secure the patient in that position. Then with the incision lancet, open the aposthume, as much as is requisite, but not deeper

deeper than needful. It is an erroneous supposition, that all the cavities are to be opened, and this has been the ruin of many. When the apothume is opened, search with the utmost tenderness, with an easy flexible probe, guarded by a smooth button, into the various cavities, and in every cavity inject cautiously the antacid injection. Dress the ulcer with the antacid cerate: and if there is inflammation, apply the cataplasm before described. If time and circumstances admit, clysters previously, and after the operation, are very requisite; but by no means drastic purges, or any thing that causes a stimulus.

If the urethra, by this operation, has been obliged to be laid open, the ulcer should, when the inflammation admits of it, be cleared as much as possible, and bougies, when the lips begin to unite, are highly requisite, in order to render the passage as clear as possible from carnosities, which the cicatrification might occasion. With this method I have succeeded in two most desperate cases, and the patients perfectly recovered. The one for some time voided the urine through the ulcer, so that for a while I despaired of a perfect cure; which however was happily effected.

Another operation yet more precarious, and terrible in its nature, is the amputation of the penis. If the foregoing remedies are applied in time, there is no need for this melancholy undertaking: But when the sphacelus has already taken place, and entered into the cavernous bodies, the inflammation transformed from a florid tense hue to a dusky brown cadaverous aspect, the skin in a putrid state, attended with a nauseous fætor: The surgeon, who is called to such a deplorable patient,

patient, must not hesitate a moment, to amputate the member. Ligatures in that case, or coutries to stop the blood, &c. ought to be rejected as very improper and pernicious; and I cannot believe that ever one recovered with such a terrible treatment.

The best method is; having the dressings in readiness, the needles properly armed, dry lint, strewed with some calomel *, and the before mentioned antiputrescent fomentation, &c. And the patient properly secured in a laying posture, divide the mortified part from the sound; with a large bistoury, and take up the two arteries with the needles; lay on the pledgets of lint prepared with the calomel, over which lay compresses previously wetted with the fomentations mentioned, and the patient put to compose. The antispasmodic powders, together with the anodyne essence made into draughts, as occasion requires, and clysters occasionally repeated, &c. are requisite. The bark is greatly esteemed in such cases; but I am inclined to think the patient will ever by the above rules do better without it.

Lastly, I will consider the important operation of extirpating a scirrhus or mortified testicle. Mr. le Dran has been very circumstantial in this operation, but with humble submission, his method rather perplexes, and renders the operation precarious; the ligatures which he orders on the spermatic arteries are not only needless, but are

* Calomel intermixed with starch, strewed on a pledge of lint, is perhaps the best application possible, to the stump of an amputated limb; and worth the consideration of every judicious surgeon.

liable to inflame them. The entrance of the spermatic arteries from the aorta are very narrow, so that the blood enters and circulates in them but very slow, and in this respect they differ very little from the veins; so that his fears of the patient bleeding to death are entirely groundless. His precautions, that the divided spermatic vessels should not go back into the abdomen, are equally ill founded; for that will and must be the case if the patient does recover. The parts becoming useless, naturally shrivel up, and in time are quite obliterated; as has been observed in the dissections of castrated subjects.

This considered, the operation is performed with less trouble and certainty to the operator; and less pain, and more safety to the patient. The method is this. The patient being laid backwards, his legs distended, and secured by proper assistants, divide the scrotum lengthwise on the diseased testicle with a bistoury, so that by one incision the aperture will admit the taking out the testicle; extend the spermatic vessels invested by the peritonæum by which the testicle is suspended; and separate the testicle, as near the abdomen as may be; then dress the wound with dry lint prepared with calomel as before observed, and let it be dressed with compresses, steeped in the before mentioned fomentation, in order to quell an approaching inflammation; and thus with proper care, a complete cure will soon be effected.

The fear of an hæmorrhage, or a collection of matter in the abdomen from the draining of the spermatic vessels is without foundation; for
when

when we consider that they are enveloped with the peritonæum, and that the drain must consequently descend to the orifice of the operation, it can be of no consequence; but besides all this, whilst the divided spermatic vessels are immediately enclosed, freed from the external air and farther irritation, the parts become easily reconciled; and the draining will be absorbed by the neighbouring lymphatics, especially if the habit is otherwise good; this is sufficiently experienced by the simple method of * castrating brutes in many countries; and the † eunuchs among the Easterns, where that operation is performed with ease and safety; whilst it must always be attended with the greatest hazard of life when the operation is perplexed with so many unnecessary circumstances, as some writers have advised to be followed.

But this theory I can confirm by experience in two desperate cases; the one a contused testicle, where an approaching mortification threatened the loss of life; the other, a scirrhus testicle of an enormous size, in a negro; in both cases I took the above method, and was so successful, that without the least symptom of danger, both

* That I might the more be confirmed of the safest method of castration, I have performed that operation in various ways, on boar pigs, and dissected them afterwards; in order to discover the effects of each different way.

† Castration is a remedy I recommend to sodomites. I humbly conceive, if the legislature should order this operation to be inflicted on these miscreants instead of other corporal punishments, it would be the only effectual method to quell that horrible pest to society.

patients

patients recovered in a short time their former health and vigour.

Before I conclude, I think it yet requisite to observe something concerning my method of internal treatment before-mentioned.—Notwithstanding the gentleness I have so much insisted on to be ever observed as the safest and most effectual method to eradicate the malignity from the system; and the small doses of mercury administered to that intent; yet so various are the constitutions, and so many different changes happen in the same system, that circumstances should ever be consulted, and accordingly the effects will vary ad infinitum. Mercury, in whatever form it is given, will sometimes in the smallest quantity be inclined to affect the salivary glands; particularly if other secretions and excretions seem to be obstructed; but as I advise the congestion of humours to the salivary glands, to be ever avoided, being fully persuaded it must oppose the salutary effects of the mercury intended, I hold it always prudent to balance the secretions of the system with other evacuations; whether cathartics, diuretics, diaphoretics, &c. by which the system may be again rectified; which a prudent practitioner will ever know how to guide with caution.

I must likewise observe, that the notion of mercury being merely an antivenereal medicine is evidently one of the grossest errors of physic among our modern mistakes. Experience confirms that its antacrid quality extends to every malady in the human body, that has acrimony for its foundation. I have also repeatedly mentioned in the various

rious parts of this treatise, and a due observance in practice daily confirms it, that whatever malady the venereal virus is liable to bring on, the same may also be produced by a variety of causes, either externally or internally, materially different from the venereal infection. Hence prejudice should be banished from the rational practitioner; the curative indication should ever be formed according to the nature, action, appearance, and situation of the disease, but not precisely according to the cause that produces it; since those may be different and yet the effects the same.

This considered, and which is strictly confirmed by experience, mercury and its preparations, the universal antacid, is certainly the greatest medicine we have in the whole materia medica; not only in the venereal, but in every disease to which the human body is liable, without distinction to name, cause, action, or part affected, and sex or age of the patient. But let it ever be remembered as a sacred maxim in physic, that the virtue of a medicine consists wholly in the skill of its application, and that the best and most salutary medicine is converted into the most deliterious poison, if injudiciously administered.

With respect to the venereal disease, the grossest absurdities have from time to time been adopted. Every age has had their peculiar and fashionable errors; which, like clouds in continual succession, have obscured the serenity of truth. At present, a notion seems to creep in, that a gonorrhoea is of a different nature from the lues venerea, and contains nothing of the infectious malignity in its nature; and that shankers
however,

however, and the other symptoms, are distinctly the malignity of the virus *.

I shall not say any thing of the absurdity of the error; but as it is an ignis fatuus by which many are liable to be led into destruction, I would caution every person who has any reason to consult, or health worth preserving, to guard themselves against the allurements of this error of judgment. An old habitual purulent gonorrhœa may seem to come under such a denomination; but notwithstanding its gentleness, it is sooner or later liable to subject the patient to an unaware shock, to the peril of life itself: But the recent gonorrhœa in irritable subjects might, I think, on the least serious reflection, annihilate an absurdity too gross even to admit of refutation †.

The animal virus, like fire, may be kindled many different ways, and affect many different parts, and in this consists the variety of diseases; whilst there is the least spark remaining in the system, the animal fabric is not safe from a universal conflagration. And all the assistance nature requires from art is to quench the destructive fire, wherever it is open to be acted upon, to assist the salutary efforts of the animal œconomy, and by the gentle hand of judgment, to set na-

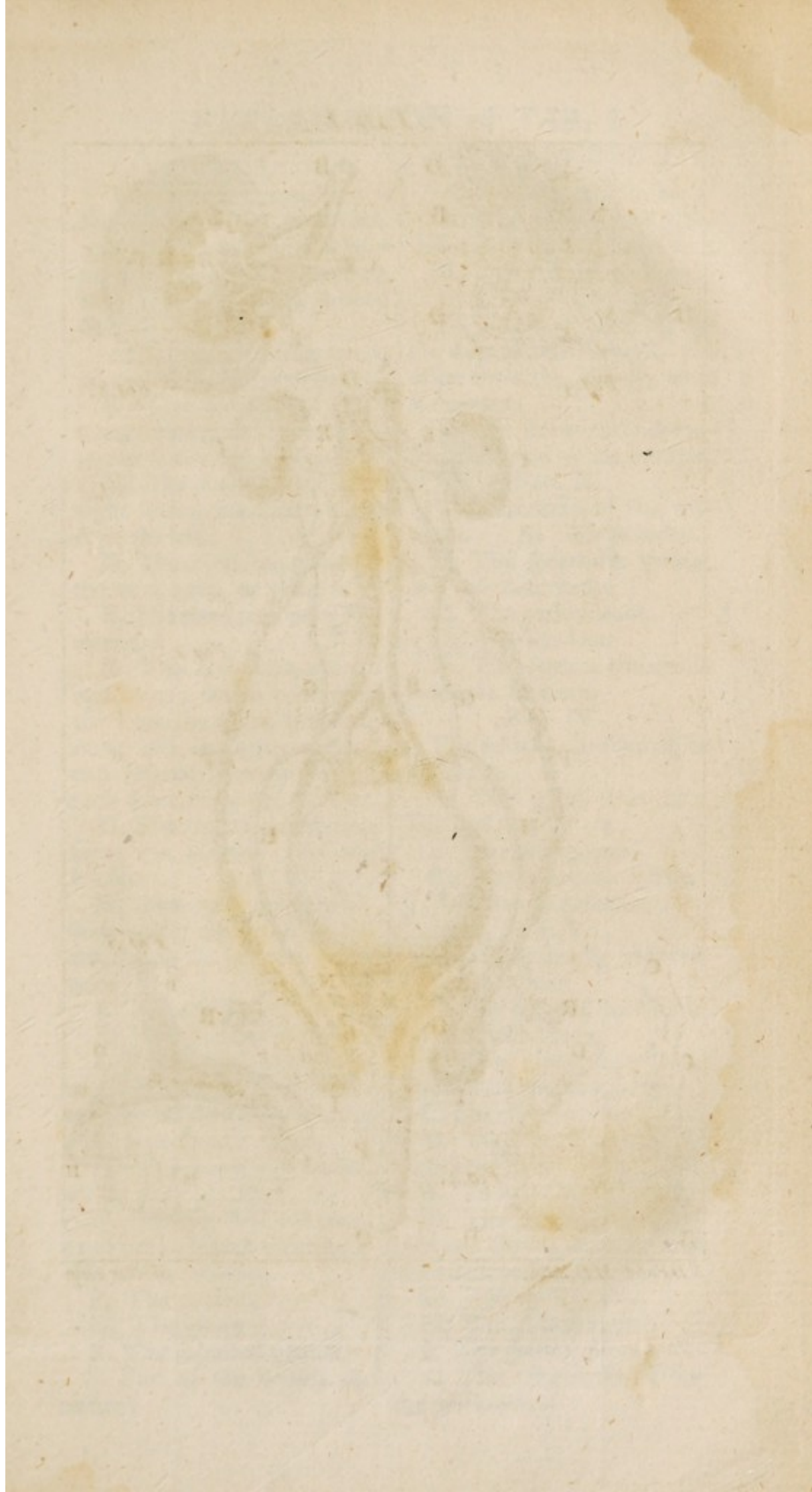
* Had this notion been asserted by men of inferior character, I should have imputed it to ignorance, and not thought it worth my notice; but what makes it the more surprising is, that men of character and of reputed ability, have had their judgment so far mislead, as to favour a notion in itself both pernicious and ridiculous.

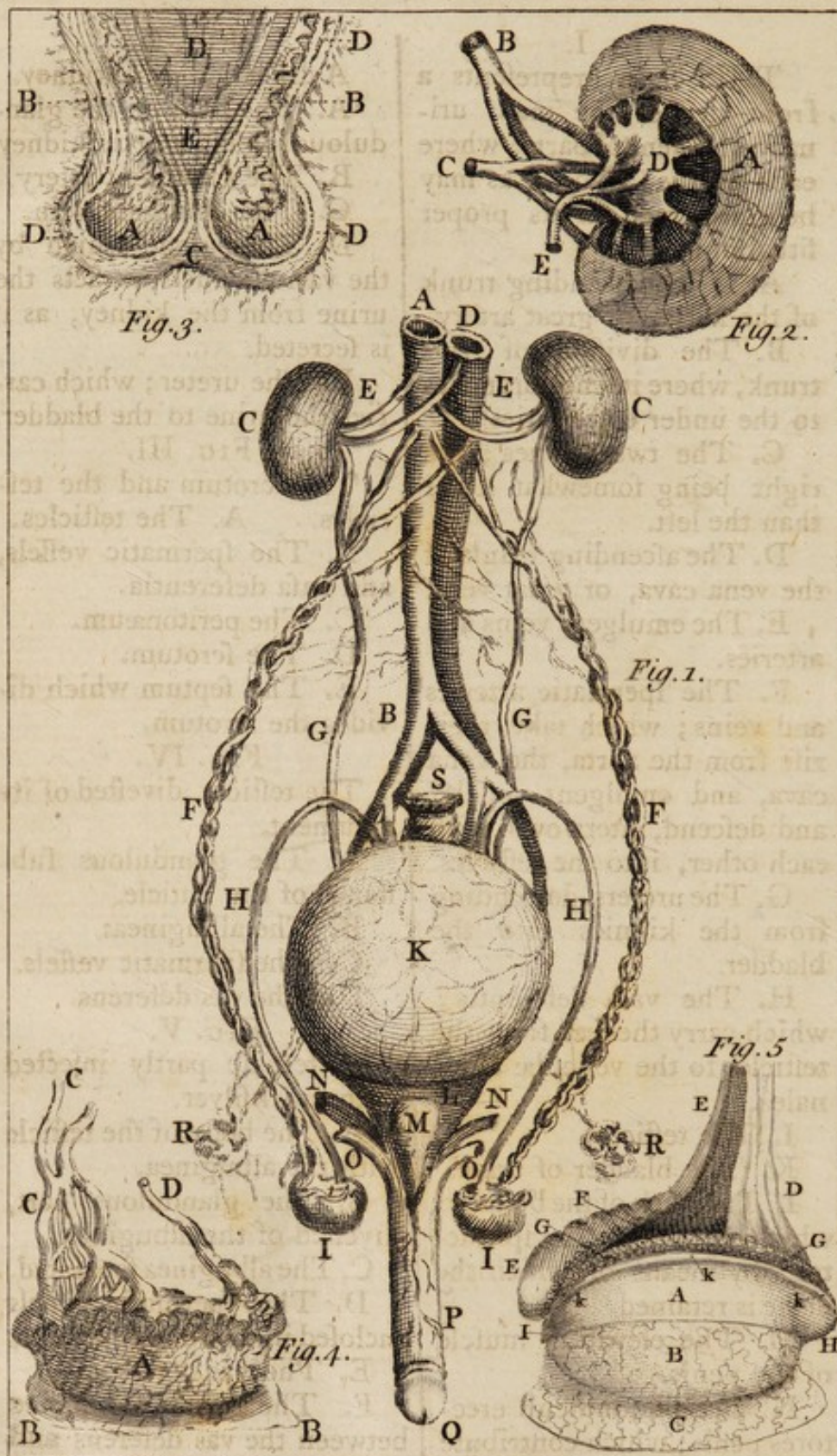
† See chap. v. part ii. from page 116 to 216.

ture to rights, when by disturbances of acrimony she is led astray from her salutary laws.

Here then I beg leave to conclude this treatise. And as I have throughout the whole followed the dictates of reason, experience, and an upright heart, I am at least sure of this consolation in my last moments, that I have, to the best of my judgment, discharged myself in this, as a faithful member to society, in obedience to truth and duty.

T H E E N D.





N.D. Falck M.D. delin.

Walker sculp.

EXPLANATION of TAB. I.

FIG. I.

THIS figure represents a front view of the male urinary and genital parts; where each part is (as much as may be) preserved in its proper situation.

A. The descending trunk of the aorta, or great artery.

B. The division of this trunk, where it sends branches to the under extremities.

C. The two kidneys; the right being somewhat lower than the left.

D. The ascending trunk of the vena cava, or great vein.

E. The emulgent veins and arteries.

F. The spermatic arteries and veins; which take their rise from the aorta, the vena cava, and emulgent vessels; and descend, interwoven with each other, into the testicles.

G. The ureters, descending from the kidneys into the bladder.

H. The vasa deferentia; which carry the seed from the testicles to the vesiculæ seminales.

I. The testicles.

K. The bladder of urine.

L. The neck of the bladder; which constitutes the sphincter: by means of which the urine is retained.

M. The elevating muscle of the penis.

N. O. The musculi erectores penis; which contribute also to the erection.

P. The penis.

Q. The glans.

R. The inguinal glands.

S. Part of the intestinum rectum.

FIG. II.

A dissection of a kidney.

A. The body of the glandulous substance of the kidney.

B. The emulgent artery.

C. The emulgent vein.

D. The bason, which by the various ducts attracts the urine from the kidney, as it is secreted.

E. The ureter; which carries the urine to the bladder.

FIG. III.

The scrotum and the testicles.

A. The testicles.

B. The spermatic vessels, and vasa deferentia.

C. The peritonæum.

D. The scrotum.

E. The septum which divides the scrotum.

FIG. IV.

The testicle, divested of its tegument.

A. The glandulous substance of the testicle.

B. The albuginea.

C. The spermatic vessels.

D. The vas deferens.

FIG. V.

A testicle partly injected with quicksilver.

A. The body of the testicle with the albuginea.

B. The glandulous part, divested of the albuginea.

C. The albuginea separated.

D. The spermatic vessels inclosed in a celular substance.

E. The vas deferens.

F. The celular substance between the vas deferens and spermatic vessels.

G. The epididymis.

H. The globus major.

I. The globus minor.

k. The separation from the peritoneum.

EXPLANATION of TAB. II.

FIG. I.

THIS figure represents the membrum virile in its natural position, viewed side-ways, in order to exhibit the curve of the urethra, as well when the member is erect, as when it is flaccid.

A. The bladder.

B. Part of the intestinum rectum,

C. The anus.

D. The neck of the bladder.

E. The urethra; this part from O to C is called the perinaeum.

F. The conjunction of the os pubis.

G. The connexion of the erectores, &c.

H. The pubis.

L. The abdomen.

M. The penis when erect.

N. The glans.

O. The penis when flaccid.

P. The scrotum.

Q. The testicle.

R. The spermatic vessels.

S. The vas deferens.

T. The ureter.

U. The femoral vesicle.

FIG. II.

Representing that part of the urethra which is next to the rectum.

A. A portion of the bladder.

B. The ureters.

C. The vasa deferentia.

D. The vesiculæ seminales.

E. The prostate gland.

F. Part of the urethra.

G. The blood vessels of the vesiculæ seminales.

H. The mucous glands.

I. Two small glands near the prostate.

K. The accelerator; divided in the middle seam, and expanded.

L. The bulb of the cavernous body of the urethra, inflated, and divested of the accelerator muscle.

M. The third pair of muscles of the penis.

N. The muscoli erectores penis.

FIG. III.

The cavernous body of the urethra, with the glans; and slit open, so as to see part of the inside.

A. The cavernous body.

B. The urethra.

D. The cavity formed in the corpus cavernosum glans penis; in which the extremities of the corpora cavernosa penis are received.

D. The upper part of the glans.

E. The glans.

F. The frænum.

FIG. IV.

Shews the situation of the inguinal glands, and the neighbouring parts.

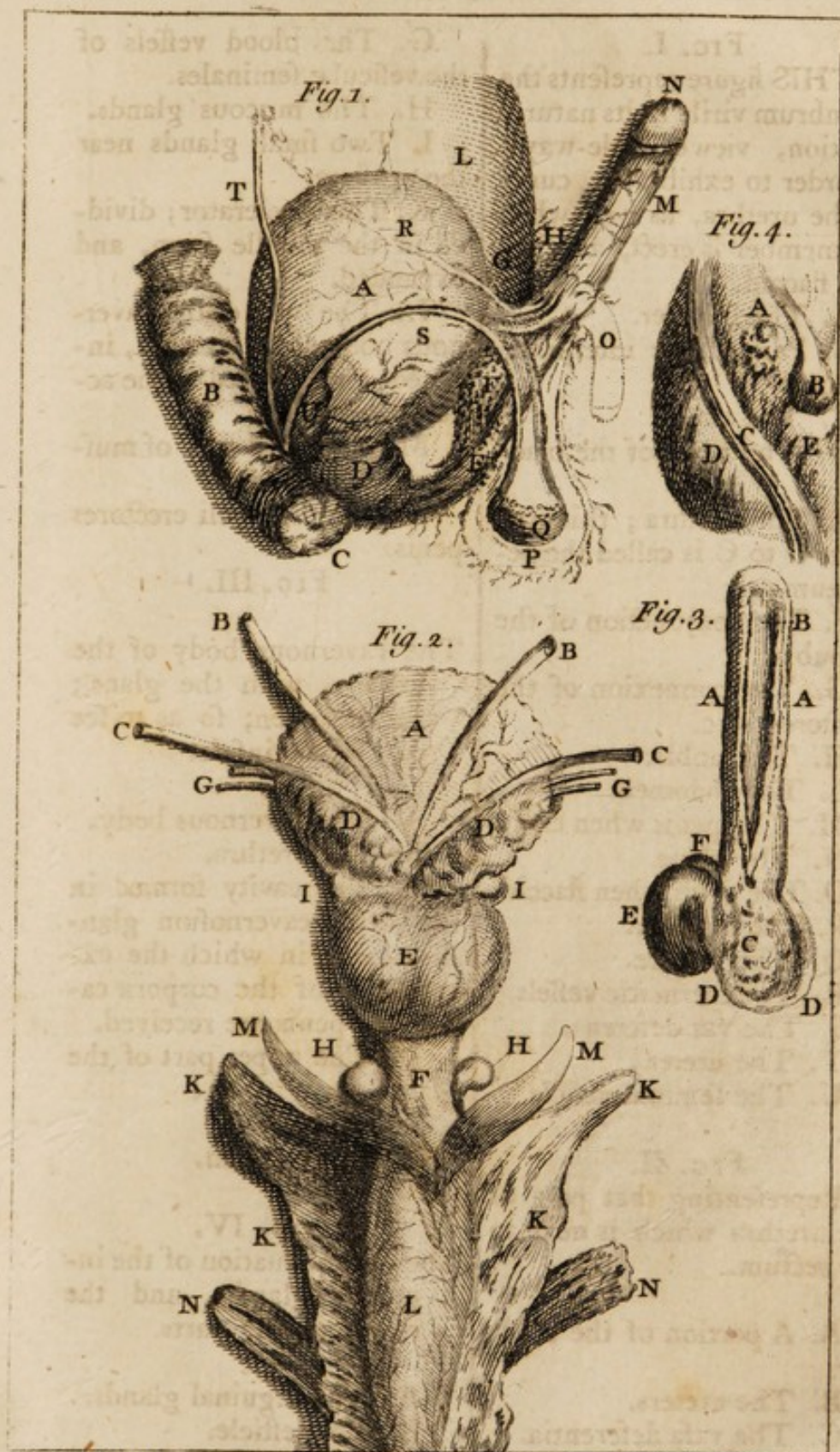
A. The inguinal glands.

B. The testicle.

C. The sartorius.

D. The rectus femoris.

E. The triceps.

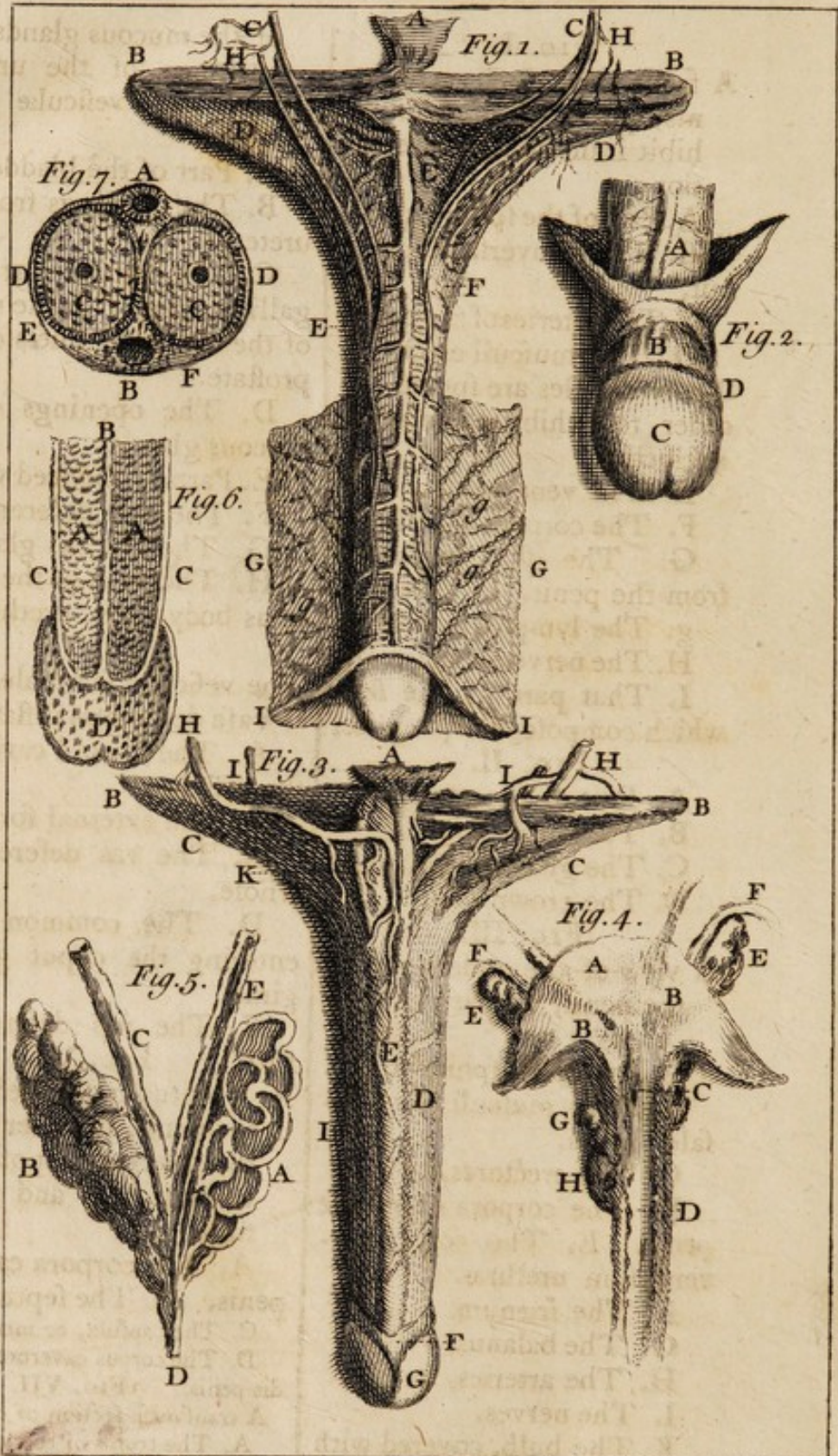


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EXPLANATION of TAB. III.

FIG. I.

A front view of a human penis, prepared so as to exhibit it in the state of erection.

A. Part of the sphincter ani.

B. The transversalis spread out.

C. The arteries of the penis.

D. The muscoli erectores.

These muscles are spread, in order to exhibit them more distinctly.

E. The vena penis.

F. The corpora cavernosa.

G. The skin separated from the penis.

g. The lymphatic vessels.

H. The nerves of the penis.

I. That part of the skin which composes the præpuce.

FIG. II.

A. Part of the penis.

B. The duplicature.

C. The glans or balanus.

D. The crown.

FIG. III.

A view of the under part of the penis, prepared as before.

A. Part of the sphincter ani.

B. The muscoli transversales penis.

C. The erectores.

D. The corpora cavernosa penis. E. The corpus cavernosum urethræ.

F. The frænum.

G. The balanus.

H. The arteries.

I. The nerves.

K. The bulb, covered with the musculus accelerator.

FIG. IV.

The fore part of the urethra laid open; to shew the orifices of the excretory ducts

of the mucous glands, the openings of the ureters, from the vesiculæ seminales.

A. Part of the bladder.

B. The openings from the ureters.

C. The caruncle, or caput gallinaginis; with the mouth of the excretory ducts of the prostate.

D. The openings of the mucous glands.

E. Parts of the seed vessels:

F. The vasa deferentia.

G. The mucous glands.

H. The bulb of the cavernous body of the urethra.

FIG. V.

The vesiculæ seminales, and vasa deferentia inflated.

A. The inward cavities of the vesicles.

B. The external form.

C. The vas deferens left whole.

D. The common orifice entering the caput gallinaginis.

E. The vas deferens cut thro'. FIG. VI.

A longitudinal dissection of the penis, in order to shew the internal part of the cavernous body and the septum.

A. The corpora cavernosa penis. B. The septum.

C. The capsula, or membrane.

D. The corpus cavernosum glandis penis. FIG. VII.

A transverse section of the penis.

A. The trunk of the vena penis.

B. The urethra, and its corpus cavernosum.

C. The corpora cavernosa penis.

D. The trunk of the arteries.

E. The tegument of the corpus.

F. The capsula, or common tegument.

EXPLANATION of TAB. IV.

FIG. I.
REPRESENTS the genital parts peculiar to the female sex, on a side view.

- A. The bladder.
- B. The vagina.
- C. The uterus.
- D. Part of the fallopian tube.
- E. Part of the rectum.
- F. Mons veneris.
- K. G. N. Pudendum muliebne.
- K. N. The rima magna.
- G. The labia.
- H. The Nymphæ.
- I. The clitoris.
- K. The præpuce of the clitoris.
- L. The meatus urinarius.
- M. The orifice of the vagina.
- N. The perinæum; the space between the pudendum and the anus.
- O. The anus.
- P. The ureters.
- R. The carunculæ myrtiformes.

FIG. II.
This figure represents the uterus and vagina, partly opened.

- A. The uterus; that part next the rectum.
- B. The inside of the vagina, with the rugæ, and the small openings of the mucous glands, called Lacunæ.
- C. The mouth of the uterus.
- D. The orifice of the meatus urinarius.
- E. The carunculæ myrtiformes.
- E. The præpuce of the clitoris.
- F. The clitoris.

G. The external part of the vagina.

H. The fallopian tubes.

I. The external parts of the ovaria.

K. The ovaria divested of the vascular membrane of the peritonæum.

L. The spermatic vessels.

M. The loose flaps of the tubes, called the morsus diaboli.

N. The broad ligaments, properly nothing but a continuation of the peritonæum.

O. The fundus of the uterus.

P. The ligamenta rotunda.

Q. Its extremities; which are fixed to the os pubis, whose ramifications end in the clitoris.

R. Some of the blood vessels; which from the spermatic vessels give their branches to the fallopian tubes and the uterus.

FIG. III.
The clitoris and its appendages: inflated, as it is in coitu.

A. The body of the clitoris; distended, as it is with blood in coitu.

B. The great vein.

C. The arteries and nerves.

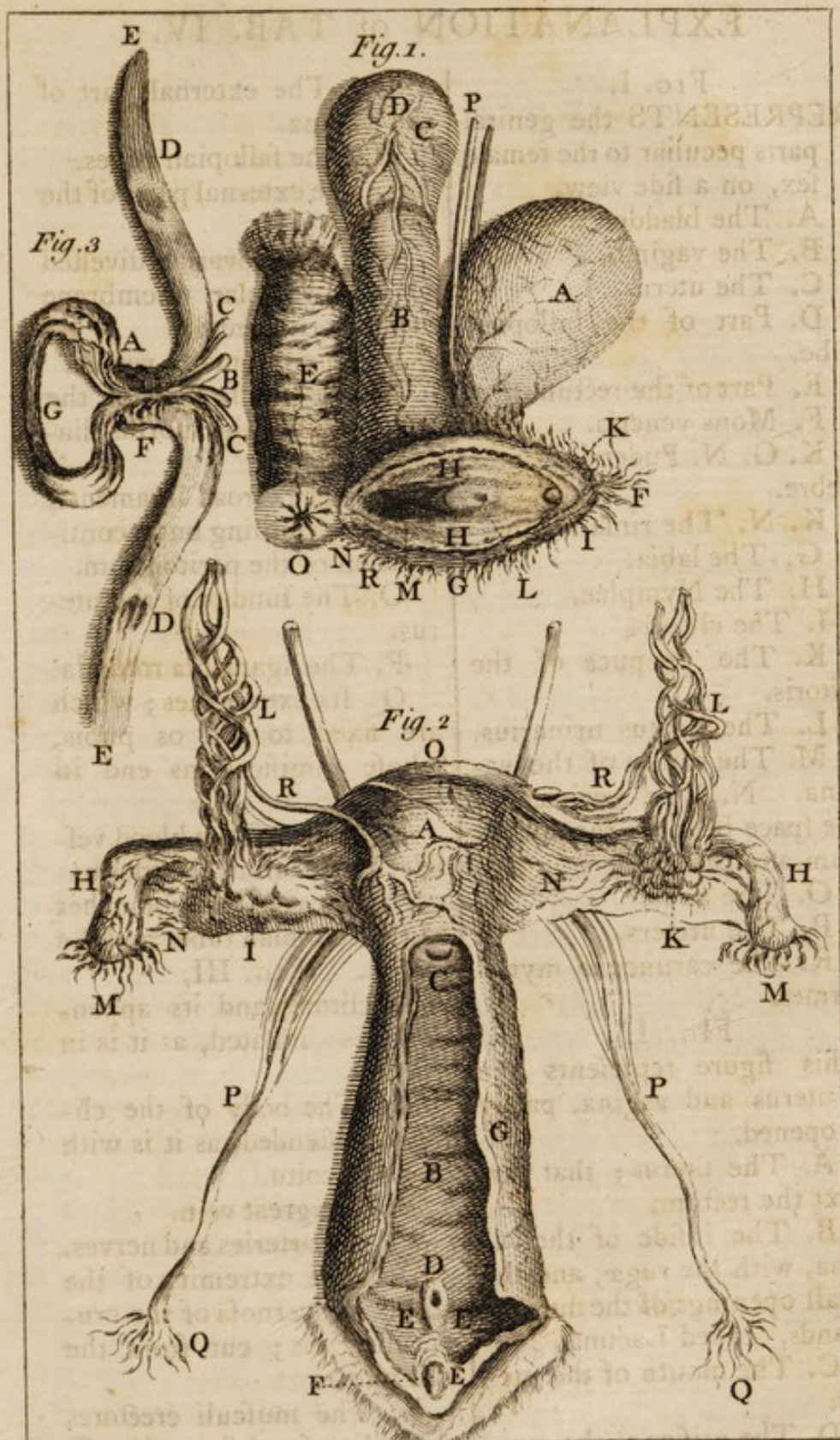
D. The extremity of the corpora cavernosa of the crura clitoridis; cut from the ossa pubis.

E. The musculi erectores clitoridis, freed from the ossa coxendicis, and left at their terminations.

F. The crura also distended.

G. The corpus cavernosum pudendi, inflated by the veins of the clitoris.

TAB. IV.



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EXPLANATION of TAB. V.

FIG. I.

Represents the female syringe, in its natural size; which should be made of the best ivory.

A. The barrel part; which should be strong, and the barrel quite true; that the piston E. may move easy, and the whole not subject to warp.

B. Is the lower pipe part; which should be solid ivory, and bored through with a narrow canal, like the dotted lines C. which may again open into various perforations at the end D. this should be screwed on exactly to the upper part, so as to make a good joint F.

If the vagina is intended to be injected, various small perforations at the end are necessary, in order to make the injection search into the various rugæ in the vagina; but if the injection is designed for the uterus only, one perforation in the middle is sufficient, and the other orifices may be stopped up with wax.

FIG. II.

Represents a common syringe of ivory, made so as to fit in the capsula of the flexible catheter.

A. The syringe.

B. The flexible catheter.

C. The silver wire, suitable to the catheter.

D. The pipe of the syringe, which may occasionally be screwed on.

FIG. III.

A straight bistoury; the best instrument for amputating the penis, castration, &c.

FIG. IV.

The crooked bistoury, guarded at the point with a kind of button, which is a continuation from the back of it, and serves instead of a conductor; the best instrument for the opening of fistulous canals; either a fistula in ano, or in the abscess in perinæum.

FIG. V.

Is an incision lancet for the opening of aposthumes in general; buboes, exulcerated testicles, &c.

The edge of these instruments, ought to be of a smooth sharpness, but not so as to bend easily, when pressed flatly upon the nail; a default of this nature is apt to make them become rough in the operations.

FIG. VI.

Represents the suspensorium scroti; requisite for supporting the testicles in the hernia humoralis, or other ailments in the scrotum.

A. is the waist band, which is to be tied before.

B. the suspenders.

C. the purse, in which the scrotum rests.

D. the dotted lines, shewing that the part B. is to go through the purse part C.

F. Is

EXPLANATION of PLATE V.

F. Is a front view of the suspensorium put on.

G. The hind view of the suspensorium; shewing that it will be no hindrance in purging, &c.

FIG. VII.

Represents the natural bigness of the suspensorial purse; which is nothing more than a double piece of linen cloth, stitched round the edge A. and open at the fore part B. and hind part C.

This bandage has the advantage, that it will suit immediately a patient of any size, or the largeness or smallness of the scrotum, or any topic applied to that part; for the purse may be brought backward and forward, as is most agreeable and necessary.

FIG. VIII.

Represents a suspensorium of the common form.

FIG. IX.

Represents some of the most common disorders of the bones.

A. Is the sound bone.

B. The manner of an exfoliation.

C. The head of a bone in an hyperostosis.

D. An exostosis, particularly a node.

E. An exostosis filled with a carcinomatous excrescence.

F. A bony excrescence in some of the gummata, distinctly from the main bone, which sometimes is kept by a stalk.

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