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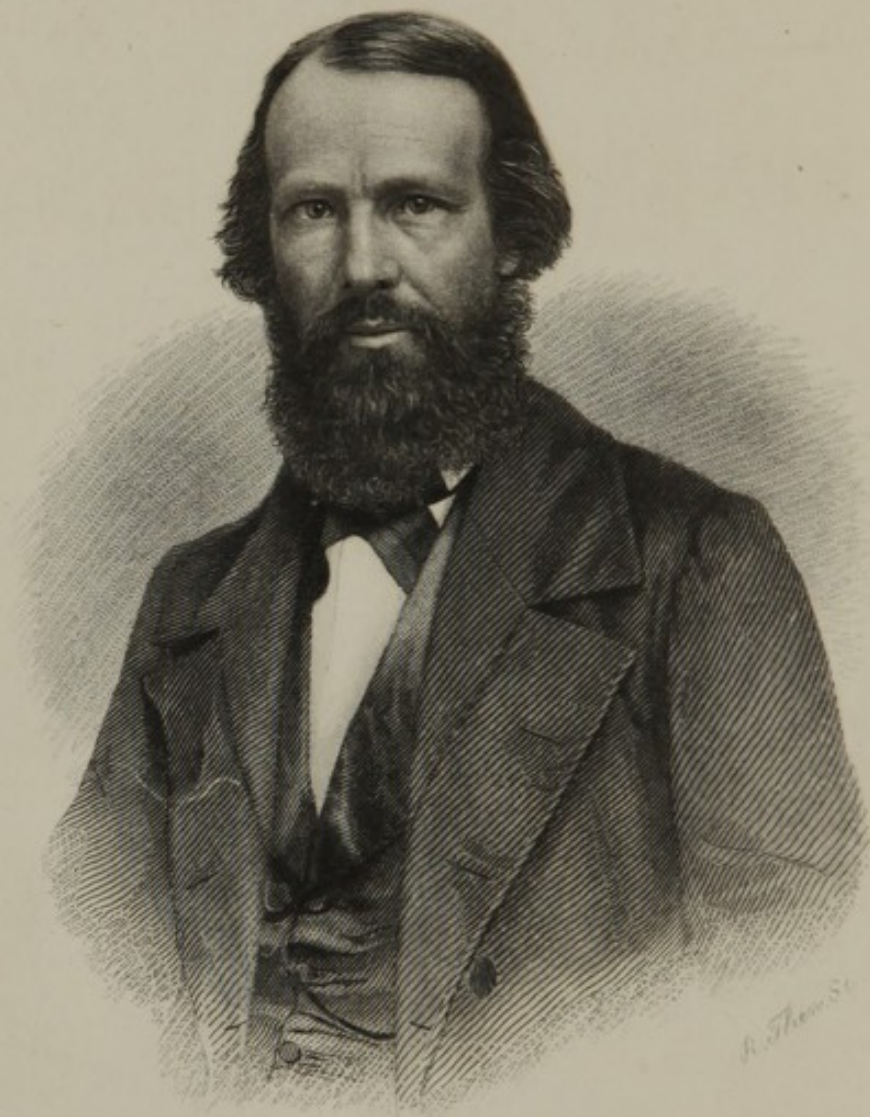
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Very Truly,

R. D. Pull, M.P.

PATHOLOGY
OF THE
REPRODUCTIVE ORGANS;

ALL FORMS OF SEXUAL DISORDERS.

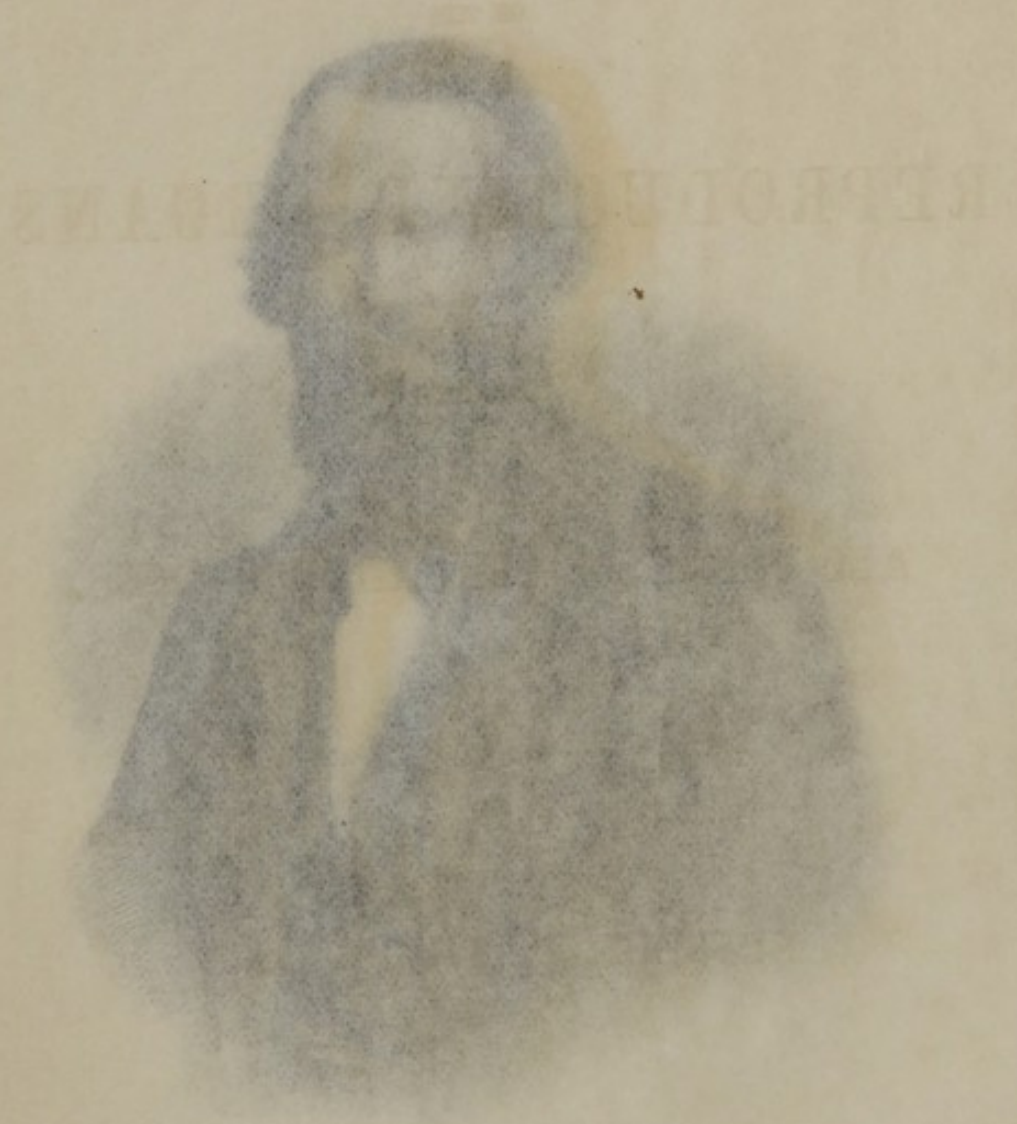
BY
RUSSELL T. TRALL, M.D.

BOSTON:

S. CHEVERETT EMERSON,
229 WASHINGTON STREET.

1862.

PATHOLOGY



Very Truly,

A. P. Smith, M.D.

PATHOLOGY
OF THE
REPRODUCTIVE ORGANS;

EMBRACING

ALL FORMS OF SEXUAL DISORDERS.

BY

RUSSELL T. TRALL, M.D.

BOSTON:

B. LEVERETT EMERSON,

129 WASHINGTON STREET.

1862.

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1862

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PREFACE.

TEN years' experience in treating Sexual Diseases *secundem artem*, — according to the principles of drug-medication, as taught in medical schools and books, and illustrated in public and private hospitals; and fifteen years' experience in treating the same maladies according to the principles of the Hydropathic, or, more properly, Hygienic system, — have convinced me, not only of the disastrous consequences of the former, but also of the incomparably superior safety and efficacy of the latter. Indeed, I have long been of the opinion, that the poisons administered for the cure of all forms of venereal affections were vastly more damaging to the patients, as a general rule, than the diseases themselves would be, if left to the unaided resources of the vital powers, with only such attentions to Hygiene as common sense would suggest. And I find, by an extensive examination of medical statistics as recorded in medical journals and in the standard works, both European and American, that wherever, whenever, and however experiments have been made, with the view of testing the benefits of different plans of medication, the advantage has invariably been

on the side of that treatment which employed the least potency of drug-medicine. In other words, those practitioners, other circumstances being equal, who have prescribed the least medicine, have had the best success. Their cures have been more speedy, more complete, less liable to relaxes, and less frequently attended with *sequelæ*, or secondary diseases.

In no class of ailments have physicians had better opportunities for observation and experimentation, than in the one before us, and of ascertaining the relative or absolute merits or demerits of all manner of drugs, specifics, and nostrums. But, unfortunately for a very large and most grievously afflicted class of invalids, diseases of the sexual organs are still regarded as the *opprobrium medicorum*, if not the *scandalum medicorum*.

The only idea that medical men of the drug-schools seem to entertain of the nature and cure of venereal diseases is that of *counter-poisoning*. Virus must be met by virus of another kind; infection must be neutralized with a different infection; foul secretions must be antidoted with fouler drugs; and specific inflammation must be counteracted with specific mercurial or other poison. And the result of all is, the miserable victims of unavoidable accidents, or of ungoverned lust, are doubly victimized. Their punishment is indeed "greater than they can bear," as is sadly manifested in rotting bones, corroding ulcers, and ruined constitutions.

If these consequences could be limited to the erring or unfortunate, the subject would be of comparatively trivial

importance. We might, perhaps, be justified in leaving them to their fate, as frightful examples of the relentless rigor with which Nature vindicates her laws in punishing their infraction. But these patients are human beings; and, in most cases, are so associated with their fellow-creatures, that their sins and their bodily conditions seriously affect others. They are, or may be, husbands, wives, and parents; and their unsoundness and frailties of bodily organization be communicated to each other, or transmitted to posterity, thus fearfully illustrating the principle, that every vice, every evil, every disease, every imperfection, in any individual of the community, affects more or less, and always injuriously, the whole social compact, as every cess-pool or cigar-smoker in a city taints, to some degree, the atmosphere which all are compelled to breathe.

I find it to be a very general prejudice in society, even among those who admit and believe in the Hygienic system of medication, as applied to ordinary fevers, inflammations, and chronic diseases, that it is insufficient in, or inapplicable to, venereal complaints. This arises from a misapprehension of the intrinsic nature of these maladies, and an erroneous idea of what constitutes the Hygienic system. Those who regard Hygienic Medication as a "Water-Cure" in the literal signification of the term, and Water-Cure as a mere routine of bathing processes, may well object to its efficacy, or even propriety, in many forms of sexual diseases.

But, in a proper sense, Hygienic Medication comprehends the employment of every normal resource, and the

application of every truly remedial agent, rejecting only mere poisons, — such agencies or things as are naturally and intrinsically incompatible with the integrity of the organic structures, and philosophically antagonistical to the normal functions. And this principle ignores *poisons, drugs and chemicals*, of every name and nature, so far as all *directly remedial* measures are concerned.

I say *directly remedial measures*. And this distinction is important. The system which I advocate and teach also employs all ordinary surgical appliances, as caustics, ligatures, congelation, the knife, &c., &c.: not, however, as curative agents, or normal processes, *per se*; but, on the contrary, as *destructive processes*. Their use is limited to abnormal structures or morbid growths. By removing a cancer, destroying an ulcerous surface, dilating a stricture, &c., they may be said to be *indirectly remedial*. Drug-medication, therefore, in the Hygienic system, is never applicable to diseased *actions*, but always restricted to diseased *conditions*. It is never resorted to as a *restorative* agency, but always as a *destructive* one. It is never employed to *cure disease*, but always intended to *kill* a substance or structure we wish to get rid of.

In addition to the surgical appliances just named, the system of Hygienic Medication embraces the regulation and adaptation of *air, food, exercise, water, temperature, clothing, rest, sleep, passional influences*, &c., to suit the particular circumstances of every case of disease. So far from being a mechanical routine of bathing processes, or a “Cold-Water Cure,” as many still persist in having it,

our system consists in freeing the body of morbid structures by surgical means, and supplying the vital powers with such materials of purification and replenishment as they *can use under the circumstances.*

R. T. T.

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Introduction.

HYGIENIC APPLIANCES.

IN order to avoid frequent repetitions in the following pages, I extract from a small work I have lately published, entitled "Water-Cure for the Million," the following brief exposition of our system of Hygienic Medication.

BATHING.

1. WET-SHEET PACKING. — On a bed or mattress two or three comfortables or bed-quilts are spread; over them a pair of flannel blankets; and lastly, a wet sheet (rather coarse linen is best) wrung out lightly. The patient, undressed, lies down flat on the back, and is quickly enveloped in the sheet, blanket, and other bedding. The head must be well raised with pillows, and care must be taken to have the feet well wrapped. If the feet do not warm with the rest of the body, a jug of hot water should be applied; and if there is tendency to headache, several folds of a cold wet cloth should be laid over the forehead. The usual time for remaining in the pack is from forty to sixty minutes. It may be followed by the plunge, half-bath, rubbing wet sheet, or towel-wash, according to circumstances. The pack is not intended as a sweating process, as many suppose, though a moderate perspiration is not objectionable. A comfortable temperature of the

surface is the desideratum, independent of more or less sweating, or none at all. When the patient warms up rapidly, thirty minutes or less will be long enough to remain enveloped; but when he becomes warm slowly and with difficulty, an hour or more is not too long. In some cases it is necessary to put hot bottles to the sides as well as to the feet. When the object is to cool a fever, the sheet should be allowed to retain more water, or, if the skin is very hot, double sheets may be used. In chronic diseases, when the main object is to induce "reaction," or rather circulation, toward the surface, the sheet should be wrung more thoroughly, and the patient enveloped with a greater quantity of blankets, comfortables, or other bedding.

2. HALF-PACK. — This is the same as the preceding, with the exception that the neck and extremities are not covered by the wet sheet, which is applied merely to the trunk of the body, from the armpits to the hips. It is adapted to those whose circulation is too feeble for a full pack; it is also often employed as a preparation for the full pack.

3. HALF-BATH. — An oval or oblong tub is most convenient, though any vessel allowing a patient to sit down with the legs extended will answer. The water should cover the lower extremities and about half of the abdomen. While in the bath, the patient, if able, should rub the lower extremities, while the attendant rubs the chest, back, and abdomen.

4. HIP OR SITZ BATH. — Any small-sized wash-tub will do for this, although tubs constructed with a straight back, and raised four or five inches from the floor, are much the most agreeable. The water should just cover the hips and lower part of the abdomen. A blanket should be thrown over the patient, who will find it also useful to rub or knead the abdomen with the hand or fingers during the bath.

5. FOOT-BATH. — Any small vessel, as a pail, will answer. Usually the water should be about ankle-deep; but very delicate invalids, or extremely susceptible persons, should not have the water more than half an inch to one inch in depth. During the bath, the feet should be kept in gentle motion. Walking foot-baths are excellent in warm weather, where a cool stream can be found.

6. WARM AND COLD FOOT-BATH. — Place the feet in water as warm as can be borne for five to ten minutes; then dip them for a moment in cold water, and wipe dry.

7. RUBBING WET-SHEET. — If the sheet is used *drippingly* wet, the patient stands in the tub; if wrung so as not to drip, it may be used on a carpet or in any place. The sheet is thrown around the body, which it completely envelops below the neck; the attendant rubs the body over the sheet (not with it), the patient exercising himself at the same time by rubbing in front.

8. PAIL-DOUCHE. — This means simply pouring water over the chest and shoulders from a pail.

9. STREAM-DOUCHE. — A stream of water may be applied to the part or parts affected, by pouring from a pitcher or other convenient vessel, held as high as possible; or a barrel or keg may be elevated for the purpose, having a tube of any desired size. The power will be proportional to the amount of water in the reservoir.

10. TOWEL OR SPONGE BATH. — Rubbing the whole surface with a coarse wet towel or sponge, followed by a dry sheet or towels, constitutes this process.

11. AFFUSION-BATH. — This implies pouring water gently over the surface of the body. The patient may stand in a tub, or lie on the bed, the bedding being protected by a sheet of India-rubber or gutta-percha.

12. THE PLUNGE-BATH. — This is employed but little, except at the establishments. Those who have conveniences will often find it one of the best processes. Any tub

or box holding water enough to allow the whole body to be immersed, with the limbs extended, answers the purpose. A very good plunge can be made of a large cask cut in two near the middle. It is a useful precaution to wet the head before taking this bath.

13. DROP-BATH. — A vessel, filled with *very cold* water, is furnished with a small aperture through which the water falls in drops. It is adapted to torpid muscles, paralytic limbs, tumors, etc. It should be followed by active friction.

14. THE SWEATING-PACK. — To produce perspiration, the patient is packed in the flannel blanket and other bedding, as mentioned in No. 1, omitting the wet sheet. Some persons will perspire in less than an hour; others require several hours. This is the severest of the Water-Cure processes, and, in fact, is very seldom called for. The warm, hot, or vapor baths, are, in most cases, preferable.

15. HEAD-BATH. — The patient lies extended on a rug or mattress, the head resting in a shallow basin or bowl, holding two or three inches of water, the shoulders being supported by a pillow. It is principally employed in chronic affections of the head, eyes, and ears. Wet cloths applied to the head, the “pouring-bath,” and the “wet cap” are good substitutes.

16. THE POURING HEAD-BATH. — The patient lies face downward, the head, supported by an attendant, projecting over the side of the bed, which is protected by a sheet or blanket thrown around the patient's neck; a tub is placed under the head to catch the water, which is poured from a pitcher moderately, but steadily, for several minutes, or until the head is well cooled, the stream being principally applied to the temples and back part of the head. It is useful in severe cases of sick headache; in the early stage of violent choleras; in the early stages of

fevers, when attended with great gastric irritation or biliary disturbance. In hysteria, apoplexy, delirium-tremens, nose-bleeding, inflammation of the brain, ophthalmia, otitis, etc., it has been employed with advantage.

17. FOUNTAIN OR SPRAY BATH. — This consists of a number of small streams of water directed to a particular part of the body. It may be regarded as a gentle douche or local shower. It is intended to excite action and promote absorption in the part or organ to which it is applied.

18. THE SHOWER-BATH. — This needs no description. It is not frequently used in Water-Cure, but is often very convenient. Those liable to a “rush of blood to the head” should not allow much of the shock of the stream upon the head. Feeble persons should never use this bath until prepared by other treatment. Placing the feet for a few minutes in warm water, before taking the shower, is a good preparatory measure for feeble persons. Standing in warm water, ankle-deep, will materially lessen its shock on the brain and nervous system.

19. NASAL, MOUTH, AND EYE BATHS. — Drawing water gently up the nostrils and ejecting it by the mouth, holding water in the mouth, and holding the eyes open in water of a temperature suited to the case, are the processes indicated by these terms. They are useful in relaxed and inflammatory affections of the mucous membranes and other structures of the parts.

20. ARM AND LEG BATHS. — The limbs may be held in any convenient vessel containing the requisite depth of water. These baths are useful in cases of fever sores, chronic ulcers, inflammatory affections of the joints, etc.

21. VAPOR-BATH. — Hot stones or bricks may be employed to generate vapor or steam. The patient may sit naked on an open-work chair, with blankets pinned around the neck; a small tub or a common tin-pan, holding a quart of water, is placed under the chair, and red-hot

bricks or stones occasionally put in the vessel, so as to keep the vapor constantly rising from the surface of the water. Another very simple plan is this: Procure a one-gallon tin boiler, with a half-inch tin pipe, having two or three joints and a single elbow. The boiler may be heated on any ordinary stove, grate, or furnace, and the pipe so attached to it as to convey the steam under the chair in which the patient sits, covered from the neck downward with blankets. It may be employed from ten to thirty minutes, according to the amount of vapor generated.

22. AIR-BATH. — The whole body is suddenly exposed to cool or cold air, or even to a strong current; and an excellent and invigorating process it is, in many cases. There is no danger from it, provided the surface has a comfortable glow or temperature at the time, and the circulation is maintained by active exercise. Friction with the hand, a sheet, towel, or flesh-brush, is beneficial at the same time.

23. BANDAGES AND COMPRESSES. — These are wet cloths, applied to any weak, sore, hot, painful, or diseased part, and renewed as often as they become dry or very warm. The best surgeons have, in all ages, employed "water-dressings" alone, in local wounds, injuries and inflammations. They may be *warming* or *cooling* to the part, as they are covered, or not, with dry cloths.

24. THE WET-GIRDLE. — Three or four yards of crash towelling make a good one. One half of it is wet and applied around the abdomen, followed by the dry half to cover it. It should be wetted as often as it becomes dry. It is extensively employed in bilious and dyspeptic affections, female weaknesses, etc. When required to be worn for a long time, it should, after the first few weeks, be omitted occasionally, or worn only a part of each day, so that the skin over which it is applied will not become too tender. It should not be worn when it occasions permanent chilliness.

25. **THE CHEST-WRAPPER.** — This is made of coarse linen, to fit the trunk like an under-shirt, from the neck to the lower ribs; it is applied as wet as possible without dripping, and covered by a similar dry wrapper, made of Canton or light woollen flannel. It requires renewing two or three times a day. It is useful in most cases of pneumonia, asthma, consumption, bronchitis, etc. The same precautions apply to its prolonged employment as mentioned under the head of the wet-girdle.

26. **FOMENTATIONS.** — These are employed for relaxing muscles, relieving spasms, griping, nervous headache, etc. Any cloths wet in hot water, and applied as warm as can be borne, generally answer the purpose; but flannel cloths dipped in hot water, and wrung nearly dry in another cloth or handkerchief, so as to steam the part moderately, are the most efficient sedatives. They are usually employed from five to fifteen minutes. They are useful in cases of severe constipation, colic, dysmenorrhœa, hysteria, etc.

27. **REFRIGERATION.** — One part of common salt, to two parts of snow, or pounded ice, makes a good freezing mixture. It is enclosed in a very thin cloth, and applied for a few minutes, until the requisite degree of congelation has taken place. It is useful in felons, stys, malignant tumors and ulcers, fever sores, cancers, and in some forms of neuralgia and rheumatism.

28. **WET-DRESS BATH.** — This is a method of self-packing, enabling the patient to dispense with the services of an attendant. A linen sheet is fashioned into the form of a night-dress, with large sleeves, and after the bed is prepared the dress can be wet and put on; the patient can then get into bed and wrap himself sufficiently to secure a comfortable reaction.

29. **ELECTRO-CHEMICAL BATH.** — A copper-lined bathtub is necessary for this process. The patient is immersed in warm water up to the neck; one hand is brought in

contact with the positive pole of a strong galvanic battery, the negative pole being in contact with the metallic lining of the tub. The water is usually acidulated, though in some cases alkalies are employed. From half a pint to a pint of nitric acid is put into the water for each bath. It should not be mixed with the water until the galvanic circuit is completed, either by having the patient in connection with the poles of the battery, or these in contact with the copper lining of the bath-tub. The patient may remain in the bath from ten minutes to half an hour. This bath is very useful in a torpid condition of the skin with low circulation; in glandular obstructions; scrofulas, rheumatic and gouty affections; in chronic congestions of the liver, and to aid the elimination of mineral medicines and other poisons.

30. INJECTIONS. — These are warm or tepid, cool or cold. The former are used to quiet pain, and produce free discharges; the latter to check excessive evacuations, and strengthen the bowels. For the former purpose as large a quantity should be used as the bowels can conveniently receive, and for the latter purpose only a small quantity — as much as can be conveniently retained. Small enemas of very cold water are highly serviceable in cases of piles, prolapsus, fissures, etc. The self-injecting syringe is the most convenient instrument. With a rectal, vaginal, and intra-uterine tube, it will answer all possible purposes, for old or young, male or female.*

31. GENERAL BATHING-RULES. — Never bathe soon after eating. The most powerful baths should be taken when the stomach is most empty. No full bath should be taken less than three hours after a full meal. Great heat or profuse perspiration are no objections to going into cold

* See advertisement of SYRINGES, in the advertising pages, at the end of this book.

water, provided the respiration is not disturbed, and the patient is not greatly fatigued or exhausted. The body should always be comfortably warm at the time of taking any cold bath. Exercise, friction, dry wrapping, or fire may be resorted to, according to circumstances. Very feeble persons should commence treatment with warm or tepid water, gradually lowering the temperature. All shocks, such as shower-baths, douches, plunges, etc., should be avoided by very feeble and irritable invalids; by consumptives in the second and later stages; by those who are liable to great local determinations, or congestions, as "rush of blood to the head," bleeding from the stomach or lungs, etc.; in displacements of the bowels or uterus; during the menstrual period of females; during any considerable crisis or critical effort; after the crisis or "turn" of any fever, or other acute disease; during the existence of any powerful emotion or excitement; soon after eating or copious drinking; in all cases attended with profuse discharges, as diarrhœa, cholera, diabetes, hemorrhages; during the suppurative stage of extensive abscesses or ulcers. The heat or feverishness which may attend any of the conditions or diseases above named should always be abated by tepid affusions or spongings. It is dangerous to employ the wet-sheet pack, in prolonged or violent fevers, after the crisis or turn of the fever. Many errors have been committed in ignorance of this rule. Never eat immediately after bathing.

32. DURATION OF BATHS. — Many errors are committed by remaining in cold baths for too long a time. I have known cases in which dyspeptics and consumptives, at Water-Cure establishments, were kept in cold sitz-baths for two hours at a time, once or twice a day. This was intended as a derivative measure, but it worked very injuriously for the patients. Derivative baths, like all others, must be determined by the condition of the patient, not

by the thermometer nor chronometer. Sitz-baths of a mild temperature should seldom be prolonged beyond twenty minutes; more frequently ten to fifteen minutes are preferable. It is better to repeat all bathing appliances frequently, than to make violent impressions less frequently. Plunges, douches, and showers, if the water is cold or cool, should not, ordinarily, be continued more than a minute: when the temperature of the water is temperate or tepid, they may be taken from five to ten minutes. Tepid half-baths should usually be taken from five to ten minutes. Sitz-baths, foot-baths, head-baths, arm and leg baths, etc., may vary from five to thirty minutes. But, as already intimated, regard must always be had to the temperature of the water and the circulation of the patient.

CRISES.

Those general disturbances of the system, transfers of morbid action, or aggravations of symptoms, constituting crises, do not occur as frequently nor with so much severity in home practice as under the more thorough and systematic course at a water-cure. Nevertheless, they do occasionally occur; and then all the patient has to do is to moderate the treatment in precise ratio to the violence of the crisis. Keep quiet and cool, taking as much exercise as is agreeable to the feelings, and *let Nature have her course*. After it is over, if the patient is not cured, the treatment may be resumed as before. In some few cases, as in mercurial diseases, gout and rheumatism, the crises may be so violent as to render some part of the body excessively sore and painful; or the whole body feverish, tender, and inflammatory. In these cases one or two full hot-baths, ten to twenty minutes, should be employed.

Crises may take the form of diarrhœa, feverishness,

rashes, or boils. Should diarrhœa be very severe, it may be soothed by warm hip-baths. Feverishness is relieved by quiet, or a warm bath at bed-time. It is a common error with people, and with some Hydropathic physicians, that crises are *always essential* to a cure. Many cases of the worst kind recover without any critical disturbance whatever. Nor should the practitioner ever aim to produce a crisis. If a crisis appears spontaneously in course of the treatment, it indicates a favorable effort of the vital powers, and is always followed by an improvement. But if provoked by excessive bathing, or mal-treatment of any kind, it is more injurious than useful. I have known cases, repeatedly, in which the patients were "under crisis," as it was said, for several months—in one case for two years. Such cases can be cured, by judicious management, in half the time that they are kept "under crisis" by the crisis doctors.

ABRADED AND ULCERATED SURFACES.—The best application to parts where the skin is destroyed, as in ulcers, burns, scalds, rashes, small-pox, erysipelas, and various excoriations, is dry wheaten flour. It should fill the cavities and cover the surface completely, so as to exclude the atmospheric air. Applied to burns and scalds instantly, it will stop the pain and prevent vesication—a fact which all families will do well to remember.

TEMPERATURE.

So far as protection from the atmosphere is concerned, the general rule is, to keep the patient as cool as possible, consistent with comfort. In case of burns and scalds, when the surface is destroyed, the pain may be very much mitigated by keeping the temperature of the room as high as the patient can well bear.

In the application of water for hygienic or remedial purposes, the invariable rule to guide us is the temperature and circulation of the patient. The warmer his surface, the colder should be the water employed, and *vice versa*. The sensations of the patient should also be consulted. The more feeble and delicate the patient, and the more susceptible his feelings to the shock or impression of cold water or cold air, the more carefully should we regard his sensations in the temperature of the baths prescribed. Mischief is frequently done in home practice by applying the water too cold. Very cold or very warm baths should be brief, precisely in the ratio of their temperature. Tepid baths may be more prolonged. Baths may be regarded as *very cold* when the temperature is 40° or below; *cold*, from 40° to 60° ; *cool*, from 60° to 70° ; *temperate*, from 70° to 75° ; *tepid*, from 75° to 85° ; *warm*, from 85° to 98° ; *hot*, above 98° . Hot-baths range from 98° to 115° ; vapor-baths from 98° to 125° . For bathing infants and young children the temperature should ordinarily be from 72° to 85° . The greatest error in home-treatment is in giving too many *cold* baths.

WATER-DRINKING.

Thirst is the general rule for water-drinking. Those who use a plain, unstimulating diet have little thirst, and require but little drink. It is injurious to load the stomach with a large quantity of water when nature does not demand it. As with food, all that cannot be used is a burden which must be thrown off. The routine practice of drinking so many tumblers per day, as is advised at some water-cures, is very reprehensible. It is well to take a tumbler of water after the morning ablution, and at other times according to thirst. It is unnatural, and hence injurious, to drink at meals. Throughout the whole animal king-

dom nature has intended the saliva to be the solvent of the food. If the food is well masticated and insalivated, it will never need any "water to wash it down." In acute diseases there is often extreme thirst; and here water-drinking may be indulged *ad libitum*; but it is better to "take a little and often," than to take large draughts at long intervals. In many cases of low fevers, cholera, etc., warm water will allay thirst better than cold. Enemas of warm water will also check thirst very promptly.

Cool, but not very cold, water is the most natural drink. But it is always important to have the water pure. Hard and impure waters are a prolific source of affections of the liver and kidneys. For invalids it is of especial importance that all the water taken into the stomach be *soft* and *pure*. Artificial "mineral waters," and the saline, alkaline, ferruginous, sulphurous compounds of the "medicinal springs," are pernicious beverages for the sick or well. The drugs they contain are no better, and no different in effect, than the same drugs taken from the apothecary shop. Those Water-Cure physicians who *permit* their patients to use them may be justified in thus yielding to popular prejudice; but to *prescribe* them argues strange ignorance of Hygiene, or perhaps a worse motive.

FOOD.

DIETETIC RULES. — As fruits and farinacea are the natural food of man, preference should always be given to a vegetarian diet, whenever it can be had properly prepared. Those who use animal food should never eat of it more than once a day; and they should restrict themselves to the lean flesh of vegetarian animals.

Milk, and its products — butter and cheese — though favorite articles with many invalids, are in no sense physi-

ological or natural food for adults. A large experience in this matter has convinced me that all invalids (except infants and young children) can do much better without them. Eggs, rare-boiled, may be placed in this category.

The best forms of animal food are beef and mutton, boiled or broiled.

Fish, and particularly shell-fish, are among the least nutritious and grossest kinds of animal food.

With regard to condiments of all kinds, salt, sugar, vinegar, pepper, spices, etc., the rule is, the less the better.

Salt is an indigestible mineral substance, and in no sense dietetical. This last is also true of vinegar.

The best seasonings are the saccharine and acid principles of vegetables and fruits, as sugar or syrup, lemon-juice, etc. But even these should be employed in moderation.

Among the fruits particularly recommended to invalids are apples, grapes, pears, peaches, cherries, sweet oranges, tomatoes, prunes, berries in their season, squashes, and pumpkins.

Of the vegetables we may especially commend potatoes, beans, peas, parsnips, asparagus, spinach, green peas, and green corn. Those whose digestive powers are not much impaired, can partake, without detriment, of cabbage, carrots, turnips, and cucumbers.

Invalids, however, in addition to bread and fruit, had better use but one or two vegetables at one meal.

As a general rule, breakfast should consist of bread and fruit; dinner, of bread and fruit with vegetables; and supper, of bread with a small allowance of fruit.

Those who use animal food should take it at the noon meal. The breakfast should be light, and supper very light. Those who do not use fruit at dinner may use a greater proportion of vegetables.

Mushes, as wheaten grits, rice, hominy, corn-meal, etc., may be used as a part of the bread-food, at breakfast or supper. But they should always be eaten with a hard cracker, dry crust, parched corn, or something that will insure due mastication and insalivation.

TIMES OF EATING.—I do not regard it as of very great importance whether we eat once, twice, or thrice a day, provided we are regular in our habits, and have a proper regard for the time between meals, and the quantity and variety of our viands. I have known patients do very well on a single meal a day. One of my patients — Miss E. M. Hurd, of Sparta, N. J. — who afterward became my student, and is now a physician, and the wife of Dr. N. W. Fales, of California, lived on one meal a day for more than a year. When she commenced this plan she was an emaciated dyspeptic, but became healthy and fleshy while adhering to it. Another graduate of our school — Dr. E. P. Miller, now my associate physician in the New York Water-Cure — has eaten but once a day for a long time. He was also badly dyspeptic when he first adopted the plan, but is now as fair a specimen of health and activity as can easily be found.

I have known hundreds to improve rapidly in changing from three meals a day to two. Probably the majority of invalids, and especially those who are decidedly dyspeptic, will find it beneficial to eat but twice. Those who take three meals a day should take breakfast from 6 to 7 A. M.; dinner, from 12 M. to 1 P. M.; supper, about 6 P. M. Those who eat but twice should take breakfast at about 8 A. M., and the other meal at about 3 P. M. Those who adopt the one-meal-a-day system, should obviously *feast* about the middle of the day.

PREPARATION OF FOOD.—After all, the most difficult part of the Hygienic system is the management of the dietary. Few persons know anything about hydropathic

cooking; and so perverted are the appetences of the masses, that to talk to them of physiological victuals is very much like talking to a brandy-toper of the beauties of "clear cold water," or to a tobacco-smoker of the virtues of a pure atmosphere. Bread, which is, or should be, the staff of life, has, by the perversions of flouring-mills and the bakers, become a prolific source of disease and death. Much as the Health Reformers declaim against the abominations of pork, ham, sausages, and lard, as articles of human food, I am of opinion that fine flour, in its various forms of bread, short-cake, butter-biscuits, dough-nuts, puddings, and pastry, is quite as productive of disease as are the grosser elements of the scavenger swine.

Nearly all the bread used in civilized society is made of fine or superfine flour, which is always obstructing and constipating, and which is deficient in some of the most important elements of the grain; and it is still further vitiated by fermentation, or by acids and alkalies, which are employed to render the bread light.

Pure and wholesome bread can have but three ingredients—meal, water, and atmospheric air. The water is only useful in converting the meal into dough; and the atmospheric air serves to expand its particles, so as to make light and tender bread. If properly managed, bread can be made as light as ordinary loaf-bread with no other rising than atmospheric air. To effect this, three essentials must be regarded. 1. The dough must be mixed to a proper consistence—neither too stiff nor too soft. 2. The dough must be cut or rolled into cakes or pieces, so as to expose the greatest possible surface to the heat of the oven. 3. The oven must have a brisk or quick fire. The hotter the oven—provided it does not burn the dough—when the baking process begins, the lighter will be the bread. The reason is this: The heat, when sufficient, instantly forms a nearly impervious crust over the dough,

by which the air is retained, and, expanded by the heat of the oven without being able to escape, separates the particles of the dough, and thus renders the bread light.

If the meal is mixed with cold water instead of hot, and allowed to stand and swell for several hours before baking, it will be nearly as light as if mixed with hot water and baked at once.

As good bread may be regarded as the great regulator of the patient's dietary, too much pains cannot be taken with it. All persons who undertake home-treatment should acquaint themselves with the processes for making it. Bread made in the manner I am about to explain can always be had fresh for each day or each meal, and may be eaten so soon after cooked as sufficiently cooled. It requires but a few minutes of time, and a supply can be made before breakfast for the day. Or a supply can be made for several days. If heated a few minutes, when two or three days old, it has the tenderness and flavor of freshly-made bread. It is still more tender if dipped in cold water and then heated.

BREAD-ROLLS. — Mix wheat-meal (Graham flour) with boiling water quickly, by stirring rapidly with a stick or strong iron spoon to make a rather soft dough; as it cools, knead it a little with the hands; make the dough into small thin cakes or rolls; prick them to prevent blistering, and bake about twenty minutes in a hot oven. The baker — an iron one is best — should be well dusted with dry meal to prevent sticking.

The cakes should be one third of an inch in thickness, and one and a half to two inches wide. When made into rolls (which is the best form, as it exposes the largest surface to the heat, and forms a thinner and more tender crust), they should be about the length and thickness of the finger.

When a large quantity is required, it is more convenient

to make them diamond-shaped. The dough is rolled out, cut in slips an inch and a half or two inches wide, then cross-cut into diamond-shaped cakes. The knife, roller, and board should be kept well covered with dry meal.

Fine flour bread may be made light in the same way. But it must be mixed with *cold* instead of *hot* water. It requires baking from ten to fifteen minutes.

BATTER-BREAD. — Mix wheat-meal with *cold* water to the consistence of ordinary batter for griddle-cakes. Pour the batter into any convenient baking-dish — the bottom of which should be covered with meal to prevent sticking — and bake in a quick oven. The batter may be half an inch thick, or so thin as it can be spread. The thinner it is the better, although if made very thin a large oven is required to bake much in quantity. For this reason the bread-rolls are most convenient for families. An individual who makes bread only for number one, and who does not like the “muss” of working in dough, will find the batter-bread a very convenient article. I have, many a time, made it and had it cooking in a gas stove in less than two minutes from the time I commenced.

WHEAT-MEAL CRISPS. — Mix the meal with water, cold, warm, or hot, into a stiff dough; roll it out as thin as possible, and cut into small, narrow pieces or strips, and bake in a quick oven. These are excellent for sour stomachs and irritable bowels.

WHEAT-MEAL CRACKERS. — These differ from the bread-rolls in being very dry, hard, and brittle. In order to render them so, the dough is thoroughly kneaded, and then baked in a *brick* oven till the moisture is entirely evaporated. If kept dry, they will retain their sweetness and rich flavor for several weeks. If kept in a very dry and very cool place, they will remain good for several months. They are made a little smaller and a little thinner than the Boston cracker of the shops. All travelling

invalids should supply themselves with these crackers. Fancher & Miller, No. 15 Laight Street, New York, manufacture them largely, and send them to order to any part of the country.

LOAF-BREAD. — Very good loaf-bread may be made of six parts of wheat-meal, two parts of corn-meal, and one part of mealy potatoes, mixed with boiling water, and baked in the ordinary way.

RYE-BREAD ROLLS. — Rye-meal (unbolted rye flour) may be made into bread-rolls, or batter-cakes, in the same manner as for wheat-meal bread-rolls. They are very light and delicious.

CORN-CAKE. — Wet coarse-ground Indian meal with boiling water, roll it into a cake or cakes of half an inch in thickness, and bake in a hot oven. Some prefer this made with cold water, after the manner of the wheaten batter-bread. This is the old-fashioned and ever-to-be-admired “Jonathan-cake” — the “Johnny-cake” of “Down-East.”

OAT-MEAL CAKES. — These may be made in the same manner as the wheaten bread-rolls.

OAT-MEAL CRISPS. — Made in the same manner as the wheaten article. When these are thoroughly dried over a slow fire, they will, if kept in a dry place, remain good for months.

PUMPKIN-BREAD. — Stewed and sifted pumpkin, or richly-flavored winter squash, may be mixed with meal of any kind, and made into bread or cakes, in any of the ways already mentioned.

FRUIT-BREAD. — Stewed apples, pears, peaches, pitted-cherries, black currants, or berries may be mixed with unbolted flour, and made into fruit-bread. A little sugar added will convert the article into fruit-cake.

SNOW-BREAD. — When snow is plenty and clean, a light and beautiful article of bread can be made by adding

to flour or meal two or three times its bulk of snow, and stirring them together with a strong spoon. It may be baked in the form of a cake or loaf an inch or two inches in thickness. The oven should be quite hot. It will bake in about twenty minutes. A little pulverized sugar, mixed with the flour or meal, will convert this bread into a very short and tender sweet-cake.

GRIDDLE-CAKES. — Oat-meal, wheat-meal, or corn-meal may be made into a batter by mixing with cold water and baking on a soapstone griddle. Some prefer hot water for oat-meal.

SQUASH-CAKES. — Mix flour or meal with half its bulk of stewed squash, or West-Indian pumpkin; add milk sufficient to make a batter, and cook on a griddle.

PASTRY. — Baker's pastry, and also "home-made pies," as ordinarily manufactured, are among the worst of dietetic abominations. But pastry can be made so as to be not only a luxurious but a wholesome article. Almost any kind of fruit, with a little sugar, and a crust of wheat-meal, or of rye and corn-meal, shortened with mealy potatoes, are all the materials required. Squash, pumpkin, and custard pies require the addition of milk.

PUDDINGS. — I regard all these dishes, even when made in the plainest manner possible, as things to be permitted rather than recommended to invalids. They are mushes, made thin, moistened, and baked. Indian-meal, hominy, rice, and wheaten grits are the best farinaceous articles for making puddings. Sago and barley are allowable. Stewed pumpkins, properly sweetened, with a small proportion of farina or corn-starch, with or without a little milk, makes a very simple and light dessert that some persons are very fond of.

MUSHES. — These dishes are preferable to puddings. Wheaten grits and hominy, well boiled, are the best mushes. When wheaten grits are coarse-ground, they

require boiling five or six hours. For an ordinary family they may be ground in a large-sized coffee-mill; and if ground so fine as convenient, they will cook in an hour and a half. Rye-meal, Indian-meal, and oat-meal make favorite mushes also. Rice should be boiled fifteen to twenty minutes; avoid stirring it so as to break the kernels; turn off the water, and let it steam fifteen minutes. All mushes, when cold, may be cut into slices, and moderately browned in an oven, when they become as good as new — and even better.

GRUELS. — These are merely very thin mushes. They are properly regarded as “slop diet” for feeble invalids during convalescence after acute diseases, in cases of obstinate constipation, etc. Wheat-meal, corn-meal, rye-meal, and oat-meal are employed in gruel-making. About two table-spoonfuls of meal are mixed with a gill of *cold* water, and the mixture is then stirred into a quart of boiling water, and boiled gently fifteen minutes. Rice gruel is useful in some cases of diarrhœa.

PORRIDGES. — These are intermediate between mushes and gruels. Wheat-meal or oat-meal is usually employed. Half a pound of the meal to a little more than a quart of water is the usual proportion. They require boiling about twenty minutes. Raisins, pitted-cherries, black currants, or dried berries may be added if desired.

SOUPS. — Split-peas, beans, barley, and rice are employed in the preparations of hydropathic soups. One pint of split-peas, boiled for three hours in three quarts of water, makes one of the best soups for vegetarians. Some add a trifle of sugar. Bean soup is made of similar proportions, and then boiled in a covered pan for four or five hours. Rice should be boiled until entirely soft. Barley should be soaked for several hours, and then boiled slowly in a covered pan for four or five hours. Tomato soup, made in the following manner, is a pleasant and whole-

some dish: Scald and peel good ripe tomatoes; stew them one hour, and strain through a coarse sieve; stir in a little wheaten flour to give it body, and brown sugar in the proportion of a teaspoonful to a quart of soup; boil five minutes. Okra, or gumbo, is a good addition to this and other soups.

BOILED GRAINS. — Wheat, rice, hulled corn, and samp boiled until the kernels are entirely soft, but not broken nor dissolved, rank next to bread in wholesomeness. They may be eaten with syrup, sauce, sugar, milk or cream, or fruit.

APPLE-DUMPLINGS. — Mix boiled mealy potatoes with flour into a dough; roll it out to a little less than one fourth of an inch in thickness; enclose in each dumpling a medium-sized apple, previously pared and cored, and boil or bake about an hour.

RICE APPLE-PUDDING WITHOUT MILK. — Boil rice till nearly done, then stir in sliced tart apples, and cook about twenty minutes.

BOILED INDIAN-PUDDING. — Wet coarse corn-meal with boiling water, add a little sugar or molasses; tie the pudding in a bag, leaving room for it to swell, and boil three or four hours.

APPLE JONATHAN. — Fill a baking-dish two thirds full of sliced tart apples, sweeten to taste; mix wheat-meal with water and milk (a little cream will make the crust more tender) into a batter, and pour over the fruit until the dish is filled; bake until the crust is well browned.

RICH APPLE-PUDDING. — Take equal quantities of very tart apples, well stewed and sweetened, and bread rolls or crackers previously soaked soft in cold water; mix them and heat them thoroughly for a few minutes. Any tart fruit will answer in the above.

CRISPED POTATOES. — Boil good, sound, mealy potatoes till a little more than half cooked; then peel them, and bake in a hot oven till moderately browned.

POTATO SHORTENING. — Pare and boil good mealy potatoes, choosing those which are of an even size ; pour off the water, and sift, while hot, through a wire sieve. An equal quantity added to flour makes the best shortening in the world for bread, pastry, cakes, etc. A little cream added makes a richer but less wholesome article.

ANIMAL FOODS. — As I never recommend animal food to invalids, although I sometimes tolerate the use of it in special cases, my remarks under this head may be very limited. Beef-steak, without butter or gravy, is perhaps the very best kind of flesh-food. Slightly corned beef, boiled until it is quite tender, is also admissible. Mutton chops, broiled, or the lean part of mutton, boiled, ranks next to fresh beef in wholesomeness. Eggs are not materially different in this respect. To cook them so hygienically as possible, pour boiling water on them, and let them remain on top of the stove, or near the fire, but not allowed to boil, for seven to ten minutes. Chicken, boiled or broiled, is next in order ; and lastly, fish which are not oily, as cod, halibut, trout, perch, etc. Milk is rarely admissible. With dyspeptic, bilious, and rheumatic invalids it is decidedly objectionable. Nor should persons affected with constipated bowels, or profuse discharges of any kind, use it at all. Butter and cheese should be out of the question, although cream and curd may be allowed.

EXERCISE,

“ Little and often,” is the rule for most invalids. All exercises should begin and end moderately. The kinds of exercises should be as varied as possible, so as to bring into action all the muscles of the system. Long walks should be alternated with frequent runs and occasional rests. The most severe exercises should be taken in the

early part of the day. Those who are able should take moderately active exercise before bathing (except in case of the morning bath taken on first rising), and still more active exercise immediately after each bath. A morning walk or ride before breakfast is always desirable. Calisthenic, gymnastic, and kinesipathic exercises and manipulations, except in their mildest forms, should only be taken when the stomach is nearly empty. Regularity is of great importance. Feeble invalids should commence all exercises very moderately, and gradually increase them in time and severity. Whenever much fatigued, rest or a change of exercise is advisable. Invalids should not get so fatigued as to be restless in consequence during the night, nor so much so that a night's rest will not remove all its disagreeable feelings. Those who cannot go into the open air will derive great benefit from exercising in their rooms with the windows open. Dancing and the dumb-bells are among the most convenient in-door exercises. As exercise develops strength, the weakest muscles should be exercised the most; but if very weak, *passive* exercises should be principally employed for awhile, as rubbing, kneading, riding, sailing, etc. Invalids who do not react well after bathing should be well rubbed over with a dry sheet by the hands of an attendant, and afterwards by the bare hands.

All persons generally, and invalids particularly, should be very careful in having an abundant supply of pure air. This is very apt to be neglected in sleeping apartments. In sitting-rooms, warmed by the hot-air stove or furnace, the air is rapidly contaminated unless special attention is paid to ventilation. Indeed, no room is fit to sit nor sleep in unless there is some inlet for the fresh air, and an outlet for the impure air. In fevers and other acute diseases, fresh air should in all weathers be freely admitted into the sick-room; and in putrid, infectious, and contagious dis-

orders, as yellow fever, small-pox, etc., the supply should be abundant. Invalids will find it an excellent practice to *ventilate* the lungs each morning before breakfast, by half a dozen or more deep inspirations and prolonged expirations.

L I G H T.

The importance of light, as a remedial agent, is not sufficiently appreciated. Nearly all forms of disease are more severe and unmanageable in low, dark apartments. Many persons who live in elegant and expensively furnished houses so darken many of the rooms, in order to save the furniture, as to render the air in them very unwholesome. The scrofulous humors which prevail among those inhabitants of our cities who live in rear buildings and underground apartments sufficiently attest the relation between sunshine and vitality. Invalids should seek the sunlight as do the flowers — care being taken to protect the head when the heat is excessive. Exposing the whole skin in a state of nudity, frequently, to the air, and even to the rays of the sun, is a very invigorating practice. For scrofulous persons this is particularly serviceable.

C L O T H I N G.

The physiological rule is, the less clothing the better, provided the body is kept comfortable. It should never be worn so tightly as to impede, in the least degree, the free motions of the body and limbs. Especially must it be loose and easy around the chest and hips, so as not to interfere with the action of the vital organs in respiration. Flannel garments next to the skin are objectionable. In very cold weather, thicker outside garments, or more of

them, may be worn ; but flannel under-shirts and drawers tend to make the skin weak and susceptible to colds. Invalids who are accustomed to them should leave them off in the spring or early part of summer, and so invigorate the skin by bathing, etc., that they will feel no necessity for them the ensuing winter.

S L E E P.

Invalids generally do not sleep enough. The importance of sound, quiet, and sufficient sleep cannot be too highly estimated, as may be inferred from the physiological fact, that it is during sleep that the structures are repaired. The materials of nutrition are digested and elaborated during the day ; but assimilation — the formation of tissue — only takes place during sleep, when the external senses are in repose. Literary persons require more sleep, other circumstances being equal, than those who pursue manual-labor occupations. If the brain is not duly replenished, early decay, dementation, or insanity will result. The rule for invalids is, to retire early, and remain so long in bed as they can sleep quietly. If their dietetic and other habits are correct, this plan will soon determine the amount of sleep which they require. Gross, indigestible, and stimulating food, heavy or late suppers, etc., necessitate a longer time in bed, for the reason that the sleep is less sound. And for the same reason, nervine and stimulating beverages, as tea and coffee, prevent sound and refreshing sleep, and thus wear out the brain and nervous system prematurely. Those who are inclined to be restless, vapory, or dreaming, during the night, should not take supper.

BEDS AND BEDDING.

All bedding should be so *hard*, and all bed-clothing should be so *light*, as a due regard to comfort will permit. Feather beds are exceedingly debilitating. Hair, grass, husk, chip, straw, etc., mattresses, made soft and elastic, are the proper materials to sleep on in warm weather. In winter a light cotton mattress may also be employed.

BODILY POSITIONS.

Avoid crooked bodily positions in walking, sitting, working, or sleeping. Always bend the body on the hip-joints; never by crooking the trunk. Never lean forward while sitting so as to compress the stomach and lungs. Do not sleep on high pillows. Children are often injured and the spines distorted by this habit. Invalids who are so distorted, or so feeble that they cannot keep the erect position in sitting but a few minutes at a time, should change their position frequently — walk, sit, and lie down, etc., so often as either position becomes painful.

NIGHT-WATCHING.

The usual custom and manner of watching with the sick is very reprehensible. If any persons in the world need quiet and undisturbed repose, it is those who are laboring under fevers and other acute diseases. But with a light burning in the room, and one or more persons sitting by, and reading, talking or whispering, this is impossible. The room should be darkened, and the attendant should quietly sit or lie in the same or in an adjoining room, so as to be within call if anything is wanted. In an extreme case,

the attendant can frequently step lightly to the bedside, to see if the patient is doing well ; but all noise and all light should be excluded, except on emergencies. It is a common practice with watchers to awaken the patient whenever he inclines to sleep *too soundly*. But this is unnecessary, because when the respiration becomes very laborious, the patient will awaken spontaneously. Under the drug-medical dispensation the custom is to stuff the patient, night and day, with victuals, drink, or medicines, every hour or oftener, so that any considerable repose is out of the question. But, fortunately for mankind, the Hygienic system regards sleep as more valuable than the whole of them.

FR I C T I O N.

Friction, more or less active, is desirable after all ordinary baths, except in cases of fevers, inflammations, and other acute diseases. And in some cases of tumors, enlarged joints, and torpid muscles, active and prolonged rubbing, in promoting absorption and increasing the circulation, greatly assists the curative process. Many of the cures of these affections performed by specialists, in which cases thorough hand-rubbing is conjoined with the use of liniments, decoctions, and other medicamentums, are attributable mainly, if not wholly, to the friction employed. Wens, chronic swellings from sprains or bruises, etc., have been cured by the rubbing process.*

* See advertisement of PATENT HORSE-HAIR GLOVES, in the advertising pages, at the end of this book.

ELECTRICITY.

There are two kinds of electrical force, mechanical and chemical. The former is the ordinary machine electricity, which operates mainly by producing shocks which agitate the motive fibres. It is quite analogous to friction in its effect, and is hence sometimes called friction-electricity. It is a convenient method for exercising, in many cases, particular sets of muscles, or exciting action in some particular organ or part; and to this extent is a useful remedial agent.

GALVANISM.

THIS is generated by alternate layers of metallic plates of opposite electrical natures. It is a powerful chemical agent, and as such is extensively employed in the arts. Its chemical action enables it to effect, to some extent, the decomposition of foreign and effete matters in the fluids and tissues of the living system, and thus favor their elimination. The galvanic current will often excite action and sensibility in semi-paralyzed muscles and nerves, and is sometimes successfully resorted to for the purpose of allaying rheumatic and neuralgic pains. The galvanic battery, in connection with the warm bath in the form of the electro-chemical bath, is probably the most convenient and efficient method of employing the galvanic influence as a depurating agent.

MAGNETISM.

Whatever may be the intrinsic nature of the mysterious property known as animal magnetism, and whatever may be its relation to the life-principle, it is certainly capa-

ble, under certain circumstances, of exercising a powerful influence over the vital functions. The salutary effects of a cheerful disposition, a hopeful mind, and a healthy organism, upon the minds and bodies of invalids, are well known to physicians. Many persons are exceedingly susceptible to the influence of magnetism, while others can with great difficulty be impressed at all. In some cases it will quiet pain and restlessness, and produce sleep more effectually than opiates ; and in rare cases it can be made an efficient anæsthetic agent to suspend sensibility, so that surgical operations can be performed without pain. Its laws, however, are not yet sufficiently understood to enable us to reduce its remedial applications to any very definite rules.

CLEANLINESS.

Few persons seem to have a proper idea of the full import of this term. Being next to godliness, the term cleanliness implies perfect purity in all our mental and organic relations. Many persons who are exceedingly nice and fastidiously neat in their attentions to the external skin, and in the matters of apparel, bedding, rooms, furniture, etc., are, notwithstanding, extremely heedless in regard to internal conditions and external surroundings. They will continually take into their stomachs and lungs such aliments and miasms as poison the blood and befoul the secretions ; while they will permit the elements of contagion to accumulate to any extent in their cellars, yards, cesspools, and out-buildings. I have known half a dozen members of a family to be prostrated with typhus fever, the chief cause being stagnant water and rotting vegetables in the cellar. Offal and garbage — dead and decomposing vegetable and animal matters of all kinds — in or around any dwelling, are a prolific source of disease.

The hog-pen of many of our farmers causes more strange, putrid, and even fatal diseases than most persons suspect. I can hardly conceive of a fouler concentration of malignant and pestilent miasms than those which always emanate from a den of swine while undergoing the process of fattening. If folks will persist in keeping piggeries, they should be located so far from the dwelling-house that the abominable stench thereof will not be offensive to noses polite.

CLEANLINESS.

For persons seem to have a proper idea of the full extent of this term. Being next to nothing, the term cleanliness implies perfect purity in all our mental and organic relations. Many persons who are exceedingly clean and industrious as to their attention to the external side and in the matters of apparel, bedding, rooms, furniture, and in the matters of appearance, extremely heedless in regard to internal conditions and external surroundings. They will continually take into their stomachs and lungs such elements and miasms as poison the blood and beliel the system; while they will guard the elements of contagion to as minute to any extent in their cells, yards, kennels, and out-buildings. I have known half a dozen members of a family to be poisoned with typhus fever, the chief cause being stagnant water and rotting vegetables in the cellar. Oil and garbage—dead and decomposing vegetable and animal matters of all kinds—in or around any dwelling, are a prolific source of disease.

PATHOLOGY

OF THE

REPRODUCTIVE ORGANS.

PATHOLOGY
OF THE
REPRODUCTIVE ORGANS.

First Part.

VENEREAL DISEASES.

PRIMARY INFECTIONS.

Any form of disease, however rare or peculiar, which is introduced into the system by the action of a virus, is a venereal disease. The term is applied to all diseases which are introduced into the system by the action of a virus, whether the virus be of a venereal or non-venereal nature.

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Part First.

VENEREAL DISEASES.

PRIMARY DISTINCTIONS.

ALL forms of venereal diseases may be, primarily, distinguished into *gonorrhœa* and *syphilis*. Both are essentially local diseases in the first instance, originating from impure or excessive sexual commerce, or communicated by contact with the infectious secretion of a diseased person.

Gonorrhœa is an inflammatory infection of the mucous, or lining membrane of the urethra, attended with the secretion of an acrid and erosive matter, which, in the act of sexual intercourse, may infect the opposite sex with the same disease. But, unlike syphilis, it does not, by the absorption of its infectious matter, occasion any specific general or constitutional affection.

Syphilis commences with minute erosive ulcers on some part of the genital organs. These are termed *chancres*. As the chancres gradually spread and deepen, they secrete a virus, which, being absorbed, may occasion a constitutional taint or cachexy, called *secondary* or *constitutional syphilis*.

The *secondary* forms of both *gonorrhœa* and *syphilis*, as we find them described in medical books, and as they appear in the public hospitals, are very numerous. But it will simplify our understanding of the whole subject very much, to regard the great majority of them, as they really are, the effects of the medicines which have been administered in the treatment of the primary disease, and which, in a majority of cases, have done the patient more serious and lasting injury than the original disease would have done, had it been left entirely

to itself, or to nature — to the unaided remedial resources of the constitution.

Late authors have termed the primary diseases above mentioned the "*primitive venereal symptoms*," while they have denominated the secondary forms the *consecutive venereal symptoms*."

HISTORY.

The literature — *syphilography* — of our subject is very extensive. Innumerable works, both by regular and irregular physicians, have been written about it. But, as is the case with most other medical subjects, opinions respecting its intrinsic nature and proper treatment, are exceedingly discrepant and contradictory.

A vast amount of learning has been expended uselessly in endeavoring to fix the origin of venereal diseases, and to ascertain the locality of their origin. Nor can the authorities agree whether they are of modern origin, or were known to the ancients. These speculations are not now very important. It is perfectly certain, that venereal diseases do exist in all places where promiscuous and illicit sexual intercourse is indulged. And this fact sufficiently indicates the origin of the diseases to be wherever such practices prevail. Fracoster, the poet, ascribed the origin of syphilis to the shepherd Syphilus, who was the first one smitten with the disease, which the gods, in their wrath, invented. The allegory implies a salutary admonition. In no respect does nature vindicate the sanctity of her laws more instructively, than in the terrible maladies and sufferings she inflicts for the transgressions of those laws which concern the reproductive system, and which lie at the very starting-point of existence.

That venereal diseases, and the infectious matters which produce gonorrhœa and syphilis, may and do originate in the manner I have suggested, is corroborated, and, I think, demonstrated, by the fact that local inflammations and ulcerations are often occasioned by the frequent sexual intercourse between

those who are correct in life in other respects. Frequent intercourse during pregnancy is well known to excite inflammation and superficial ulceration. Moreover, it is well established that a married woman, whose chastity is unimpeachable, affected with the acrid discharge of a severe *leucorrhœa*, or "whites," may communicate to her husband a slight gonorrhœal inflammation, inducing in him a *gleety* discharge, with some degree of heat and smarting in urinating.

This is an important point to understand clearly, not only in its relations to the family circle, but in its applications to medical jurisprudence; as, for example, in suits for divorce, predicated on a charge that one or the other parties have been affected with venereal disease.

Unfortunately, medical professors are at variance here again. A case occurred in this city a few years ago, in an action for divorce, based on the ground that the husband had been affected with gonorrhœa, in which two of our most eminent and experienced physicians, one a professor, and the other an ex-professor, of midwifery in our first-class medical colleges, gave opinions diametrically opposed to each other. One testified that he had repeatedly known cases in which the wife, laboring under severe leucorrhœa, had communicated an inflammation resembling, in all its prominent symptoms, a mild form of gonorrhœa, to the husband. The other professor testified that he had never known such a case, *and did not believe it could exist!*

Certainly the cause of justice, as well as that of domestic peace and social well-being, requires that this question be accurately determined. I have no shadow of doubt of the truth of the affirmative. Indeed, I have had occasion to prescribe to several *gleety* husbands, whose diseases were clearly traceable to leucorrhœa in the wife. And I have also the concurrent testimony of several physicians, that similar cases have occurred in their practice. Surely the medical man, whose testimony on this subject may be decisive of the character of the individual and the fate of the family, ought to be well posted, especially if he be a professor in one of the regular schools.

The fact that this form of venereal affection existed in the early ages, and was, perhaps, the first form of venereal disease recognized by the medical profession, sufficiently explains the manner in which all gonorrhœal and syphilitic diseases originate. On this point any one may satisfy himself who will take pains to examine the ample statistics of medical records.

Although it is easy to show that certain forms of inflammation, discharges, and ulcerations of the sexual organs are almost as old as all the history of ordinary inflammations and fevers, it is impossible to determine at what precise period they were regarded as peculiar, specific, and infectious. The learned Astruc is a believer in the modern origin of the venereal disease; but it is supposed by many that Moses prescribed the observance of certain precautions, not only as a measure of proper hygiene and general cleanliness, but also as a preventive of the infection of gonorrhœa. And Hippocrates (B. C. 460) mentions ulcers and pustules on the genitals, which can hardly be regarded as other than true venereal chancres. Galen (A. D. 131) traced gonorrhœa to an infectious origin. In modern times, Avicenna and Aretus, eminent Arabian physicians, described a peculiar disease of the throat, which was called the Egyptian disease, and which other authors have traced to venereal infection. Later still, a number of authors — and among them are William of Salicet, Lanfranc, and B. Gordon — have mentioned the deplorable results of carnal connection with unclean females, affected with virulent discharges. *Buboes*, followed by abscesses in the groins, and preceded by ulcers in the penis, were noticed by the above authors; and there existed in London, before the fifteenth century, medical police regulations for certain houses of prostitution, somewhat on the plan of the medical police regulations of the French capital at this time.

It is well known to medical men, that in seaport towns, where sailors often congregate in large numbers, and in all places where armies are quartered in close proximity to large towns, venereal diseases are not only very prevalent, but aggravated and virulent in character.

“During the fifteenth century,” says Vidal, “many persons were smitten with a scourge which has been represented as cruel and disgusting. The skin of the afflicted was covered with numerous pustules, agonizing pains racked their limbs and head; these were accompanied with sleeplessness, scalding of the urine, and fever. It was particularly during the latter part of this century (1495), and at Naples, while it was occupied by the French army commanded by Charles VIII., that this scourge was most violent, and counted its greatest numbers of victims. The rapidity with which the disease spread, and the extent of the country over which it travelled, gave to it the character of an epidemic; on which account this period in the history of syphilis has always been known under the name of ‘the epidemic of the fifteenth century.’”

It seems to me that the *rationale* of the unusual malignancy of venereal diseases during the fifteenth century, in the light of historical data, presents no difficulty. It was during this period that several pestilences prevailed extensively over Europe. The terrible plague which devastated so many cities, and which destroyed, during the Middle Ages, more than one hundred millions of the earth's inhabitants, was extremely malignant at the same time. Under the names of “Black Death” and “Great Mortality,” it ravaged the nations at various times from the latter part of the fourteenth, through the fifteenth, sixteenth, and seventeenth, and until after the commencement of the eighteenth century. It is true that the plague had prevailed at different times in different parts of Europe, Asia, and Africa for centuries previously. Before the Christian Era it was known at Carthage, Rome, Athens, Egypt, Ethiopia, and Syria. And the first recorded general plague in all or most parts of the Eastern world occurred B. C. 767. But it was during the Dark, or Middle Ages, that it raged so fearfully and so frequently in England, Ireland, France, Italy, Spain, Turkey, and Persia.

As there is no effect in this world without a cause, the logic is indisputable that there was a cause why the special pestilence under consideration should have prevailed with extraordinary

malignity during the centuries just mentioned. Those who will study attentively the phenomena of the epidemics of the Middle Ages, — one of which was the “sweating sickness,” whose victims frequently died within three hours after the attack, — and will also carefully note the personal habits of the people, can hardly fail to connect their manner of life and the prevalent pestilences in the relations of cause and effect. And the principle indicated is just as true in relation to the maladies which prevail among us at the present time, as it is in relation to the plagues and pestilences of by-gone days.

There has, probably, never been a period in the world’s history during which the great masses of the people were so reckless in their habits of living, so regardless of hygienic conditions, and more sensuous in the indulgences of appetite, than during the Middle Ages. Their cities were filthy and pestilent with dirt and offal; the streets were narrow and sunless; their houses, dark and low; bathing was scarcely thought of, and the people literally rioted in the abundance of flesh-food and alcoholic beverages. Impure blood, foul secretions, and a miasmatic atmosphere, the inevitable consequences, are enough to explain the occasion and severity of the diseases which followed. And although the Carthaginians resorted to human sacrifices, even offering up their own children to propitiate the angry gods, while the rude civilized Europeans besought mercy with prayer and supplication, none, not even the physicians, seem to have thought of that cleanliness, which is next to godliness, as a preventive of and a remedy for pestilence. Instead of removing the causes themselves, they only implored the higher powers to prevent the effects. Instead of enjoining on them self-purification, their physicians, as physicians do now-a-days, could only drug and dose at the phantoms of their own imaginations.

The same unphysiological habits of the people which laid the foundation for the terrible plague, produced the predisposition to the malignant form of venereal diseases to be manifested in foul and putrescent sores, rapidly-spreading inflammations, and fatally-disorganizing ulcerations, whenever the specific cause —

venereal infection — was applied. This principle may be seen in this day wherever these diseases are known. Any person who becomes attainted with venereal disease of any kind will have it manifested in a mild or malignant form, as he is pure or gross in blood and secretions. Of this I have had hundreds of very striking illustrations in my practice.

In the venereal epidemic of the fifteenth century, the constitutional depravity was so prominent that the local lesions were, comparatively, insignificant, or but slightly noticed. Medical authors inform us that the malady was then regarded as *contagious*, and different nations accused each other of having spread it. The term “contagious” is, I think, improperly used. The disease is *infectious*; that is, excited by contact, and not communicated through the atmosphere, as are diseases which are truly contagious.

Soon after Columbus discovered the Western Hemisphere, an American origin of the disease was invented, when the European nations lessened their mutual criminations and recriminations. The opinion that the Spaniards, in their return from the conquest of the New World, imported syphilis as a new disease into Italy, which spread thence to other countries, has still some adherents, notwithstanding the overwhelming testimony to the contrary. Swediaur asserts that the Spaniards carried the disease to the New World, instead of bringing it from it, — an opinion a thousand times better sustained by the facts than the opposite one.

Fernel (in the sixteenth century) was the first to assign to syphilis a specific cause. He also traced the disease from a diseased to a sound person; and he demonstrated its transmissibility by various modes of contact, more especially by the venereal act, from which has originated the term, *Lues Veneris*.

THE VENEREAL VIRUS.

Medical authors are in the habit of applying the term “morbid poison” to the infectious matter of gonorrhœa and syphilis, as though some poisons were *not* “morbid.” The substance

of this virus, or poison, has never been detected, and, like the virus or "morbid poison" of the rattlesnake or of the small-pox, will probably forever baffle chemical and microscopical investigations, — a remark which applies to all poisons or viruses which originate in the morbid actions or decomposing processes of organic matter. The most remarkable property of viruses thus generated is their facility of reproduction when brought into certain relations to the living structures. But, of whatever elements or materials it is composed, the venereal virus has for its vehicle a thin, acrid pus, or muco-purulent matter; which matter, if inserted under the epidermis or scarf-skin, on the point of a lancet, in the manner of inoculating a person with vaccine virus, will, in many cases, occasion the same form of inflammation and ulceration, and reproduce the same virus, as existed in the original affection. In this respect it manifests a close analogy to the process of fermentation, by which decaying or decomposing organic elements reproduce the cause of which they are the effects, — a circumstance which has suggested the theory of the parasitic or animalcular origin of infections, contagions, and ferments.

Virulent pus may be preserved, like vaccine matter, for a long time without losing its peculiar properties. And one drop of this matter, diluted in a glass of water, renders the whole liquid virulent, — a fact which suggests a necessary caution in handling water or wet cloths which have been used for bathing or fomenting syphilitic sores, or persons affected with them.

The question whether there is one or two venereal viruses has been much discussed by writers. Do gonorrhœa and chancre each originate from the same, or from distinct viruses? Are the inflammation of gonorrhœa, and the ulceration of syphilis, attributable to the same "morbid poison" affecting different constitutions, or individuals of different local susceptibilities to morbid action, or does each arise from a distinct and specific matter?

It is perfectly certain that both gonorrhœa and chancres have existed and been communicated at one and the same

time. Numerous experiments have been made with the view of testing the question of a double or a single virus; but the results were so various, and in some respects so contradictory, that the minds of medical men are still as much divided as ever. The theory is at least quite plausible, that the same virus may produce gonorrhœa or chancre, or both, as it is manifested on the mucous membrane of the vagina or urethra, or both, or, also, according to the particular susceptibility of the parts affected, or, moreover, according to the virulence of the poison in relation to the morbid predispositions of parts exposed to its influence.

MODES OF PROPAGATION.

Whether gonorrhœa and syphilis depend on the same poison or not, each disease may be propagated in various ways. In most cases it depends, of course, on sexual intercourse, and the genital organs are primarily affected. But the infection may be communicated by contact with wounds or ulcers, or any part of the surface denuded of its cuticle. And when the whole system has become contaminated, the mother may convey the infection to the nursing child during the period of lactation. The more frequent and prolonged the connection, the more danger of propagating the infection, and the more virulent will it be. Lacerations of the genital organs during coition are very liable to be affected with venereal disease of the most malignant form.

The infection may also be propagated mediately, as by the clothing of a diseased person, the seats of a privy, &c. It is also believed by many that the sexual organs of the female may receive the venereal infection, and impart it to the next person having connection with her, without being herself infected. But, to say the least, this hypothesis lacks demonstration.

PERIOD OF INCUBATION.

The time which may elapse between the reception of the infection and the development of the disease varies from a few hours to several weeks. In a majority of cases the gonorrhœal symptoms, such as a sense of heat and tenderness along the urethra, and a smarting or burning sensation after urinating, and the incipient chancre, in the shape of a minute hard pimple, appear in two or three days after exposure. I have known cases in which the whole surface of the penis was swollen and livid with erysipelatious inflammation of a gangrenous tendency on the third day after connection; and I have had several patients to treat whose chancres had, in four or five days from the reception of the infection, eaten, so to speak, into the substance of the penis from half to three-quarters of an inch. Such are, of course, extreme cases, and always indicate a very impure state of the blood consequent on gross habits of living.

INOCULATION.

Many experiments have been instituted for the purpose of determining the possibility of producing the various forms of venereal disease by inoculation. The method usually adopted has been the insertion of the virus under the cuticle, as in the case of ordinary vaccination. In some cases the cuticle has been removed by a blister, and the virus applied to the denuded surface. And in this way syphilitic pustules have been induced in persons whose whole systems were contaminated with the disease. Constitutional syphilis has also been induced in healthy persons by scarifying the skin and dressing the wounds with the blood of syphilitic patients.

There is an infinite diversity in constitutions with regard to susceptibility to the influence of venereal poison. Some persons seem to possess an almost entire immunity, owing, no doubt, to a vigorous condition of the vital powers, and a free

and well-balanced action of all the depurating organs, by which the virus is soon decomposed or expelled. Others, perhaps, owe their immunity to a very different cause — a torpid condition of the absorbents, so that the virus is not readily taken into the system. Many persons are bitten by rabid animals without becoming hydrophobic; and so, too, some persons will be exposed to venereal infection without acquiring venereal disease. Persons of a scrofulous, scorbutic, or plethoric habit, or of any cachectic diathesis, are liable to the more malignant manifestations of venereal disease, and that in the precise ratio to the constitutional depravity.

Animals have been successfully inoculated with the syphilitic virus, although they are not so readily infected as are the majority of human beings, — a circumstance attributable, probably, in part at least, to their more physiological habits. The plan, however, of preventing syphilis in human beings, or modifying the disease by matter passed through the organism of an animal, after the precedent furnished in the history of small-pox and vaccinia, does not seem likely to succeed.

SYPHILIZATION.

By *syphilization* is understood the condition of the system so impregnated or saturated with the syphilitic virus, that any further application of the poison will not produce manifest venereal disease. The process consists in inoculating the system, repeatedly, so long as any development of syphilis results. When no further effects can be induced, the patient is supposed to have acquired an immunity to the virus.

Strange as it may seem to the reader whose mind is unsophisticated with the multitudinous fallacies of medical theories, this plan of poisoning the system, through and through, with the venereal virus, until it has lost all susceptibility to its influence, or has lost all ability to resist or expel it, has been gravely proposed, by the savans of science and the conservators of the public health, both as a *preventive* and a curative remedy. It has even been recommended as a

measure of general prophylaxis, or public hygiene, as well as a method of therapy. Shocking as the idea may be, and ought to be, to the moral as well as the physiological sense of the community, distinguished medical professors have advocated the plan of syphilizing the whole community, in order to arrest the spread of the disease at once.

Although this subject has recently been revived in the French metropolis, the idea dates back two or three centuries. *Universal syphilization* was proposed anterior to the sixteenth century. The brilliant thought was even then conceived of exhausting the venereal virus by saturating the human race. Within a few years, numerous experiments have been made in the Parisian hospitals, with the view of farther testing the feasibility of this plan of protection. The benefits which vaccination has conferred on the human race, in the exemption it affords from the small-pox, have been urged as a precedent to justify this practice. But there is so little analogy in the cases, that I wonder any argument should ever have been derived from this source in favor of the abominable and outrageous proceeding.

The following article, copied from the *British and Foreign Medical and Chirurgical Review* for April, 1857, gives a fair summary of the sayings and doings of the French physicians on this extraordinary subject: —

“Two or three years ago a bold young French physician startled the grave deliberations of the *Patres Conscripti* in the French Academy of Medicine, by the announcement of his having discovered a new method of the treatment of syphilis, with which he proposed to extirpate the wide-spread malady from our nosology. Not only did Auzias Turenne aim at the cure of syphilis in persons already affected with the disease, but he shocked morality by the proposal to render individuals, hitherto untainted with syphilis, totally unsusceptible of the venereal virus. The French Academy of Medicine met, and an acrimonious discussion ensued. The moral and hygienic objections seem to have been those which were descanted upon; the

facts do not seem to have been very carefully inquired into; no experiments were made to test the truth or falsehood of the new mode of treatment; and, under the powerful influence of Ricord, it was rejected by the Academy, in spite of the protest of Malgaigne and others against this summary decision. In this country, the subject seems to have excited very little interest. One or two journals briefly alluded to it in terms of unqualified condemnation; and the only notice of the controversy, from an impartial point of view, is given in *Ranking's Abstract of the Medical Sciences*, p. 333, vol. xvi., by Dr. Radcliffe. Since then, with the exception of two papers by Victor de Meric, in the *Lancet* for 1853, no notice has been taken of the subject, and the medical public in this country seem to regard the question as finally settled by the fiat of the French Academy. Not so, however, our brethren on the Continent. In Norway, in Sweden, in Turin, and elsewhere, the bold empiricism of Auzias Turenne has been carefully put to the only test capable of deciding the question at issue; namely, that of experiment. Not content with merely declaiming against syphilization as unheard-of and unjustifiable, Professor Boeck in Cristiana, Davidson in Bergen, Carlson in Stockholm, and Sperino in Turin, have for some years past been engaged in a series of careful experiments and observations to determine the truth or fallacy of Turenne's practice. It is plain that experiment alone can decide the question; theory here is but of little avail, and would be of more use in disproving stubborn facts — if such they really be — than if it were directed against the efficacy of mercury in primary syphilis, or of quinine as an antidote to ague. The French Academy seems to have rejected the practice of Turenne without putting it to the proof: indeed, as we observed before, the moral question alone was tried, and found wanting, while the actual facts seem hardly to have been discussed at all.

“Auzias Turenne, a young French physician, commenced, about the year 1844, a series of experiments, with the view of testing the validity of John Hunter's doctrine of the non-communicability of syphilis to the lower animals. After

many experiments and several failures, he succeeded in producing in monkeys inoculated with chancre-matter a disease which had all the characteristics of true chancre. This was at first admitted in the French Academy, but at a later period was denied. However this may be, it is quite certain that a contagious disease was communicated to the poor animals, and that from these it was transferred to rabbits, cats, and horses. The malady was again from these returned by inoculation to the human species, the first trials in this regard having been made by Dr. Robert Wertz, of Wurzburg, on his own person. On four separate occasions, Dr. Wertz succeeded in producing an unmistakable chancre on his own person by inoculation from animals, and this was acknowledged even by Ricord.

“While Auzias Turenne was thus engaged in researches on the transmission of syphilis to animals, he became aware of the curious fact, that each succeeding chancre produced by inoculation became less and less in each animal, until at length a period arrived when inoculation apparently lost all its power, and no chancres or sores of any kind followed the application of the venereal virus. From these facts he drew the inference, that, by prolonged inoculation with the syphilitic poison, a constitutional state or diathesis was at length produced, in which the system was no longer capable of being affected by syphilis. This condition he terms *syphilization*; and upon this asserted discovery all the subsequent experiments and peculiar mode of treatment are based. Auzias Turenne and his followers contend that by such a process of prolonged inoculation the system becomes protected for the future against the venereal poison, just as an individual who has had small-pox cannot take the disease a second time. To obtain perfect syphilization or immunity, the individual must undergo constitutional syphilis; but he must be forced rapidly through this disease by repeated inoculations, in order that it may not injure the constitution.

“The abortive experiments of Diday, in 1849, require but little notice. He proposed to inoculate with blood drawn from a person laboring under tertiary syphilitic symptoms, so

as to prevent, as he imagined, the poison from entering into the constitution at all. Although this proposal was apparently based upon one of Ricord's supposed 'laws,' — namely, that constitutional syphilis never affects an individual but once in a lifetime, it was also in direct contradiction to Ricord's positive opinion, 'that tertiary syphilis could not be communicated by the parent to the child.'

"After a series of experiments, Auzias Turenne's doctrines were laid before the French Academy of Medicine, November 18th, 1850; and, as might be expected, opinions so novel and startling met with the most vehement opposition. Turenne had, it seems, only recently commenced, at that time, his experiments on syphilization in the human subject; he had, therefore, few or no data for the support of his opinions; and he not only proposed to employ syphilization for the primary and secondary forms of venereal diseases, but suggested the use of this treatment as a prophylactic against the contagion of syphilis in persons as yet untainted with that malady. It was upon this latter point that the discussion mainly turned, and here the indignation of his opponents was unbounded at the audacity and immorality of such a proposal. We cannot deny that they had right on their side; the proposal was not immoral, for this disease is one to which an individual voluntarily subjects himself by a lapse from the rules of morality: but it was most injudicious to subject a perfectly healthy person to the danger of incurring a malady from which he might never again be able to free himself. The true method of determining the question — that of experiment, carefully conducted and often repeated — was not adopted, and an application by Turenne for leave to prosecute his researches in the Hospital St. Lazare was negatived by the Commission. Hitherto, not being permitted to pursue his investigations in a hospital, he had only experimented on a few cases in private practice, and these were necessarily too few and scanty in the details to be implicitly relied upon. The real question at issue, that of the reality or non-reality of syphilization, was left untouched. Malgaigne, Depaul, and others, in vain protested

against the sweeping condemnation of these proposals, before the truth or falsehoods of the doctrine had been determined by experiment: the great influence of Ricord and his partisans prevailed, and the proposals by Auzias Turenne were unequivocally condemned. Shortly after, a strong case appeared in favor of the opponents of syphilization, in the person of a Dr. Laval, who had allowed himself to be inoculated to produce syphilization, and was now covered with venereal sores. While matters thus proceeded in Paris most unfavorably for the advocates of syphilization, the question was being investigated on a large scale, and in a more complete manner, by Sperino, of Turin. This physician had great advantages for prosecuting his researches, as he was attached to the Syphilicoma, or Venereal Hospital, of the city of Turin. He had long remarked that large suppurating buboes healed more readily when their syphilitic character was tested according to Ricord's plan, by inoculation of the surrounding parts; and, moreover, that, when the primary chancres were large and obstinate, the inguinal buboes were smaller and less freely developed. The longer the local disease lasted, the less chance there seemed to be of constitutional syphilis. Sperino made his first report on the subject to the Medico-Chirurgical Academy of Turin, on the 23d of May, 1851. In this report he gives the full details of fifty-two cases treated by him in the Syphilicoma of that city. If Sperino was not the first to employ syphilization for the cure of venereal diseases in the human subject, he at all events first performed a regular series of experiments and observations to test the truth or fallacy of Turenne's doctrines.

"The subjects of M. Sperino's experiments were fifty-two hospital patients, all prostitutes, and all suffering from aggravated forms of primary or secondary syphilis. The virus was taken from the person syphilized, or from a comrade — from the first, if possible. The inoculations were repeated once or twice a week in three or four distinct places, usually in the abdomen. The time required for the establishment of the artificial chancres was from two to three days. The effects of

the second inoculations were less serious than the first, the third than the second, the fourth than the third, and so on, until the virus ceased to produce any effect whatsoever; contemporaneously with which epoch all former ulcers had healed, and buboes, recent nodular enlargement of bones, and cutaneous stains or blotches, had either disappeared altogether, or were rapidly going away.

"The virus, also, which made no impression at that time, was found to retain all its virulence when tried on an unaffected person.

"Sperino's observations were confirmed by similar results obtained by Dr. Gamberini at Bologna, and by Gulligo at Florence. The report of the Commission appointed in this case, as at Paris, was unfavorable, but it did not extend to the prohibition of further experiments, and Sperino has ever since followed up this treatment in the hospital under his charge. In 1833 he published a detailed account of ninety-six cases of syphilization in a bulky volume of 903 pages.

"Not only are certain cases ill fitted for syphilization from previous mercurial treatment, but the state of health of the patient must be taken into consideration before submitting him to this painful treatment. Dr. Boeck advises that we should never syphilize when any inflammatory diathesis exists in the system, as in such cases the artificial chancres may take on a malignant action. Habitual spirit-drinkers, and persons of very weakly constitutions, should not be subjected to this treatment. The bowels should be regulated, and the digestive organs should be brought into good order; but it is not necessary to enforce any strict rule of diet. In the hospitals of Bergen and Cris-tiana, the ordinary full diet of the hospitals was always allowed. With regard to obtaining the patients' consent to the treatment, no difficulty seems to be found either in the Scandinavian or the Italian hospitals. Both Sperino and Dr. Boeck mention the readiness which patients submitted to, and even sought for, the mode of cure which they had seen to be so successful in their fellow-sufferers."

Various methods of inoculating the venereal virus have been

adopted by the advocates of this system. Auzias Turenne at first kept up a succession of single chancres; while Sperino made three or four separate inoculations at once, and repeated these two or three times in the week. After having in this way reached the number of twenty-four or thirty inoculations in all, he found that the chancres last produced were exceedingly small; and he then diminished the intervals, and made more inoculations at each sitting. He found that the first chancres were deeper, larger, and more inflamed than those which succeeded them; and that, by diminishing the intervals and increasing the number of applications, the earliest chancres visibly diminished, and were less painful and inflamed. To test this still further, Sperino ventured upon as many as sixty inoculations at once upon the same individual; but the result obtained was that *immunity* to further inoculation set in before syphilitic symptoms were cured, and relapses of the disease frequently ensued. He therefore returned to his former plan, and now inoculates for six to ten chancres at each sitting. While these chancres are progressing, it is neither necessary nor advisable to inoculate afresh, nor should this be done until the former chancres are developed. Should the chancres be developed too freely, and threaten to produce active inflammation, or to extend as phagedenic sores, he checks their progress by inoculating afresh at shorter intervals.

The practice of Dr. Boeck differs from that of Sperino. At first, afraid of producing too serious an impression on the system, Dr. Boeck inoculated for two chancres only, every six days, selecting that period of time because he found from experience that it required about five days to produce induration in a chancre; although he does not, as we have already seen, consider this latter circumstance absolutely essential. Subsequently he has shortened his intervals to three days, and increased the number of inoculations to eight or ten. Less time is thus required to produce immunity, but Dr. Boeck has a wholesome distrust of those cases which are pushed too rapidly through their course of syphilization.

With regard to the most favorable points in the body for

inoculation, Sperino places his punctures on the lower part of the abdomen, while Dr. Boeck prefers inoculating on the arms and thighs. Accompanying each of his observations in the volume before us is a lithographed outline of the human figure, with the points of inoculation, and the date of each, while lines drawn from the arms to the thighs enable us to follow the transpositions of the virus from one chancre to another. By this simple figure it is easy to trace the progress of the treatment, to see the number of inoculations at each sitting, and the source from which they are derived.

It seems that the advocates of syphilization have established a claim on the profession for a fair trial of their system. It is evident that its employment is not fraught with danger, as is the case with so many remedies proposed from time to time ; and the investigation of the subject seems to open up a new field for the further study of one of the most malignant, most lasting and destructive poisons that affect the human frame.

PROFESSOR BOECK ON SYPHILIZATION.

To the foregoing article we add one from Professor Boeck, originally published in the *Dublin Quarterly*, and since copied into the *Glasgow Medical Journal*, the *New Orleans Medical and Surgical Journal*, and other medical periodicals : —

“ If it be evident, as I think it is, that the remedies hitherto used against syphilis are uncertain, and even pernicious, then it is not only allowable, it is our duty, to try the new one that is offered to us. To me the only question was — in what cases syphilization might be used. I have already mentioned that I always thought *prophylactic* syphilization to be an absurdity. Therefore I shall not dwell any longer on it. The question is, whether syphilization ought to be used in all cases where syphilis exists. The question is easily answered. I cannot predicate with certainty if all those who get primary syphilis will get constitutional disease. The simple chancre is not in general accompanied by any constitutional affection. The

Hunterian one is certainly a consequence of a constitutional syphilis, but we may easily deceive ourselves in respect to the induration. Therefore I never use syphilization where there is merely primary syphilis. It is not until the constitutional symptoms have appeared that I consider this method allowable, for then I am convinced that I do not introduce anything into the organism but what is there before. I cannot double a malady already present. So I am quite certain not to do any harm to the patient.

“This may be the fit place for mentioning how I produce syphilization. Without any other preparation than a bath, or in my private practice even without this, I apply on each thigh, and on each arm, or on the sides only, three inoculations in every one of those places, with matter taken from a primary ulcer, or from an artificially produced one in the person who has been syphilized. I choose the first-named places for those who are lying in the hospital, but I inoculate the sides of those who, during syphilization, are going out attending to their business. However, I must add, that I never confine my inoculations exclusively to the sides. If they do not prove effectual there, I apply them on the thighs, on which we shall almost always find the ulcers to be larger and deeper and of longer duration. Therefore I think this place the best, and never fail inoculating there. Every third day I inoculate anew, as long as the last inoculation produces pustules. I take the matter from these. In some cases I have always tried to take the virus from the first-made inoculations, thinking to find there the strongest matter, and thereby, perhaps, be able to achieve the cure in less time; but the cases in which the cure has been accomplished in this manner are so few, that I should not venture to draw deductions from them. In syphilized children I have only applied one inoculation on each thigh, and generally also on each side, every third day, or perhaps at longer intervals. The ulcerations produced in this manner may occasionally become phagedenic in grown-up persons. Many wounds may be united into one, and form a large ulcerating surface. This, however, does not signify in

the least, provided you continue the treatment without being alarmed. The inoculations are a certain remedy against the phagedenic ulceration. In children, the ulcers are generally so small as not to cause any inconvenience. It is only in cases which have been mercurialized before, that I have sometimes seen the artificial ulcerations enlarge, yet never to an alarming degree.

“ In some instances the inoculated person becomes proof to one sort of virus. I then take the matter for inoculation from another, preferring a case which has had a different origin: this then proves effectual. But sometimes they become proof to this also, and I then seek for a third source; and thus I go on as long as any matter at all will operate.

“ Moreover, it is worth noticing that immunity does not occur, and the syphilitic phenomena do not vanish, earlier in children than in grown-up persons. The time necessary to produce immunity is about three months. However, it depends on the number of inoculations that may be employed, upon the symptoms that have taken place, and in children it seems to depend upon the syphilis having been acquired or inherited. The quality of the virus, even, may not be without influence. When immunity is attained, the syphilitic phenomena generally vanish. However, should this not be the case, it should cause no uneasiness, as they will certainly vanish within a short time, without any remedy being used.

“ It is not uncommonly the case, that during syphilization a new eruption takes place; but this always exhibits symptoms of the same nature as were observed at the beginning of the process of syphilization. These eruptions need not cause any anxiety. The operator may quietly go on inoculating, and things will proceed as in other cases. One phenomenon that I have often seen develop itself under syphilization is iritis. This has been very intense in some cases; but I do not make it the subject of any special treatment, either antiphlogistic or derivative, and the result has hitherto been always favorable.

“ The syphilitic poison does not run a rapid course, as was known a long time before we heard anything of syphilization.

We often see the constitutional symptoms not to show themselves until after some months: therefore there is nothing astonishing in the fact that the curative results of inoculation do not show themselves until after some time.

“ But if even by syphilization alone we cannot effect a cure in all cases, it is, nevertheless, an indispensable remedy. Patients who have been nearly destroyed by syphilis and mercury may be restored by it to health. The cases belonging to this class may present very different aspects, and the effect of syphilization on them, of course, also different. I therefore think the best way to give my view of the matter is to arrange them in separate groups, viz.:

“ 1. The early constitutional cases recently treated with mercury, in which the same symptoms have reappeared. Here syphilization will, in some cases, produce as certain effects as in cases not treated before, but we often find some irregularity. The phenomena vanish and return again. That which I have said takes place in the individuals not mercurialized is repeated here, viz.: it is always the same forms which existed at the beginning of the syphilization that return.

“ 2. The affection may be still confined to the cutaneous system and the pituitous membranes, but the tubercular forms may be predominant, ulcerations and mucous membranes may go deeper, or the affection may be in the sub-cutaneous areolar tissue. We may even have the *tubercular serpigenous syphilide*. These affections are more slowly acted upon. The reason for this may partly be found in the fact that these forms are often rather of old standing. Mercurial treatment, iodine, &c., have been used against them, and we often see bad forms show themselves within a year after the primary affection. This seems to depend on individual constitution, for it often has no relation to the quantity of mercury, or the care taken of the patient during the treatment.

“ If, in these cases, new eruptions come out during syphilization, we shall always find them to be more superficial than the earlier affection, if even they have the same form as that which existed at the beginning of the syphilization treatment.

If it happens in these cases, especially, that the inoculations, after a small number of them have been made, do not produce any effect, then we must give iodine, after which we shall again have larger pustules and ulcers.

"3. Affections of the osseous system. Here syphilization hardly ever seems to produce any effect. But when iodine has been used earlier, producing results of only a short duration, then syphilization united with iodine seems to relieve the nocturnal pains more certainly; but osseous tumors remain unaltered by syphilization.

"4. Affections of the nervous system — hyperthesia, and incomplete and complete paralysis — may occur. First, in combination with other syphilitic symptoms; and in those cases I have seen them diminish under the influence of syphilization. Secondly, they may be the only phenomena left as the result of the mercurials used against the primary syphilis; and, under these circumstances, we see little or no effect from syphilization. However, I must observe that all the cases of that sort which I have hitherto treated have been of old standing, and have for a long time been treated with iodine, etc.

"5. Mental maladies, finally, may be the result of the mercurial treatment. I have had no opportunity of employing syphilization in such cases, but I consider it well worth trying. The idea that syphilization should be the last refuge, seems to be quite as if quinine should not be given in the beginning of an intermittent, but that the system should be first injured by different other medicines, and then quinine given afterwards.

"As the result of the great many observations made with syphilization, it seems sufficiently proved that the syphilitic virus heals constitutional syphilis, and that it cures the malady without doing any harm to the organism. On the contrary, we see that uneasiness, the rheumatic pains which often accompany constitutional syphilis, vanish under continued inoculations.

"The immediate effect of syphilization upon the organism is generally also very favorable; but there are some who have thought that it may, perhaps, operate perniciously in future

time. To this I have only to say, that I can show many individuals discharged from hospital more than three years ago, who had remained in uninterrupted good health; and that in not one of the persons treated in this manner can I point out any unfortunate result whatever which could be ascribed to syphilization.

"If, finally, I were to comprehend, in a few words, my opinion about syphilization as a curative remedy, I should say:—

"1. Syphilization is undoubtedly useful against syphilis; it is the only certain remedy that we know, and it is not pernicious to the organism: mercury, therefore, ought to be banished as a curative remedy.

"2. Syphilization is not so certainly useful against *mercurialized syphilis*, but it ought always to be tried. It often does cure it entirely, and it at least does not fail to do some good in the greatest number of cases.

"3. The application of syphilization against other maladies than syphilis ought to be tried with the greatest possible care and exact observation."

So much for syphilization, *pro* and *con*. I am not a little astonished that those very learned and experienced medical gentlemen who have so assiduously experimented with venereal virus as a preventive or curative remedy for syphilis, and who have even recommended its trial for other diseases, do not see the delusion that underlies the whole subject, the fallacy that attended all of their proceedings, and the fundamental error which has determined all of their conclusions.

Let the reader note particularly the significant expression of Boeck. "Mercury ought to be banished as a curative remedy."

Why banish mercury from the catalogue of remedies for this fell disease? Of course, because of its damaging effects on the constitution. It is conceded, that mercury will cure syphilis; it is believed by nearly the whole medical profession that mercury is an antidote to syphilitic poison, and a specific remedy for nearly all forms, stages and conditions of venereal diseases.

The only objection to it is, its injurious effects upon the system. Herein is one of the greatest delusions that ever possessed the minds of medical men. Mercury is not in any sense an antidote to the poison of syphilis; nor is it in the least degree a specific for venereal diseases of any kind, as I shall show presently from abundant and indisputable data.

It is claimed that syphilization does not injure those who are already laboring under venereal disease. I admit that it does not do, in these cases, but very little appreciable harm. Nor would a person already affected with small-pox, measles, hydrophobia, or the bite of a rattlesnake, have the existing fever, or inflammation, or spasms, materially aggravated by inoculation with an additional quantity of the contagion or infection which occasioned the primary disease. But when the syphilitic virus is applied to one who is unaffected with venereal disease, the matter becomes very different, and much more important. In this case the system must be seriously injured at the best; and to render it insusceptible to venereal virus for all future time, it must be thoroughly depraved and contaminated — the immunity, in all cases, being exactly proportioned to the degree of constitutional contamination which has been produced by the process of syphilization.

Another source of fallacy, and the greatest of all, is this: It is the natural tendency of the venereal virus to run out, or rather to be run out; that is to say, the unaided powers of the constitution will, in the great majority of cases, overcome and expel the poison in a longer or shorter time; the only exceptions being in persons of feeble vitality, of cachectic condition, and gross habits. Some persons of powerful vitality, and of simple dietetic habits, are but slightly affected, or not at all, by exposure to renewed affection. This is the reason of the natural or constitutional immunity that some persons are supposed to enjoy. It is true, also, that when the virus is repeatedly applied, it is resisted with less and less energy at each successive application, until, finally, the virus produces little or no appreciable disturbance. And this principle applies to the whole range of "morbid poisons," as well as to all the

stimulants and narcotics, to all the toxic agents of the animal, vegetable and mineral kingdom, and, indeed, to all the drugs and medicines of the apothecary shop. The one invariable and universal rule of all poisons of every name and nature is, a diminution of effect in the exact ratio, other circumstances being equal, to the repetition of the doses. If this were not so, the human race would soon become extinct.

But this by no means proves the utility of these poisons as remedies for diseases. On the contrary, it is the strongest argument that need be urged against the whole system of drug-medication. Soundness and vigor implies activity, sensibility, perceptivity and susceptibility — the greater the better — to all morbid impressions, to the presence of all injurious and foreign matters. To render the constitution unsusceptible to disease of any kind, is to vitiate its sensibility, deprave its instincts, pervert its organic perceptivities, degrade its vitality, and lower its stamina. Exemption from disease is a curse, and not a boon, to the human race; but exemption from the *causes* of disease is always a real blessing.

That inoculating persons who are not affected with venereal disease is at least a hazardous experiment, is sadly and sufficiently illustrated in the case of M. Laval, the German physician already mentioned, who, in allowing himself to be syphilized, became a victim to the "cause of medical science," or the cause of syphilization, or the cause of folly and fanaticism, as the case may be.

The reader who will familiarize himself with the disastrous history of drug-medication in venereal diseases, as seen in hospitals, and recorded in medical books and journals, can hardly fail to come to the conclusion that the benefits of syphilization are entirely *negative*. Those practitioners who rely on venereal virus to cure venereal virus do not employ mercury, iodine, or other potent and destructive drugs. And as the drugs ordinarily employed in the treatment of venereal diseases are a hundred-fold more injurious than the diseases themselves are, it would follow as a logical sequence, that syphilization, though of no positive advantage — though actual-

ly injurious to some extent — would be about a hundred-fold the better practice for the patient.

We are told by the syphilizing experimenters, that, as new inoculations are occasionally made, the primary chancres gradually heal. And so they would, and so they do, when let alone, provided the patient is kept under favorable hygienic influences, and is not poisoned with drugs of any kind. Nothing can be more fallacious than the reasoning which imputes the cure of the old chancres to the introduction of the new. Even if this did happen, the patient would not be benefited in the least, for it is chancre and poison, or poison and chancre, the difference being more in the physician's imagination than in the patient's condition. Indeed, the fallacy of placing the production of the new chancres and the cure of the old ones in the relation of cause and effect, is shrewdly suspected by the syphilizers themselves. However, this whole matter will be better understood after we have considered the subject next in order.

MERCURIALIZATION.

Horrid as are the venereal diseases in all their states, stages, forms and applications, the effects of the ordinary or mercurial treatment are tenfold more so. Since the days of Paracelsus, who proclaimed the wonderful discovery, that the human system is composed of "salt, sulphur and mercury," and that mercury, antimony, and opium are the natural specifics for diseases, the medical profession seems to have acted upon this senseless vagary of a distorted brain, as obsequiously as though some Sir Oracle, instead of a brazen empiric, had spoken. For a long time mercury has been regarded as a specific for all forms of primary or secondary venereal affections, as well as an antidote to the syphilitic virus itself. How entirely baseless, how grossly erroneous, those opinions are, we have data to demonstrate. Indeed, this subject has been put to the direct test of experiment in many thousands of cases, and in every instance the result has been against the mercurial treatment.

Still the delusion exists; still mercury continues to be administered as the remedy for all forms of venereal diseases all over the civilized world.

The whole doctrine of "specifics" is a fallacy. It is very true that poisons, taken into the system, will occasion so violent a drug-disease as to suspend for a time, or entirely suppress, the symptoms of a previously existing disease. In this way arsenic and quinine seem to cure intermittent fever. Such cures, however, are deceptive, and invariably leave the system in a worse condition. Nitre and antimony are regarded as specific antiphlogistics in inflammations; but whenever they seem to cure one inflammation, they do it by producing another; and, in my opinion, invariably a worse one. Digitalis, aconite, arnica, veratpum, opium, henbane, &c., &c., are specifics for pain; but they relieve pain by paralyzing the nervous sensibility, without removing the cause, thus leaving the patient in a condition of diminished vitality — a permanent injury for a temporary benefit.

It would, perhaps, be impossible to settle this question of the good or bad results of the mercurial practice by the ordinary experience of medical men, either in private practice or in hospitals. Pride, reputation, interest, prejudice, competition between rival practitioners or rival schools, would distort the evidence, bias the judgment, and discolor the report. Every medical school has its particular theory, and each practitioner his peculiar hobby, so that it would be next to impossible to get the facts before us in such an unquestionable shape as would enable us to draw correct conclusions.

Fortunately, the experiments have been tried under precisely the right circumstances, and on a sufficiently large scale, to enable us to see the exact truth, without partiality or prejudice. In the European naval and military hospitals, the mercurial plan of treating venereal diseases has been tested and contrasted with various other methods; and the uniform results have been, 1. *The less medicine, the better.* 2. *The mercurial treatment is worst of all.*

No question can be raised as to the fairness of these experi-

ments. It is the policy and the interest of the governments to have the best possible treatment for their sailors and soldiers. And the surgeons who have the care of this class of patients, are removed, in a great degree, from the influences which confuse the minds and pervert the testimony of physicians under ordinary circumstances.

Professor Bennett, of Edinburgh, Scotland, in a clinical lecture, published in the London Lancet of July 24, 1852, and subsequently copied into Braithwaite's Retrospect (the leading Allopathic medical journal of Europe), Part xxvi. p. 278, gives a summary of these experiments, the substance of which I will now extract : —

“ The treatment of syphilis may be said to be of two kinds; namely, the *simple* and the *mercurial*. The profession is rapidly deciding in favor of the first, although some of its members still give mercury in inveterate cases. Many of those we meet with, therefore, have taken the drug, and we have to eradicate the effects of the *mineral poison* as well as that of the original disease.

“ The *simple treatment* is divided into *internal* or *medical*, and *external* or *surgical*. The first consists in the observation of certain hygienic rules, and the employment of general therapeutic means. The diet must be light and mild, meat and all stimulating viands retarding the cure : even with the lightest diet, the hunger should never be quite appeased. The regimen must be the more diminished and rigid in proportion to the youth and vigor of the patient. Diluent beverages, decoctions of barley, liquorice, and linseed, alone or mixed with milk, should be taken freely, to the amount, indeed, of several pints a day. Perfect repose must be secured by confinement to bed. Constipation must be obviated by the use of emollient clysters or mild laxatives. The air should be maintained at the same temperature : this is an indispensable precaution in chronic, consecutive, and mercurial affections. Exercise is only useful in the convalescent stage. In chronic syphilis, however, it may often be carried to fatigue with advantage. Tepid baths, repeated three or four times a day, are always attended with advantage.

"In the external or surgical treatment, strict attention to cleanliness, and the position of the diseased parts, should never be lost sight of. Emollient decoctions or fomentations, or dressings of simple cerate, are the best applications, and the dressings should not be too frequently renewed."

Such is, substantially, the simple treatment. It certainly has the negative merit of doing but little harm, so far as drugs are concerned; while the hygienic management, so far as it goes, is positively beneficial, and in a majority of cases, perhaps, all that is required. It is true that, in some cases, stimulating, astringent, caustic or opiate dressings were applied; and occasionally leeches were applied; and in a few cases the iodide of potassium was prescribed for those patients who were laboring under tertiary symptoms. Of the specific or mercurial treatment, Dr. Bennett says:—

"The *mercurial treatment* consists in keeping up slight salivation by means of the internal administration of blue pills or some form of mercury, sometimes conjoined with mercurial frictions or fumigations, at least for the space of a month. This physiological [pathological?] action of the drug may be produced by administering any of its preparations continuously in small doses. If combined with opium, they act less on the bowels and more on the system generally.

"It is necessary during its action, that the patient do not expose himself to cold. A certain irritability is produced, and the constant soreness of the gums, the metallic taste in the mouth, not to speak of the inconveniences of profuse salivation which occasionally occur, render this species of treatment anything but agreeable to the patient."

And, Dr. Bennett might have added, this course of treatment is not only particularly disagreeable to the patient, but absolutely distressing, and not only distressing, but actually ruinous to the constitution. No person can be salivated, however slightly, without a serious injury to the system; but to keep up this condition of violent poisoning and disorganizing inflammation for weeks can never fail to damage the whole organization irreparably, as the thousands of aching, pain-

racked, shattered, rheumatic, and neuralgic invalids, who have been subjected to even the mildest mercurial course, and whose existence thereafter is but a living death, can testify. Well does Professor C. R. Gilman, M. D., of the New York College of Physicians and Surgeons, say: "A mild mercurial course, and mildly cutting a man's throat, are synonymous terms." And well does Professor H. G. Cox, M. D., of the New York Medical College, testify: "Mercury is a sheet-anchor in fevers; but it is an anchor that moors your patient to the grave." But let us have the result of the experiments. Says Dr. Bennett:—

"Both kinds of treatment have now been extensively tested. In the year 1822, the Royal Council of Health, in Sweden, having been charged by the King to conduct a series of experiments upon the different modes of treating venereal diseases, reports from all the civil and military hospitals were ordered to be drawn up annually. These reports establish the *inconveniences* (!) of the mercurial system, and the superior advantages of the simple treatment. In the various hospitals of Sweden, forty thousand cases have been under treatment, one half by the simple method, the remaining half by mercury—the proportion of relapses have been in the first instance *seven and a half*, in the second, *thirteen and two thirds*, in one hundred. Dr. Fricke's experiments in the Hamburg General Hospital were *first* made public in 1828. In four years, out of 1649 patients of both sexes, 582 were treated by a mild mercurial course, and 1067 without mercury: the mean duration of the latter method has been *fifty-one days*, and that by mercury *eighty-five*. He found that *relapses were more frequent*, and *secondary syphilis more severe, when mercury had been given*. When the non-mercurial treatment was followed, they *rarely occurred*, and were more *simple and mild* when met with. He tells us that he has treated more than five thousand patients without mercury, and has still to seek cases in which that remedy may be advantageously employed. He has *never observed caries, loss of the hair, or pains in the bones*, follow his treatment; and in all such cases which have come under his care, *much mercury* had been given.

"In 1833, the French Council of Health published the reports sent in by the physicians and surgeons attached to regiments and hospitals in various parts of France. Some of the reports are in favor of a mild mercurial course; others in favor of simple treatment. They all agree in stating the cure by mercury to be one third longer than by the simple treatment. At Strasburg, mercury was only employed in very obstinate cases. Between 1831 and 1834, 5271 patients had been thus treated, and the number of relapses and secondary affections calling for the employment of mercury had been very small. *No case of caries*, and only one or two instances of exostosis, had been observed. Full reliance may be placed on these facts, as regiments remain in garrison at Strasburg for five or six years.

"In the various reports now published, more than eighty thousand cases have been submitted to experiment, by means of which it has been *perfectly established* that syphilis is cured in a shorter time, and with less probability of inducing secondary syphilis, by the simple treatment."

Do not the facts we have considered thus far most clearly point to mercury as being itself the cause, and the sole cause, of many maladies which have been called secondary syphilis? I have no shadow of doubt that the vast majority of complaints which are called secondary syphilis by physicians are nothing more nor less than mercurial diseases. In some hundreds of cases which have come under my observation, the diseases were mercurial, and not syphilitic. My plan of cure consisted in expelling the mercury from the system. But, in the hands of nine-tenths of the drug-doctors, these mercurial diseases would be treated with more mercury! More than a score of times have I seen the miserable sufferer salivated again, to remedy the effects of a prior salivation, the physician mistaking mercurial cachexy for secondary syphilis. These views are corroborated by what follows:—

"These facts," says Dr. Bennett, "are now very generally admitted, and malignant syphilis is gradually disappearing. Twenty years ago, the most frightful secondary and tertiary

cases were met with, and the usual treatment was profuse salivation. At present such cases are rare. Abroad, owing to the wise police regulations, the disease is infinitely more innocent even than it is at present in Scotland; and under the salutary influence of a mild and simple treatment, its virulence is daily abating. In appreciating the value of this important revolution in practice, we should not forget to eulogize those who had first the boldness to introduce it. The credit of this is mainly due, in England, to Mr. Ferguson, and other British army surgeons, who practised it during the Peninsular campaign; and to Mr. Rose, of the Coldstream Guards. In Scotland, the writings and lectures of the late John Thompson, of this university, were mainly instrumental in convincing Scotch practitioners of the evils of mercury in venereal diseases. In England, the Hunterian theory and practice have been deeply rooted, and in Ireland have been supported by the writings of Carmichael and Colles. Mercury in consequence is still very generally employed in those parts of the kingdom. The gigantic experiments made abroad, however, *ought to convince the most sceptical*: if not, let them compare what syphilis is in Scotland with what it was, and especially observe that we never see an instance of the disease, such as that malignant case now in the ward, unless the patient's system has been contaminated with mercury."

It may surprise the reader to learn, in the face of such overwhelming testimony of the advantages of simple treatment, and the disastrous consequences of mercurialization, that mercury is still the leading remedy employed, by the Profession, for the treatment of venereal diseases. It can only be accounted for on the ground of professional prejudice. Medical men, after being once educated, do not often change their opinions. They have, during their course of studies, learned that medical theories, on almost all subjects, are as contradictory as they are numerous, and that medical facts, opinions, and practices are as changeable as the ever-varying phases of the moon. Hence they naturally become incorrigibly sceptical in relation to new notions, and so, with rare exceptions, go

through life with the same routine with which they started in professional business. For this reason, too, they are much more inclined to adhere to old errors than to adopt new truths. In the language of Professor B. F. Parker, M. D., of the New York Medical College, "instead of investigating for themselves, medical authors have copied the errors of their predecessors, and have thus retarded the progress of medical science, and perpetuated error."

The experiments of more than eighty thousand cases have established the facts, that venereal patients, treated without mercury, recover in a much shorter time; that their constitutions are much less damaged; that they are much less liable to relapses; that secondary affections are less apt to follow; that diseases of the bones are almost unknown; and that a malignant form of the disease is seldom seen. What more would the profession have? If these facts are not sufficient to condemn the mercurial practice, nothing could be conclusive short of the extermination of the whole human race.

TRANSMISSIBILITY OF SECONDARY SYPHILIS.

An important medico-legal question occasionally arises, respecting the communicability of secondary syphilis, without the existence of local disease of the genital organs of either party. The opinions of medical men favor the affirmative. Such eminent authorities as Dr. John Watson and Mr. Carmichael of England, and Professors Mott, Parker, and Muzzey, of this country, inculcate this view of the subject in their lectures, while the equally eminent teachers, M. Ricord of France, and Mr. Acton of England, oppose it.

Ricord, Cazenane, and Erasmus Wilson, believe that the syphilitic temperament or diathesis, when once formed, may last ten, fifteen, and twenty years, or indeed never be eradicated; and an interesting and very perplexing question arises, when can a man, who has had constitutional syphilis, but who is free from every external manifestation of the disease, with safety marry? Acton advises giving him a "clean bill-of-

health" after a "six months' quarantine," while Mr. Wilson would extend the quarantine "from two to five years."

Cases are on record in which young married women, whose position and character were above suspicion, have been affected with constitutional symptoms of syphilis, but who have not had the least appearance of any primary or local venereal affection. But their husbands, though equally free from any primary form of the disease at the time of their marriage, were affected with secondary symptoms in the form of eruptions or ulcerations of the throat. The following cases, reported by Mr. Langston Parker, are in point. 1. A gentleman contracted a superficial chancre, which readily healed without leaving the least scar or induration. Being apparently in good health, he married. Three or four months after his marriage, he perceived on his body numerous red, smooth, elevated, scaly blotches: very shortly his wife broke out with an eruption of a similar character, and the hair came off rapidly in both patients. Neither had any primary disease, and the lady had never had the slightest irritation in the genito-urinary organs. 2. A gentleman who had suffered both from primary and secondary syphilis, married, after having been free from all symptoms for twelve months; soon after this he had another eruption and sore throat; his wife became affected with the same eruption, excavated ulcers of the tonsils, and was prematurely delivered of a dead child in the sixth month of her pregnancy. Both patients lost their hair and eyebrows.

These cases seem conclusive as to the transmissibility of *some* morbid condition — a cachectic diathesis of some sort. But they do not prove that it is syphilitic. It may be mercurial. This is no better for the parties, but rather the worse; for the syphilitic contamination is much more easily recovered from than the mercurial. But the presumption is strongly in favor of the opinion that these and similar cases are generally, if not always, mercurial instead of syphilitic, from the fact that nearly all such patients have been mercurialized during the primary venereal diseases. In hundreds of cases which have applied to me for the treatment of constitutional syphilis, I have not

found one who was not affected with mercurial disease. The fact that *the hair fell off* in all the cases mentioned by Mr. Parker, taken in connection with the statement of Dr. Fricke, of the Hamburg Hospital, namely, that he had *never known loss of hair* in five thousand patients which he has treated without mercury, while all the cases which he has ever seen in which loss of hair occurred had been treated with mercury, renders the presumption that these cases were mercurial and not syphilitic disease a moral certainty.

Here again is shown the incomparable safety of the hygienic over the drug-treatment. A few weeks of "quarantine" at a water-cure are better than months or years at a drug-hospital. Even when the organism is badly damaged with mercury, a few months of rigid hydropathic management will deterge almost any person of the "diathesis," so that neither mercurial nor syphilitic cachexia will be communicated to the conjugal partner, nor to the offspring.

Mr. Porter remarks, that the cases which have come under his observation have led him to the conclusion, that the semen of a diseased man, deposited in the vagina of a healthy woman, will, by being absorbed, contaminate that woman, without the necessary occurrence of a chancre, or any other sore, secreting matter, on either the man or the woman.

If the whole organization is poisoned, the blood depraved, and the secretions impaired, whether the cause be mercury or syphilis, or, as is usually the case, a combination of mercury and syphilis, the semen must of necessity partake of the universal contamination, and hence a malformed, imperfect or cachectic progeny is inevitable. And this consideration, alone, ought to induce every person who contemplates the marriage relation, after having been the subject of venereal disease, to undergo a course of purification, not by swallowing "drugs and dye-stuffs," but by means of a rigid dietary, fresh air, ample exercise, and abundant bathing.

GONORRHŒA.

The term GONORRHŒA, or CLAP, is usually applied to that form of venereal disease which commences with an inflammation of the mucous membrane of the urethra in the male, and of the mucous membrane of the vagina and urethra in the female, attended with a greater or less discharge of an acrid, purulent, or muco-purulent matter.

Cullen recognized two forms of gonorrhœal inflammation: one resulting from venereal infection, and the other from different causes. Dr. Good, who adopts the technicality of *blenorrhœa*, also divides the disease into two species, corresponding to the distinctions of Cullen; namely, *blenorrhœa luodes* and *blenorrhœa simplex*. This distinction is important, especially in its relations to medical jurisprudence. As already remarked, a female laboring under an acrid leucorrhœa may infect the man who cohabits with her with a mild form of urethral inflammation. This is the *gonorrhœa puræ* of Cullen, and the *blenorrhœa simplex* of Good. It is important for us, and especially for our patients, that we do not confound these cases. In course of my practice, several married men affected with a *gleety* discharge from the urethra — without having been, so far as they knew, exposed to venereal disease — have applied to me for advice. On ascertaining these facts, my attention was at once directed to their wives, and I have invariably ascertained that they were severely affected with leucorrhœa. Of course, after interdicting sexual intercourse for several weeks, I prescribed for the leucorrhœa in the woman, as well as for the gonorrhœa in the man.

It is to be regretted that medical men differ on this, as well as on all other subjects. As already stated, I have known venerable and experienced professors of "Midwifery and Diseases of Women and Children," of the city of New York, testify diametrically opposite to each other, in a court of justice, with regard to the fact of gonorrhœa in the male, resulting from leucorrhœa in the female: one professor, the late John

W. Francis, M. D., declaring that he had known many such cases, while the Professor of the College of Physicians and Surgeons declared that he did not believe in the possibility of the occurrence!

Later authors have applied the term *blenorrrhagia*, in a general sense, to the various forms of gonorrhœal inflammation, designating the part affected by the appellation so generally applied to acute inflammations, as *blenorrhagic urethritis, vulvitis, vaginitis, cystitis, orchitis, prostatitis, &c.*, as the gonorrhœal inflammation affects the urethra, vulva, vagina, bladder, testicles, prostate gland, &c. By some authors, however, the term *blenorrrhagia* is used in a more comprehensive sense, and made to include all forms of urethral muco-purulent discharges, without respect to their nature or causes.

SEAT OF GONORRHŒA. — Authors have differed widely in designating the primary seat of this affection: for example, different portions of the urethra, the fossa navicularis, Cowper's glands, the prostate, the vesiculæ seminales, the lacunæ of the urethra, &c. There can be little doubt that the disease commences in the anterior portions of the urethra, thence extending to the deeper seated portions, the prostate gland, the bladder, sometimes to the kidneys, and not unfrequently involving the glands of the groin, producing abscesses, technically called *buboes*.

SYMPTOMS OF GONORRHŒA IN THE MALE. — The first symptoms of the disease are usually manifested in two or three days after coition. In some cases they appear sooner, but in others not until the lapse of two, three, or more weeks. The patient feels an itching sensation at the commencement of the urethra, which, increasing, soon changes to pain, particularly while urinating. Soon after, a thready, slightly adhesive discharge appears, which dries upon the linen. The humor or matter *glues together* the lips of the urethra, forming a mucous scab, which is broken through by the stream of urine, producing acute pain. The mucous or muco-purulent matter soon

concretes again, rendering urinating at all times painful, sometimes extremely so. As the disease progresses the lips of the meatus become red, swollen, and the pain in urinating increases; soon a burning sensation is experienced along the track of the urethra as the urine passes through the canal. In severe cases the pain extends more towards the neck of the bladder, and the pain is increased by pressure along the course of the urethra. The swelling and morbid sensibility gradually extend towards the bladder, and the matter discharged comes daily from a more distant point, so that in five or six days general *urethritis* is fairly established. After this, and so long as the acute stage of the inflammation continues, the pain while passing urine is violent, and is increased by crossing the legs during defecation, and often extends to the perineum. The emission of semen is also painful. Erections are also frequent and distressing. The stream of urine is diminished in volume, and sometimes bifurcated. When the inflammation reaches the prostate gland, complete retention of the urine may occur.

The discharge varies in color and consistence, but is always a mixture of mucus and pus, and often streaked with blood. At first it is of a whitish color and of a cream-like consistence; then it becomes yellow, and afterwards green. In some severe cases the blood flows freely. During the progress of the disease the prepuce and the glands become more or less swollen. In the acute stage of the disease the matter discharged has an odor resembling that of decayed codfish; and this may, by neglect of cleanliness, become remarkably offensive.

In very severe cases, and in very nervous or irritable invalids, the erections become extremely painful and obstinate,—the penis becoming hard, very sensitive, and sometimes more or less curved, constituting what is called *chordee*. This is usually more troublesome when the patient is in bed. *Chordee* may occur at any stage of the malady, but usually happens in what is called the second stage; that is, when the inflammation is fully established along nearly or quite the whole of the urethral canal. In some cases it troubles the patient after the subsidence of the acute stage of the inflammation.

Cases are reported, and apparently well authenticated, in which the inflammatory affection of the urethra is unattended with any discharge whatever, — constituting a *dry gonorrhœa*. This is analogous to some cases of catarrh, in which all secretion from the mucous membrane is arrested. Some authors have denied the possibility of gonorrhœa without muco-purulent discharge; but I have certainly had several cases to treat which manifested all the symptoms of *gonorrhœal urethritis*, with the exception of the morbid secretion. These cases occurred, too, a few days subsequent to exposure.

The acute stage of gonorrhœa varies from one to three weeks, when the erections become less frequent, the discharges diminish, and the patient suffers pain only during urination. The matter gradually becomes more yellow, then of a dirty white color, soon, in fortunate cases, resuming the character of mucus. But if maltreated, or if the patient's habits are unfavorable to complete recovery, and the matter does not exhibit the elasticity which characterizes mucus, but easily separates into drops like thickened milk, the disease is liable to degenerate into the chronic form. The discharge may then be intermittent: it may cease entirely for a few days, then reappear, when the disease is said to *relapse*. In the chronic form the discharge sometimes consists of a single drop, which is seen in the morning if the glans be pressed, before urinating, and occasionally at other times. All imprudences in diet, all kinds of mental and bodily excitement, and the act of coitus, produce a return of the discharge. This condition is known as *gleet*.

SYMPTOMS OF GONORRHŒA IN THE FEMALE. — We have seen that the most distressing of the symptoms which attend gonorrhœa in the male result from obstructions to the passage of urine. The female urethra, being larger and shorter, is not liable to the same degree of obstruction: hence an equal severity of inflammation occasions much less suffering in the female than in the male. In the female the disease commences in the vulva, extends along the vagina, involving the urethra, and often the uterus and ovaries. When the uterus

is affected the discharge is of a mucous character, and passes from the vagina in thready masses, having a much greater tenacity than when the vagina only is affected.

In the chronic state the morbid secretion is derived mainly from the *cul de sac* about the neck of the uterus. The female does not then suffer during sexual intercourse, but still may communicate the infection. The discharge is often confounded with that of leucorrhœa.

The sterility of prostitutes is attributed by several authorities — Mr. Acton, among others — to the occlusion of the uterine cavity by the tenacious mucus secreted by the *nabothi glandulæ*, little mucus follicles in the neck of the uterus. Leucorrhœa may be attended with the same viscid secretion, and occasion barrenness. This is doubtless a frequent cause of barrenness in young married women.

Vidal is of opinion that gonorrhœal inflammation may extend along the *Fallopian tubes* to the ovaries, as it reaches the testicle in the male through the *vas deferens*. The same author also distinguishes three varieties of gonorrhœa in the female, — *vulvar*, *vaginal-uterine*, and *urethral*.

In *vulvar gonorrhœa* the inflammation affects particularly the parts comprised by the vulva, — the *clitoris* and its *prepuce*, the *vestibule*, the *greater* and *lesser lips*, the caruncles, and the vulvar circle. In most cases all of these structures are involved. The disease may be limited to the mucous membrane of these parts, or it may affect the glands and tissues which this membrane invests. In many cases the skin adjacent to the genital organs is affected with an erythematous inflammation, especially in females who are corpulent.

This variety of gonorrhœa is attended with intense heat, troublesome itchings, redness, and swelling. In some cases erosive ulceration exists. With many patients the early stages of the diseases are accompanied with very strong venereal desires. Walking renders the inflamed parts painful, and the patient often suffers much while sitting; the discharge of urine is often painful, even when urethritis does not exist, as the last drops become diffused over the inflamed vulva.

With the above symptoms there is often an œdematous swelling, which may terminate in obliteration of the vagina. The urethra is in some cases so compressed as to render urination painful at times, and occasion *dysuria*. When the inflammation is attended with these results, and when it also involves the skin and parts adjoining the vulva, the discharge is extremely acrid, and exhales a very fetid odor. The vulvo-vaginal glands may become inflamed, and the *vulvitis* terminate in extensive suppuration. Abscesses may form; leading, if not properly treated or early opened, to a blind fistula, and this may be partial or complete; that is, with an opening in the vulva only, or an opening also in the rectum very near the anus. If the inflammation involves the adjacent skin, a foul humor of an intolerable fetor oozes from the surface.

Vaginal-Uterine Gonorrhœa — vaginitis proper — is an extension of vulvitis. The vagina may be affected during its whole extent, or only that portion adjacent to the vulva or to the neck of the uterus. Says M. Vidal: "If the disease is confined to this last-named part, and if the discharge accumulate in the *cul de sac*, on a superficial examination we may pronounce a female sound, when, in fact, she is the receptacle of what may readily infect whoever shall have intercourse with her. The finger should be introduced deeply into the vagina, its posterior face depressed, by which a cavity will be formed. We then perceive the matter threading its way along the finger to arrive at the vulva. It is still better, when possible, to examine carefully with the speculum the condition of the mucous membrane as we withdraw the instrument."

Urethral Gonorrhœa is attended with symptoms very nearly like those of *urethritis* in the male, though, for reasons already named, much less violent. There is a slight itching and uneasiness at first, often changing to pain of greater or less severity, with pain of a burning character during the emission of urine.

TREATMENT OF GONORRHOEA. — The indications of cure are simply, 1. To purify the general system. 2. To reduce

the local inflammation. A third indication — to counteract, neutralize, or antidote the specific virus of the disease, is the leading, and indeed, practically, about the only one recognized by the majority of medical men. It is in prescribing in accordance with the idea of changing or destroying in some way the specific cause of the disease, that so many specific drug-medicines have been introduced, and so many constitutions been destroyed outright, or maimed for life. It is difficult to make the people, and impossible to make the “old-school” doctors, understand how it is that hygienic agencies alone — water, air, food, etc. — are competent to cure this formidable disease. The whole difficulty, however, comes from two sources : 1. A misunderstanding of the nature of the disease ; 2. A misapprehension of the *rationale* of hygienic medication. When these two propositions come to be fully understood, medical men will marvel, and the public will wonder, and the patients will lament, that a few simple, common-sensical, and almost self-evident truths should have been overlooked so long.

Responsive to the indications I have named, the remedial measures may be distinguished into two classes, general and local ; those which tend to the purification of the whole body, and those which are adapted to relieve the local inflammation. Under the first head are comprehended general bathing, the dietary, ventilating, and all other regimenal influences ; and under the latter head may be arranged all the local baths, dressings and appliances adapted to the circumstances of the case.

The majority of patients are more or less feverish, the feverishness bearing a very close relation to the degree and violence of the local inflammations. The rule, therefore — and it is invariable and infallible — by which we are to regulate the external applications of water, is the degree of superficial heat. The higher the temperature of the skin, the lower should be the temperature of the baths, and the more freely and more frequently should water be applied to the surface. As a general rule, this class of invalids are gross in the habits of living,

and not particularly mindful of personal cleanliness. Our cleansing and detergent processes should, therefore, be prompt and vigorous; for we shall find, as an inevitable result, that just in the ratio that we purify the blood and secretions by appropriate bathing and diet will the violence of the local symptoms diminish. Nothing has more astonished certain drug-doctors that I could name, than the rapidity with which the worst cases of gonorrhœa have yielded to a succession of wet-sheet packs and sitz-baths.

The warm-bath, the tepid-bath, the tepid ablution, the cold ablution, and the wet-sheet pack, are all applicable to different cases; and either is to be preferred, in the order named, according to the degree of general feverishness, as indicated by preternatural heat of the whole surface. The application, as in cases of ordinary fevers, should be continued until the superficial heat is reduced to the normal standard, and repeated as often as it rises above that standard. This rule is so plain and so simple, that the wayfaring man, though a fool in the matter of medical mysteries and meaningless technicalities, need not err very seriously in applying it to a multitude of cases.

In some cases, particularly in the early or primary stages of the disease, the patient's sense of temperature will be variable, and the superficial heat unequal; he may also be affected with chilliness, with languor, lassitude, a tendency to cold extremities, &c. Here the full warm-bath is applicable. If this is impracticable, the hot foot-bath for ten minutes, followed by the warm wet-sheet pack for an hour, is the next best application. If the chilliness be very considerable, amounting to rigors or decided "aguish" sensations, warm wet cloths should be applied to the abdomen, and bottles of hot water to the sides and feet, as a part of the "packing" process.

Water-drinking should be allowed to any extent demanded by the thirst. The water, which should be *soft*, may be of any temperature most agreeable to the patient. Even in cases where there is but little thirst, free water-drinking should be

encouraged, short of producing a disagreeable sense of weight in the stomach. As water is the only diluent and detergent in all the universe — all the acids, alkalies, salts, gums, mucilages, and sweets of the apothecary shop adding nothing to its virtues in these respects — it should always be taken into the stomach with as much freedom as it can be absorbed into the system.

The dietary should be exceedingly simple and very abstemious. Flesh-food of all kinds, milk and all of its products, with seasonings and condiments of all sorts, should be prohibited. During the stage of acute inflammation, but little food of any kind should be taken, and that little should be limited to a very moderate allowance of thin gruel, baked apple, boiled or baked potato, unleavened bread, &c. Sub-acid fruits, as oranges, prunes, tomatoes, &c., are not objectionable as a part of the dietary. The more feverish the patient is, the more abstemious should be the dietary, until the feverish symptoms have permanently subsided.

In the *local treatment*, as in the constitutional, the temperature of the baths should be graduated by that of the parts affected. In the more violent forms of inflammation, the heat, redness, smarting, burning, &c., will be correspondingly severe, and the temperature of the water should be proportionably low. Here the sensations of the patient will guide us infallibly. The local appliances should be of that temperature which produces the most sedative or soothing effect for the time being.

The sitz-bath is the leading measure of the local treatment. Usually, the *cool*, but *not very cold*, sitz-bath — from 75° to 65° — will be found most advantageous; but in many cases a higher or a lower temperature is desirable. The time of this bath may vary from ten minutes to an hour: it should be prolonged, with changes of water if necessary, until decided relief is obtained, and repeated so often as the inflammatory symptoms become aggravated. I have had cases to treat, in which the swelling, burning heat, and difficult urination were so intense, that I was only enabled to quiet the patient by keeping him in the sitz-bath for the greater portion of the day and night.

The wet-girdle, with a wet-cloth attachment to cover the genital parts, should be worn while the patient is in bed, to be renewed as often as it becomes nearly dry or very warm.

Vaginal injections should be employed in the cases of females. They may be used as frequently as the sitz-baths, and at the same temperature. Some hydropathic physicians have employed urethral injections for gonorrhœal inflammation in males. Though usually harmless, I do not regard them as strictly necessary in any case. In my own practice I have always succeeded without resorting to them. Certainly the continuous application, if need be, of water so cold as is required — and even iced-water or ice itself may be advisable in extreme cases — will reduce this form of inflammation as it will all others — a fact sufficiently attested by a hundred eminent surgeons, who have, after a long experience, abandoned all local applications for inflammation, except “water-dressings.” Says Professor C. R. Gilman, M. D.: “The continued application of cold water has more power to *prevent* inflammation than any other remedy.” He might have added with equal truthfulness, and to *cure* inflammation also.

It may be profitable to the reader now to contrast the simple, safe, and invariably successful treatment of the hygienic system with the absurd, dangerous, and always injurious effect of the drug system. Prominent among the remedies, antidotes, and specifics, we find, as local applications, sugar of lead, white vitriol, blue vitriol, lunar-caustic, calomel, corrosive sublimate, alum, tannin, opium, belladonna, and ether astringent, irritant, caustic and narcotic drugs. And among the leading constitutional medicaments are copaiba, cubebs, turpentine, Spanish flies, camphor, opium, and various preparations of iron, iodine and mercury.

Most of the local remedies are employed in the form of injections. In many cases they do not produce any appreciable injury; in some cases they seem to be beneficial. I am willing to admit, that, in many cases, they are beneficial, in the sense of being, under the circumstances, the least of two evils. But I claim, that, under all circumstances, they are more or

less injurious, and never necessary in any case. It is well known, moreover, that very serious and often really horrible consequences result from their employment. When resorted to in the acute stage of the local inflammation, they not unfrequently exaggerate the pain, heat, swelling, burning, and mismicturition, and extend the inflammation over a larger surface. They are the chief causes of the chronic form, or *gleet*, which so frequently exists for weeks, months, or years, after the acute stage has subsided. Inflammation of the groin resulting in *buboes*, or tedious abscesses, is, in my judgment, much more frequently the result of irritant injections and powerful drug medicines than of the disease itself. And *stricture*, one of the most terrible complications or sequels of gonorrhœal inflammation, is generally, if not always, the effect of drugs. In some scores of cases of stricture which I have seen, I have not found the first case where the patient had not been treated with astringent or irritating injections. On this point, my own experience is confirmed by the testimony of some of the first surgeons of the country. For example: Willard Parker, M. D., Professor of Surgery in the New York College of Physicians and Surgeons, testified, not long since, in a lecture to his medical class: "Nearly all cases of urethral stricture are *caused* by strong injections." And again, says Professor Parker: "I have no confidence in gonorrhœal specifics."

Nearly all of the quack nostrums which are prescribed by the *irregular* doctors, and sold by the druggists, are combinations of balsam of copaiba and cubebs, with opiates, or mercurial preparations in disguise. It is well known to medical men that corrosive sublimate, though much more intensely poisonous than calomel,—its greater potency being as one hundred to one,—is much less liable to affect the mouth or induce salivation. For this reason it is generally preferred in empirical practice.

SYPHILIS.

This is the form of venereal disease to which the term *pox* is more particularly applied. The beginning of syphilis proper is usually a small sore or ulcer, denominated a *chancre*. As already remarked, the question is still in controversy between syphilographers whether chancre is the first condition and *sine qua non* of the pox. The doctrine is held by some, that, without the occurrence of chancre, there can be constitutional syphilitic affection; while others maintain just the contrary opinion, namely, that the chancre is merely the evidence and the local expression of the infected system.

The opinion entertained, whether the chancre be the *cause* or the *consequence* of systemic syphilis, has an important bearing on the practice. Those who hold to the former opinion undertake to destroy the chancre and heal the ulcerated surface as soon as possible; while those — some of them, at least — who regard the chancre as the effect, instead of the cause, of constitutional syphilis, object to healing the ulcer. They recommend keeping up its discharge by means of poultices and fomentations, or pustulating ointments, with the view of deterring the system in this direction of the venereal virus.

I am of opinion that the practice of promoting suppuration in a chancre is a very grave error under all possible circumstances. For more than twenty years my attention has been directed to this point, and, in the hundreds of cases which I have treated, I have never known any constitutional disturbance when the chancre has been completely disorganized on its first appearance, or even after ulceration had taken place. I do not, however, regard this fact as conclusive that no syphilitic virus infects the system until it is absorbed from a chancre. I am ready to admit that the same infection that occasions the chancre, passes, to a greater or less extent, into the system. But I am of opinion, most decidedly, that, except in rare cases, the vital powers will themselves decompose or expel it, so that no appreciable venereal disease will be manifested, unless one

or more chancres are allowed to increase the quantity and intensify the quality of the syphilitic virus. In the great majority of cases, constitutional symptoms are never apparent until one or more chancres have existed in an ulcerating condition for days or weeks. Certain it is that, as a general rule, the constitutional affection bears a close relation to the number, and extent, and duration of the chancres. It is true that some persons will have chancres for weeks, which finally heal spontaneously, without being followed by the least symptom of constitutional syphilis; and others will be frequently exposed to syphilis in its most virulent form, and the genital organs, as in prolonged coition, in contact with chancres of the most malignant aspect, without experiencing the least evidence of infection thereafter. These facts certainly corroborate, if they do not prove, the theory I have indicated, namely: the complete defensive powers of the constitution under certain circumstances, or the "*insusceptibility*" of certain persons, — as authors have less correctly expressed it.

LOCATION OF CHANCRES. — In the *male*, chancres originally occur at the outer edge of the urethra, around the head of the penis, the *cul de sac* of the prepuce, and on the external surface of the organ near the *glans*: in the *female*, they are commonly found near the orifice of the vagina. In exceptional cases they appear on the arms, and on the delicate skin adjacent to the genital organs. Chancres are said to be sometimes found in the lips, nipples, nose, gums, tongue, and other parts of the body. Scores of these chancres may have been of mercurial rather than syphilitic origin.

The *concealed* or *deep-seated* chancres of some authors are problematical. I am of opinion that internal mercurial ulcerations have been mistaken for chancres in those cases to which this appellation has been applied.

STAGES OF CHANCRES. — The *first stage* of a chancre is the *vesicular*. A small red point is first noticed, which soon becomes elevated into a pimple. This is gradually changed

into a vesicle containing a turbid humor covered by a scab, which is eventually detached, leaving an opening ulcer. The vesicle seldom progresses to *pustulation* except in chancres produced by inoculation. The time elapsing from the first appearance of the morbid point to the complete ulceration may be a few hours, or several days.

The *second stage* is that of *ulceration*. The sores are generally of a roundish form, involving the whole skin and the subjacent tissues with an undurated base and edges. The size of the ulcerated surface varies from that of a pin's point to a dollar. Sometimes the centre and borders of the chancre are elevated so as to form a fungous projection, constituting what is called the *raised chancre*. Chancres in close proximity often become united into a single ulcer. The stage of ulceration may last for several weeks or months. In some cases it has continued for years.

The *third stage* is that of *cicatrization*. M. Vidal says: "When a chancre is about to heal, it passes into the condition of a wound, that is to say, its virulent membrane gives place to an inodular, cicatrizing membrane. The difference between an ulcer and a wound consists in the difference of the membrane secreting the humor which covers the two solutions of continuity. When this cicatrizing membrane appears, the edges of the ulcer which are detached, sink, and approach the base, to which they unite. The inequalities of the base, the indentations of the borders, disappear, and are replaced by fleshy granulations, resembling those in suppurating wounds. As the healing of the ulcer progresses, its circular form becomes changed and angular at several points of its circumference, because its edges are drawn inward, and in an unequal manner, by the inodular membrane. The cicatrix which succeeds to chancre, like that of every solution of continuity with loss of substance, is shrivelled and depressed: sometimes, instead of being depressed, it is, on the contrary, elevated like a honey-comb. On the mucous membrane these marks at length completely disappear.

"Once the healthy process commences, its progress is rapid,

for it is now no longer that of a chancre, but a wound. Cicatrization is not complete while there remains a single point of the grayish base. This point may extend, become developed, and the chancre itself be renewed, or, to speak more correctly, become enlarged, and invade the cicatrized portion, and the adjacent integuments, which were not before attacked. But when the cicatrization has once covered the whole solution of continuity, a return is no longer possible: before another chancre can appear, there must be a new inoculation.

VARIETIES OF CHANCRE. — The chancre as described in the preceding article is called *regular*. When the sores extend irregularly and progress rapidly over the surface, in the form of a malignant erysipelas, they have been termed *phagedenic*. The term *chancre* signifies a gnawing, corroding affection; but the disease is denominated *phagedenic* only when it is unusually erosive, irregular, and spreading. Another form is called *gangrenous*. It implies a destruction or death of small portions of tissue beyond the boundaries of the ulceration. The phagedenic and gangrenous varieties do not depend on peculiar modification or virulence of the original affection, but on the morbid conditions and unphysiological habits of the patients themselves, or upon the unfavorable circumstances in which they are placed.

Another variety has been denominated *diphtheritic* or *pultaceous*. It is generally noticed in old and feeble persons, and in cachectic children; and it is often induced by mercurial treatment. It is strikingly analogous to *hospital gangrene*. The ulcer is *deeply* colored, disposed to bleed, and the surrounding tissues are thickened and indurated. The ulcer is coated with a false membrane, and bleeds if this is removed. This membrane or coating is, however, immediately reproduced. In some cases the ravages of the disorganizing process are terrible. The genital organs are rapidly destroyed, and the parts adjacent often present a disgusting mass of corruption. The *indurated* chancre is defined as a *small, round, callous ulcer*. The peculiar basis of the ulcer depends on an effusion of plas-

tic lymph, and has a fibro-cartilaginous consistence, with a certain degree of elasticity. It secretes little matter, progresses slowly, and may be complicated with erosive ulceration or gangrene.

The *raised chancre* is elevated by a kind of vegetation in the form of a round or oval basin, of a fungous nature, and raised more or less above the skin. It occurs most frequently on the edge of the prepuce, and secretes a sero-purulent matter. When cicatrization takes place, it still remains for some time above the level of the skin, a flattened and whitened projection, which is slow in disappearing; the cicatrix, after a while, sinks to a level with the surrounding parts. Probably the peculiar character of this form of chancrous ulcer is owing to its locality.

DIAGNOSIS OF CHANCRE. — Usually the practitioner can determine the syphilitic nature of the ulcer at the first glance. A rounded ulcer, with raised edges and a gray or yellowish base, and more or less induration, with a violet-red circle on or near the genitals, establish the character of the chancre. In a majority of cases the fact or confession of impure sexual connection corroborates the evidence of the symptoms. There are cases, however, in which the diagnostic group of symptoms are obscure or incomplete; but, fortunately, such cases are of no practical importance, so far as treatment is concerned. Wholly ignoring the theory of specific remedies or antidotes, I do not, of course, attach the importance to differential diagnosis in these cases, that those physicians must, who regard mercury as the indispensable remedy for the truly syphilitic ulcer. With M. Ricord, inoculation is the only uniform test. If the pus will produce chancre, its syphilitic character is established. But, for reasons already explained, this test cannot be regarded as infallible. Persons are not always susceptible to infection even if the matter be virulent.

“*Diagnosis by result*” is a most unfortunate test, so far as the patient is concerned. It has too long been a practice in the profession to determine the nature of suspicious or doubtful

venereal chancres, as well as of constitutional venereal affections, by the results of mercurialization. It was assumed that mercury, being a specific for syphilis, must of necessity cure, provided the disease be syphilis. The patient is, therefore, subjected to a mercurial course. If he recovers, well; the diagnosis by result is — syphilis. If his disease becomes aggravated, the result proves that it is not syphilis. But it inflicted on the poor patient a malady much worse than syphilis. However, the nature of the disease is ascertained, and medical science “has progressed!”

The *differential diagnosis* between syphilitic and mercurial ulcers is not always unattended with difficulty; and the cases are the more complicated because the majority of patients who have had venereal diseases of long standing have been thoroughly attainted with the mercurial poison as well as the syphilitic virus. Practically it is not of much consequence whether we regard them as syphilitic or mercurial, or as a combination of both. The treatment is substantially the same.

In recent cases it is not difficult to discriminate, for in mercurial ulcerations there is a peculiar fetid or feverish odor of the breath, and a metallic taste in the mouth, with some degree of salivation. Mercurial ulcerations on the mouth are more whitish or milky, and not gray, or yellow, like pure syphilitic ulcerations. They are also more numerous, without indurated or perpendicular edges, and are found particularly within the cheeks, on the edges of the tongue, and especially behind the molar teeth. Syphilitic ulcerations most frequently occur on the palate, tongue, tonsils, pharynx, and at the commissures of the lips.

TREATMENT OF SYPHILIS. — So far as the chancre is concerned, this branch of our subject is very easily disposed of. It should be promptly and thoroughly cauterized. The object is to disorganize its secreting surface, and convert the virulent into a simple ulcer. It will then heal like an ordinary wound. It matters very little what kind of caustic is employed, so that

it is powerful enough. An iron wire or rod, heated to a white heat, will answer every purpose. But this is generally inconvenient. Nitric acid is both efficacious and convenient. Its application is very painful for a few minutes, but the pain soon subsides entirely. Nitrate of silver is still more convenient, and, in a majority of cases, is all that the case absolutely requires. I prefer the solid stick. It should be moistened with water, and applied thoroughly to every part of the chancreous surface which exhibits the least trace of the grayish, or yellowish, or dusky-white matter. A thin film or pellicle instantly forms over the surface, which is cast off in a day or two, when the caustic should be reapplied, if there is the least appearance of the erosive matter aforesaid. After a few applications — provided the proper hygienic measures and regimenal directions are attended to — the ulcerated surface will present a smooth, florid, healing appearance, when the caustic may be dispensed with. Should the ulcer, however, at any future time, take on the virulent character, the caustic treatment is to be resumed. It sometimes happens that a large chancreous surface will present the appearance of healing granulations at some points, and the corrosive action at others. Here it is necessary to cauterize only the virulent points. I am aware that more than one experienced hospital-surgeon has lately declared the nitrate to be useless, and that nothing less potent than the caustic-potassa would disorganize the secreting surface of the chancre. This may be their experience; but mine is different. Perhaps the better hygienic circumstances under which I treat my patients may account for the different results of our practice. The sore should be thoroughly cleansed with tepid water before the application of the caustic, and afterwards covered with a little dry lint. The lint should be kept in constant contact with the secreting surface, so as to absorb the matter; and very frequently changed, especially when the ulcer is large, and the secretion of matter copious. Cerates, plasters, astringent lotions, medicated washes, &c., are useless or injurious. The essential conditions on which we are to predicate the safe treatment and prompt cure of all forms and

degrees of chancrous affections are, 1. Disorganization of the ulcerous surface. 2. Local cleanliness. 3. Bodily purification. If these indications are duly attended to, all other measures will be superfluous. If not, they will only make a bad matter worse.

In some cases, the ulcer extends so deeply, indeed irregularly, into the subjacent areolar tissue, that it is difficult or impossible to apply the nitrate of silver effectually. Here the nitric acid is to be preferred, as it will readily diffuse itself over the whole morbid surface. I greatly prefer it to the strong solution of lunar-caustic, which is often employed in the hospitals. It is more painful, but it occasions a deeper slough, and thus more effectually destroys the virulent membrane. Nor will it require so many repetitions as are necessary when the nitrate of silver is employed.

When the ulcer is very large and deep, I am in the habit of preferring diluted nitric acid, in the proportion of one or two drachms of the acid to an ounce of water. The strength may vary according to the tenderness of the sore, the irritability of the patient, and the pain resulting from its application; but, in the majority of cases, the strength I have indicated will be found sufficient and not *very* painful — probably not more so than all of our curative agents should be in order to properly enforce the great moral lesson such patients are always sadly in need of, “go thy way, and sin no more.”

In the phagedenic and gangrenous varieties, I employ the nitric acid still more diluted — from one to four drachms of the acid to one pint of water. In these cases, I hardly need add, the utmost attention must be paid to personal cleanliness, the lint-dressing frequently changed, and the most rigid hygiene be enjoined. When these cases are extremely painful, warm fomentations may be occasionally employed to secure the patient needful rest. And when the surrounding inflammation is of a putrescent erythematous character, threatening rapid extension and disorganization, hot and cold applications should be made alternately. Nothing is better than alternate hot and cold applications to change the malignant character of the

disease, and arrest the progress of gangrene. A very convenient method of management is the application of bladders of warm water alternated with bladders filled with iced-water.

A variety of caustics and irritants for external application are recommended in medical books, and prescribed in the hospitals. Many of them will destroy many cases of chancre. But none of them are as reliable as the caustics I have named, while some of them do occasion very mischievous consequences. Sulphate of zinc, chloride of zinc, the chloride of gold, chloride of bromine, arsenious acid, corrosive sublimate, red-precipitate, powdered lunar-caustic, &c., are among the favorite prescriptions of different authors and practitioners. The Vienna paste — five parts of quick lime and six parts of caustic potash, made into a paste with alcohol — is much employed by M. Ricord and others. Tartarized antimony is also among the escharotics employed in the hospitals. Of this, as well as of all arsenical and mercurial preparations, it is objection enough to their use, to say that they are always liable to injure the constitution by absorption, and never so efficacious as are the more harmless agents.

The plan of destroying chancres at the outset, with the view of arresting the disease at once, and preventing constitutional syphilis, is called the *abortive* treatment. The testimony of practitioners is exceedingly discrepant respecting the propriety of the abortive treatment. It is very true that the destruction of the chancre, in its early stages, does not always, in hospital practice, prevent the development of constitutional disease; but in my own practice it has invariably succeeded. I attribute these diverse results to our respective methods of attending to the general health, and medicating the constitutional condition. While my plan is to purify the whole body of all foul humors and morbid secretions which afford a pabulum, as it were, for the syphilitic virus, the practice of the drug-doctors is to add new poisons to the preëxisting impurities. No amount of local cauterization can always prevent the generation of infectious material, and the contamination of the whole system, when the drug-diseases are being constantly super-

added to the venereal poison. And when we recollect that the great majority of practitioners who treat chancres with caustics, put the patient at the same time upon a mercurial course, with the view of *preventing constitutional contamination*, the unsuccessful results of their practice are easily accounted for. *The medicine produces the very mischief it is given to prevent.*

The following case reported by Dr. Blackman, Professor of Surgery in the Medical College of Ohio, to my mind, proves something very different from the fact it was adduced to establish. Says Dr. Blackman: "One of the most perfect examples of complete constitutional infection which has ever come under our notice followed a very small primary sore, which was thoroughly cauterized on its first appearance, and, in addition to this, the patient, a very healthy, robust man, was *immediately salivated.*"

Now, in my humble judgment, the mercurial salivation was itself the cause of the "complete constitutional infection." Many men, whom physicians certify to be robust and *very healthy*, are, at the same time, very gross; and this grossness, which is consistent with temporary muscular power, is precisely the condition which will aggravate all the evils of a mercurial salivation. I am of opinion, that, thoroughly salivating a man of gross blood and foul secretions (and this is just the man to expose himself to venereal disease), although he may pass among the crowd as strong, robust, and "very healthy," will produce a much worse constitutional infection than the syphilitic virus, left to itself and nature, would in a majority of cases.

It is even contended by some authors, that the healing of the chancre tends to prevent the elimination of the syphilitic virus. Such practitioners are content to let the chancre continue to secrete its virulent matter, while they as continually endeavor to neutralize its nature, or counteract its effects, by means of mercurial ointments or washes. The "Black Wash," composed of calomel and lime water, and the "Yellow Wash," a preparation of corrosive sublimate and lime water, have been much employed for this purpose, as has the "yellow or citron

ointment," the essential ingredients of which are nitric acid and mercury.

All of these things are pernicious, and their use is founded on a false theory. The proper practice, under all circumstances is to arrest the further production of virus in the chancre, so soon as possible, and eliminate the system of its impurities, whether syphilitic or not, by *normal agencies* through the *natural outlets*.

M. Ricord very justly objects to the employment of ointments as dressings, especially the mercurial, while he recommends aromatized wine. This is less injurious than the mercurial ointments, but incomparably inferior in utility to simple water. Alcoholic applications generally aggravate the pain of the ulcer, sometimes very greatly, so that opium and other narcotics are resorted to to allay it. This fact alone proves their injuriousness, while the cautions against using them too freely, show that they are, at least sometimes, productive of dangerous consequences. On the other hand, it is claimed that the aromatic wine (M. Baumés employs a solution of one drachm of sugar candy in an ounce of wine) diminishes the secretion of pus, and prevents the inoculation of the adjacent parts. Both of these desirable results are, however, completely accomplished by keeping the ulcer and contiguous parts *clean and dry* by means of pure water and plenty of lint.

A glance at the confusion that exists in medical books, and among practitioners of the largest experience, on the subject of local applications, is sufficient to convince any one who can see the subject unbiased by preconceived notions, that the ordinary practice is *purely empirical*, and not predicated on correct theory, nor avouched by successful results.

The favorite application of M. Ricord is, at present (or was at the last report), a solution of tartrate of iron and potassa. M. Vidal tells us, that "there are cases in which we are compelled at once to suspend the medicated wine and the ferruginous solution. M. Ricord does not cauterize unless it be necessary to repress the exuberant granulations (proud-flesh)." According to M. Reynaud, powerful caustics, especially the

nitrate of silver, tend to produce or aggravate *adenitis* — inflammation of the glands. He prefers the solution of corrosive sublimate. M. Vidal recommends dressing the indurated chancre with charpie smeared with an ointment of calomel and opium cerate. Mr. Key, Surgeon to Guy's Hospital, England, is decidedly opposed to the use of mercurial applications, their action, in his opinion, increasing the ulceration and the secretion. He prefers the common astringent salts, as the preparations of silver, lead, zinc, and copper. M. Vidal has seen dressings of too irritating a nature excite inflammatory complications.

In treating the phagedenic chancre, many eminent surgeons testify, from much sad experience, especially against the employment of mercury in any form. M. Vidal remarks: "Mercury, instead of curing, aggravates a phagedenic ulcer." This is sufficiently positive, and to the point. Mr. Langston Parker describes a form of phagedenic ulcer produced by mercury, "the *medicine* acting as a poison;" as though mercury, call it medicine or drug, is ever anything else than a poison! Mr. Key, Mr. Charmichael, and Mr. Acton were opposed to mercury. The latter gentleman says, "Let the young surgeon never be induced to give mercury, under any pretence whatever, in acute cases of phagedæna;" — very wholesome advice, and as applicable to all chancres and old surgeons as to phagedenic chancres and young surgeons. M. Ricord believes mercury is occasionally useful in phagedæna, though he is unable to point out the cases to which it is adapted.

Leeches are advised by some authors when the local inflammation is severe. But two objections confessedly exist to their employment. It is difficult to make the leeches bite at the points of ulceration, and the bites are liable to cause an extension of the ulcer, according to the depths of the invaded tissues. This last objection, it strikes me, may be regarded as serious — so much so, that leeches should have been conjoined with mercury when Prof. Boeck said, it "ought to be banished as a curative remedy."

Like a gleam of sunshine in a dark place is the testimony

of Mr. Langston Parker in favor of a truly *remedial remedy*, namely, WARM WATER. He says: "I have seen phagedæna in the nose, throat, and on the penis, stopped at once by immersion in the baths for half or three-quarters of an hour." And he adds: "No other remedy can be brought to bear thus speedily upon diseases of this nature, and the mutilations and losses of substance, which occur in such states, take place while we are waiting for the action of remedies." This statement seems to point pretty clearly to the principle, that there is more curative virtue in simple cleanliness than in all the poisons of the pharmacopœia.

The proper *constitutional treatment*, aside from local bathing, does not differ materially from the plan I have explained as applicable to gonorrhœa. *Purification* is the leading indication; and in fulfilling it, it is quite as important to avoid the introduction of new morbid materials, whether they are presented in the shape of food, drink, medicines, or poisons, as it is to deterge the system of the existing ones.

The dietary should be rigidly simple, excluding all flesh-meats, grease, spices, salt, vinegar, and even milk. Even sugar is a little worse than useless. Plain coarse bread, with unseasoned vegetables and fruits, all in moderation, should constitute the plan of diet. The patient should never eat to satiety; indeed, a moderate application of the "hunger-cure" will never come amiss in these cases. As "fulness of bread" is a prolific cause of obstructions, inflammations, and sensuality, so an abstemious dietary is among the most efficient means of purification. So far as a rapid recovery and a sound constitution are concerned, nine of every ten patients would do infinitely better, if deprived of all medical attendance, and supplied with a bread-and-water diet, plenty of pure air, and a daily ablution, than if provided with all the physicians and surgeons in the world, with all the apothecary shops in existence at hand, who rely on drugs as the chief curative agents.

General bathing is always more or less useful, in many cases indispensable; but the kind of baths to be preferred, and the temperature of the water to be employed, must here, as in all

other cases, be selected in reference to the particular circumstances of each individual case. The "General Bathing Rules," as explained in the introduction to this work, are here, as everywhere, to be regarded. And all the remarks concerning warm baths, tepid ablutions, and the wet-sheet pack, made under the head of gonorrhœa, are equally applicable in the present case.

In the early stages of the disease, when the patient has not been much reduced by bad disease and worse drugging, the wet-sheet pack for thirty to sixty minutes, followed by the towel-wash or dripping-sheet, once a day, or even twice, is to be preferred as the leading bathing process. In the later stages of the disease, when the patient has become considerably debilitated, and more especially if he has been subjected to a mercurial course, the warm-bath for ten minutes, followed by the tepid dripping-sheet or towel-wash, is preferable. In these cases, too, the "Electro-Chemical" or the "Hydro-Electrical" bath is of more or less service. I would recommend all syphilitic invalids, who have taken much medicine of any kind, to take from six to twelve of these baths, at intervals of two or three days.

It may be profitable now, by way of contrast, to glance at the constitutional remedies which we find recommended by the "standard authorities."

M. Vidal, who attaches much more importance to the general than the local treatment, recommends in addition to "general bathing, and two days of perfect rest," bleeding from the arm, if the patient be young and plethoric, followed by a saline cathartic; if the patient be feeble, or of the lymphatic temperament, he commences with a cathartic. But in either case, the preliminary treatment is to be followed by a *mercurial course of two months' duration*. During all this time the patient is to take a pill morning and evening, of which the bi-chloride of mercury (corrosive sublimate) is the chief ingredient. Well might the patient say, in the language of Cain of old, "My punishment is greater than I can bear."

M. Vidal says: "This method has rarely failed; in other

words, it has been prophylactic against general infection in every instance in which it has been resorted to in time." The "in other words" are significant. How does the author know that constitutional syphilis would have succeeded chancre if no mercury had been employed? And again, it is perfectly certain that saturating the system, as it were, with mercurial poison, will prevent the manifestation of any other poison, infection, or impurity; but *so much the worse for the patient*. Testimony is admitted that "secondary accidents," as constitutional syphilis is sometimes called, do not frequently follow the simple or non-mercurial treatment of primary or local syphilis. M. Ricord suggests a doubt as to the prophylactic value of mercury or any other agent, in the assertion that the persistence of the syphilitic diathesis for ten, fifteen, or thirty years, is not inconsistent with good health. This is more than can be said of the *mercurial diathesis*.

Dr. Blackman says: "Even though we administer, as advised by Ricord, a daily dose of mercury for six months, we cannot be sure that we have prevented the future development of the presence of the syphilitic diathesis." If this be so, no terms of execration are too severe for the mercurial practice; for it is perfectly certain, that no living man can be subject to a six months' mercurialization, without being very badly damaged, and very seriously and irreparably disorganized forever. Mr. Guthrie, who treated one hundred cases of chancres on the simple plan, arrived at the conclusion that "every kind of ulcer on the genitals is curable without mercury." In his "Military Surgery," Sir George Ballingal has furnished a mass of testimony in favor of the non-mercurial treatment. It is true, that Sir Benjamin Brodie, in estimating the results of both plans of treatment, declares that, "in extinguishing venereal disease, mercury surpasses all other remedies;" and I am quite willing to agree with Sir Benjamin, so far as mere appearances are concerned. The correct explanation, however, which is the cure of the venereal disease by the production of the mercurial diathesis — curing the original venereal disease by producing a more mercurial malady — shows the absurdity

of the practice. And well may Dr. Blackman remark, "A specific for syphilis is yet to be discovered." I venture the prophecy, that it never will be discovered among the poisons of the vegetable, animal, or mineral kingdoms. If ever found at all, it will be *in the process of purification*.

Dupuytren, M. Chomel, Broussounet, and others, are in favor of corrosive sublimate, administered in small doses for a long time. M. Chomel thinks that the cure is not so much owing to the quantity of mercury taken into the system, as to the length of time during which the system has been *modified* by the mercury. Modification, indeed! How *does* mercury modify the system? There can be but one answer. It poisons all of its fluids, and depraves all of its solids. This is *why* it cures, and *how* it cures; and this is precisely why the cure is worse than the disease.

In concluding this branch of my subject, I cannot forbear adverting to a very venerable and wide-spread delusion which exists in the medical profession, and more especially among the non-professional people, respecting the anti-venereal and anti-mercurial virtues of sarsaparilla. This drug has, for a long time, been prescribed as a remedy to cure syphilis, and also as a remedy for the effects of mercury, after this agent has been administered so as to damage the constitution materially. And an immense amount of pretended "Sarsaparilla Syrups" is sold by the nostrum-dealers, because the people generally have been indoctrinated with the false notion, that, in some mysterious and inexplicable manner, it is a wonderful "blood-purifier," and anti-disease-in-general specific.

The fact is, the article is nearly inert. All that can be truthfully said of its "medicinal properties" is this: It is a very mild diaphoretic; that is to say, being but slightly poisonous, the system gently expels it through the skin, and thus the tendency to perspiration is increased. And the same is true of a thousand articles which are *not very* injurious. Any field, pasture, or forest would supply a score of roots, barks, leaves, flowers, or seeds, equally diaphoretic, equally efficacious, equally anti-syphilitic or anti-mercurial, and equally anti-pathological

in every sense. Indeed, almost every weed that grows, which is not *sensibly* poisonous, when taken into the system in the form of a warm tea or decoction, occasions effects precisely analogous to those occasioned by sarsaparilla, and quite as useful in any case of sickness.

The peculiar *charm* of the various "compound" and "concentrated" preparations of sarsaparilla, so called, which are so industriously puffed by their enterprising inventors, and so extensively patronized by a humbugged community, owe their most prominent effects, as well as their permanent reputation, to the opiates, alcohol and sugar, which constitute their leading medicinal virtues. Were it not for the *grog* they contain, the traffic in them would soon run out. Whether they do or do not contain sarsaparilla, more or less, is of no consequence to the consumer.

ACCIDENTS AND COMPLICATIONS.

GLEET. — This is the chronic form of gonorrhœa. It very generally follows the acute stage when *cured*, or rather treated with drugs; but it never follows judicious water-treatment. I have never treated a case from the first which was not completely cured in a few days, and without the least of a gleet discharge succeeding. In very many cases the discharge continues for months; in some cases for years. And it often happens that, for months, or even years, after the subsidence of the acute stage of gonorrhœal inflammation, a drop or two of pus, or of muco-purulent matter, will succeed urination, especially if the urethra be pressed a little. As the affection is prolonged, the discharge becomes more watery, and eventually the discharge may consist wholly of a very thin mucus.

It is a delicate and often a difficult question to decide, whether the matter of a gleet discharge be really infectious. The only rule I can give to determine this point is the following. The more the character of the discharge approximates to that of true pus, the greater is the danger of infection. In this case, too, there will be more or less tenderness and heat in the part, with slight mismicturition.

The quality of a gleet discharge, it should be particularly noticed, varies greatly, according to the dietetic and other habits of the patient. If he is gross, intemperate, or luxurious in the matter of victuals and drink, so much the worse. Flesh-food and alcoholic liquor, salted meats especially, and all greasy articles or gravies, always aggravate the disease, and render the discharge more acrid and infectious, as well as more difficult to arrest.

It should be remarked in this connection, that self-abuse, constipation, and piles, often occasion a urethral running, analogous to that of gleet, but without in any degree partaking of its infectious nature. This subject will be treated of in another place. Prolonged urethral discharges, whether the consequence of maltreated or neglected gonorrhœa, of masturbation or of constipation, or other diseases or accidents, should never be allowed to continue longer than is absolutely necessary, as sexual debility and premature impotency will be the results.

Tonic and stimulant drugs, with local astringents, are the usual resources of the regular and the irregular doctors of the drug schools; and by arresting the discharge temporarily, they frequently deceive the patient with the expectation of a permanent cure by such means. But the discharge in most cases sooner or later returns, and becomes more and more obstinate in proportion to the number of times it has been drugopathically "cured."

I have never had any difficulty in permanently curing these patients by means of exclusively Hygienic treatment, although in some cases the time required has been from three to six months. In a majority of cases, however, the patients have recovered in as many weeks.

I usually commence the treatment with *tepid* sitz-baths, so as to slightly increase the discharge at first. These will soothe the irritable mucous membrane, and relieve their congested vessels, and, after a few days, the temperature may be so reduced as to constrict the relaxed capillaries, and produce permanent relief. The first sitz-baths may be from 90° to 95°,

and gradually reduced to 70° or even 65°. The longer the discharge has existed, and the more drug-medicines the patient has taken, the more slowly should the temperature of the water be reduced. As a general rule, 5° per week will be very nearly correct. The average time for continuing the sitz-baths should be twenty minutes, gradually diminishing the time to ten minutes, as the temperature is reduced. They may be repeated two or three times a day.

The constitutional symptoms and conditions should be managed according to the rules already laid down. Usually a dripping-sheet, or some other form of general bath, should be taken once a day.

The diet is of primary importance. Unleavened bread or crackers, with a moderate use of vegetables, and a rather liberal proportion of good fruit, are the essentials. Milk should not be allowed.

Female patients should use tepid vaginal injections two or three times a day. Some Hydropaths have employed urethral injections for gleet, and also for gonorrhœa in the male, and speak well of their effects. I regard them as harmless, and sometimes useful; but I do not deem them important, much less indispensable. I have never employed them, having always succeeded without.

STRICTURE OF THE URETHRA. — By stricture is understood an obstruction to the flow of urine. It may result from simple swelling or inflammation, from a spasmodic affection of the muscular tissue, or from a chronic thickening and induration of the mucous membrane. Hence authors name three varieties: the *inflammatory*, the *spasmodic*, and the *permanent*. The first and second forms soon subside unless aggravated by maltreatment. The third variety, as already intimated, is almost always the consequence of irritant injections. Urethral stricture is known by the urine passing in a small forked or twisted stream, or drop by drop, with more or less pain. Of course the severity of these symptoms corresponds with the degree of the stricture.

Spasmodic stricture is usually seated at the neck of the bladder, or in what is called the membranous portion of the urethra. This form of stricture is sometimes induced by exposure to cold, long retention of the urine, violent exercise, — particularly riding on horseback. Dissipation in eating and drinking, or sexual excesses during the existence of an imperfectly-cured gonorrhœa or gleet, are frequently among the exciting causes.

The remedy is the warm hip-bath. When this is not practicable, warm fomentations to the abdomen should be resorted to. In some very severe cases it may be necessary to draw off the urine with the catheter. But, as the introduction of the instrument is often difficult and often painful, the warm hip-bath, or fomentation for a few minutes, will greatly facilitate the operation.

The *inflammatory* form attends the acute stage of gonorrhœa, and is sometimes induced by injudicious violence in the employment of catheters or bougies. It is known by local heat, pain, or swelling, with inability to urinate; there is also more or less fever. In some cases a few drops of urine escape, attended with extreme torture. The efforts to expel the urine are sometimes incessant and involuntary, with great distress in the region of the bladder, and a violent contraction of the abdominal muscles.

The prolonged tepid, cool or cold hip-bath, according to the degree of heat and feverishness, is here the speciality of treatment. The patient may drink freely of cold water; and all food should be prohibited until the general fever and local inflammation are relieved. In very severe cases the tepid bath for half an hour, or even an hour or more, is to be recommended; or, if not practicable, the wet-sheet pack should be resorted to.

Permanent stricture, as the term implies, depends on a permanent change of structure, — usually a thickening of the mucous membrane diminishes the diameter of the urethra. Fungus, or warty excrescences, the results of ulceration, are sometimes the cause. Any part of the urethra may be the seat

of permanent stricture; but it more frequently occurs in the membranous and bulbous portions of the canal.

This form generally comes on slowly and insidiously, so that the incipient stages are scarcely noticed. The earliest symptoms are a slight diminution of the stream of urine, and some degree of difficulty in voiding it. The symptoms gradually increase until the urine is passed in a number of small spiral streams, or discharged drop by drop, requiring a long time to empty the bladder. In some cases the patient loses all control, and the urine dribbles away continually. In many cases the urethral canal is entirely impervious during the erection of the penis, so that the semen cannot be expelled until the organ becomes relaxed, when it comes away with the urine. Gleet is also among the symptoms of the permanent stricture.

In the treatment of permanent stricture, surgeons have recognized three plans: *dilatation*, *cauterization*, and *incision*. But I am happy to know that many cases, and, in my opinion, a majority, can be cured by proper hygienic management, without a resort to surgery of any kind. The resources of Nature are truly wonderful; and, when all impediments are kept out of the way, she performs many cures where medical or surgical art is utterly powerless.

The patient should be placed under the most rigid regimenal conditions. The dietary should be restricted very nearly to bread and water, with a little fruit; and, what is equally important, it should be very abstemious. A little of the "Hunger-Cure" is advisable. Nothing will better facilitate the absorption of the abnormal deposits, or morbid growths, or hypertrophied structures, nor more effectually promote the healing of the ulcerated surfaces, than dieting a little below the point of actual nutrition. By this phrase I mean, taking a little less food than the system is capable of assimilating.

Hip-baths should be employed of a temperature and frequency proportional to the local heat, pain, tenderness, or irritation; and the whole system must be "packed," or otherwise bathed, according to the rules already explained.

This plan will, in almost every possible case, produce more

or less relief in a few weeks. And, should it fail of effecting a perfect cure, it will prepare the system for the necessary mechanical or surgical appliances. Indeed they ought never to be resorted to until the local tenderness is sufficiently obviated to allow them to be employed without pain.

Dilating instruments — of which the common silver catheter, with a slightly conical point, is, perhaps, the very best — are the next proper resource; and will, in nine cases out of ten, if properly managed, do all that any surgical treatment is capable of accomplishing. Its point may be introduced gently into the strictured portion of the canal, but not pressed with sufficient force to cause much irritation or pain, and allowed to remain a few minutes. The operation may be repeated daily, or oftener, provided no pain or tenderness is induced.

Wax bougies are preferred by some hospital surgeons, while others condemn them as less convenient, and more liable to accidents.

Cauterization is frequently resorted to for the purpose of destroying vegetations, fungous growths, and callosities in the urethral canal. If managed with due discretion, the practice is safe, and, in rare cases, may be indispensable. Various methods of cauterization have been resorted to, and a variety of instruments have been invented and indorsed by the most celebrated surgeons of this country and of Europe. In my judgment, however, the plan of Professor S. D. Gross, M. D., of Louisville, Ky., is preferable to all others; and the following "annotation" of Professor Blackman, of Cincinnati, to Vidal's "Treatise on Venereal Diseases," gives all that is practically useful as to the best plan of cauterization:—

"Prof. Gross notices an objection to the instrument of M. Lallemand, which is certainly of a serious character. He states that, from the manner in which the cup is joined to the rod, it is liable to be broken; and he refers to the instance of a physician in Buffalo, N. Y., who was in the habit of cauterizing himself with this instrument, and in which this accident proved fatal. To obviate the risk, Prof. G. now employs an instrument resembling the common silver catheter, straight or curved, ac-

according to the situation of the stricture. At its vesical extremity is an eyelet three quarters of an inch in length and two lines in width, corresponding with the cup containing caustic (nitrate of silver), which is attached to a rod. The cup is partially filled with tallow, soap, or extract of hyoscyamus, and this is sprinkled with a thin layer of the powdered salt; a much better plan, he asserts, than that of melting the caustic over a lamp."

The caustic should be allowed to remain in contact with the obstruction only for a few moments at a time. Should much pain or irritation follow the application, tepid hip-baths and fomentations are the proper correctives.

Incision, or Resection, has been a favorite practice with some surgeons, and has succeeded in some cases. It consists in dividing the stricture by means of a sheath-bladed instrument, of which several varieties have been recommended. The operation, like that of cauterization, is liable to serious accidents, and should only be managed by the experienced surgeon.

CHORDEE. — This affection consists in a painful erection of the penis, in which the organ is more or less incurvated. It occurs most frequently during the night, and when the violence of the inflammation is such that the urethra cannot expand so much as the corpora cavernosa (spongy body of the penis) during erection; the consequence of which is, the gland is drawn downward. In many cases of gonorrhœa, the patient is dreadfully tortured with this affection during the whole night, especially when such irritant drugs as copaiba, cubebs, or turpentine has been taken. Injections of sugar of lead and sulphate of zinc, if resorted to in the acute stage, will often excite chordee, or greatly aggravate it when previously existing. I have known the worst sufferings from chordee, and also from subsequent stricture, result from the employment of a solution of corrosive sublimate in the early stages of gonorrhœa. The poor patient was not only *corrosive-sublimated* in the urethra, but he was severely mercurialized generally,

and kept in a state of salivation for six weeks, — all to cure a slight gonorrhœa, which left to itself and simple diet, with personal cleanliness, would have been cured by “nature” in a single week. But the result of this most unnatural “cure” was, a ruined constitution, a partial disorganization of the organs, and a total destruction of the functions of the reproductive system. Truly, if nature does not punish these poor sinners with sufficient severity for their evil ways, there is “no mistake” on the part of the drug-doctors.

There is never any difficulty in relieving chordee promptly and effectually without injuring the patient. Hip-baths, and cold wet cloths applied to the part, employed with a freedom and frequency proportioned to the urgency of the case, are all-sufficient.

Bubo. — This term is applied to an inflammatory tumor of the glands and surrounding structures of the groin. It may occur in the course of putrid fevers, as the plague, when it is denominated *malignant bubo*. Another variety, which occurs without general putrescency or specific infection, is termed *simple* or *lymphatic*. But when occasioned by venereal virus, it is called *venereal bubo*, and constitutes the malady we are now to consider.

Authors have distinguished this affection into *primary* and *consecutive*, as it occurs with the first symptoms of venereal disease, or subsequently.

Bubo is essentially an engorgement of the lymphatic vessels and glands of the groin, with inflammation of them and the subjacent tissues. It may terminate in resolution, suppuration, or induration. Whatever tends to aggravate the local affection or the feverish excitement of the system, during the early stages of gonorrhœa or chancre, is among the causes of bubo. Active exercise, stimulating viands, acrid or astringent injections, and especially mercurial drugs, are the most common and the most efficient of the exciting causes. Females are less liable to buboes than males.

The heat, pain, and swelling of the groin, which are the

first symptoms of a bubo, are sometimes observed within one week from the first appearance of gonorrhœa or chancre; but in others not until after the lapse of one or two months, or even longer. The opinion has long been entertained by many medical men, that the speedy cicatrization or disappearance of a chancre would predispose to buboes. I think the contrary is true. In my practice, a bubo has never occurred when I have had an opportunity to destroy the chancre within one week from the date of infection.

It has been noticed that, when chancres affected only one side of the penis, bubo would often affect only the groin on the same side; and that, when chancres affect both sides, buboes would affect both groins. This rule is not uniform, however, for I have known a single chancre followed by buboes on both sides, and chancres on both sides followed by a single bubo. In many cases, too, numerous chancres exist for a long time without being followed by any appearance of bubo at all.

In persons of gross habit or scrofulous constitution, buboes may become very obstinate ulcers; and if mercurialization is added to these conditions, the affection is apt to become truly malignant.

When the local heat and pain are considerable, with more or less general feverishness, some authors have designated it as *inflammatory* bubo; and when the glands are enlarged and movable without pain, the affection has been termed *indolent* bubo.

Respecting the *treatment* of buboes, the standard authors are as discordant in their opinions as they are in relation to the treatment of primary syphilis. Some recommend that suppuration be encouraged and promoted, on the hypothesis that they may thus serve as an emunctory to rid the system of the venereal poison. The remarks I have made on this point, when treating of chancre, will apply here. So far as deterring the system of any poison or impurity is concerned, the *natural* emunctories — the skin, bowels, kidneys, liver, and lungs — are infinitely better than any artificial outlets can be. Creating or promoting factitious sores, ulcers, or abscesses, in order

to cleanse the blood, is a very absurd philosophy, and a most miserable practice.

Other practitioners aim to prevent suppuration; while a third class of authors take the ground that certain buboes will process to suppuration, let the treatment be what it will; while others cannot be made to suppurate by any kind of treatment. Such diverse opinions and contradictory experiences are the natural results of a pathology and practice which are wholly devoid of any rational theory, and hence entirely empirical.

Leeches, blisters, mercurial ointments, subcutaneous incisions, cold lotions, hot poultices, opium, henbane, sugar of lead, salammoniac, sulphate of zinc, corrosive sublimate, tartarized antimony, caustic potash, injections of iodine, compression, &c., constitute the barbarous medley of chemical, mechanical, chirurgical, and toxicological agents and processes which the regular profession has brought to bear upon these unfortunate tumors; and with consequences to the human constitution not very dissimilar to those which would result to one of our stately and vigorous forest trees, should a volley of grapeshot be scattered among its leaves and branches in order to detach or excise some little excrescences on some one of its branches. Again, I say, as between the disease and the treatment, the bubo is the least of the two evils.

The proper Hygienic treatment is very simple, and always successful. When the swelling is attended with heat, pain and feverishness, cold wet cloths, frequently renewed, should be constantly employed. Sitz-baths, moderately cool, may be advantageously employed three or four times a day. When there is swelling and hardness, without much heat or pain, the hot and cold applications should be alternated. The part may be fomented, fifteen to twenty minutes, three or four times a day, and the cold wet cloths, covered with dry ones, applied immediately after. General bathing must be regulated by the general heat and feverishness; and the diet must be strict and abstemious in all cases.

If these measures are resorted to in the early stage, suppuration will rarely occur. But should the part become tense and

the pain throbbing, indicative of commencing suppuration, warm wet cloths should be applied constantly, until matter is formed, when, if the abscess do not open spontaneously, it should be penetrated with a lancet.

PHIMOSIS. — Phimosis consists in a preternatural narrowness of the opening of the prepuce, so that it cannot be carried behind the *corona glandis*, or head of the penis, or in a swelling of the glans or prepuce, rendering its retraction difficult or impossible. The former affection is congenital; and when gentle manipulations will not accomplish the object, the prepuce should be divided by means of a bistoury, or circumcision may be resorted to. The simple division is generally, and, I think, in all cases, preferable. Phimosis, as an incident or accompaniment of venereal disease, may depend on inflammatory enlargement of the parts naturally covered by the foreskin, or on the swelling of this, or on tumors or excrescences. One or more large chancres, situated on the base of the glans, may render it impossible to retract the foreskin, so as to uncover the glans, without great violence, and then the condition is changed to a more dangerous paraphymosis. Phimosis sometimes becomes permanent, in consequence of adhesions which unite the prepuce and glans abnormally.

The inflammation which attends venereal phimosis often terminates in suppuration, and an abscess forms behind the *corona glandis*, which usually opens near the end of the prepuce; and not unfrequently, the prepuce is completely circumcised by the process of mortification. A portion of the glans is also very apt to be destroyed.

In the *treatment of phimosis*, it is plain that the first and chief indication is to abate the inflammatory engorgement. If this is promptly done, no serious consequences will follow. Alternate warm and cold applications are here our main reliance, so far as local measures are applicable. At the same time, nothing should be omitted that will reduce the general heat and feverishness of the system. The bowels should be freely moved with copious enemata of tepid water, and the

tepid half-bath, or wet-sheet pack, should be employed once or twice daily.

Ingenious surgeons have proposed and practised several operations for this disease. But, although they frequently succeed well, they are always dangerous, and sometimes make a bad matter worse. The wounded or excited part is very apt to take on chancrous or gangrenous inflammation, resulting in more extensive structural ravages than would have occurred without the surgery.

PARAPHIMOSIS. — This affection consists in a strangulation of the prepuce, or foreskin, behind the glans penis. It may occur without or with the accompaniment of venereal disease. Persons affected with phimosis may push the prepuce violently behind the base of the glans, without being able to replace it, thus inducing paraphimosis. This accident has sometimes happened during sexual intercourse. The narrow and resisting aperture of the prepuce forms, behind the *corona glandis*, a kind of ligature, which causes the part to swell and inflame, and sometimes to become gangrenous.

In the *treatment of paraphimosis*, the first measures should be directed to the abatement of the inflammation, as in the case of phimosis. Attempts should next be made to reduce the strangulation, by compressing the glans, and carrying the prepuce over it to its normal position. If this does not succeed, there is no resource but to incise the ring which causes the strangulation.

VEGETATIONS. — These are abnormal, and probably parasitic growths, resembling certain vegetables, appearing on different parts of the integuments. In the male, they most frequently affect the mucous membrane, covering the glans and lining the prepuce; in the female, they are commonly found at the entrance of the vagina, but sometimes within the vaginal canal. Occasionally they may be seen on the neck of the uterus, and around the nipple. In both sexes they may appear

in the urethra, in the vicinity of the anus, at the umbilicus, and on the lips, mouth, and base of the tongue.

Vegetations present a variety of appearances; but all penetrate the skin and expand outwardly. They have been compared to warts, cauliflowers, strawberries, leeks, raspberries, &c. In some cases, several branches seem to arise from a common stem, or pedicle, and shoot off so as to form several united bouquets, when the vegetations take the name of *cauliflower excrescence*. They are all more or less vascular. M. Sibert professes to have discovered, by means of the microscope, that all of the different kinds of vegetations contain only cells of the epidermis, and a vascular element.

They are usually preceded by more or less irritation and itching of the part affected, with some degree of pain. When fully developed, they may be constantly painful, or indolent and painless, except when chafed, or otherwise irritated. They often secrete copiously matter of a very disagreeable odor. Sometimes they inflame, mortify, and slough; but this does not effect a cure, as new vegetations are reproduced from the roots. Authors disagree whether vegetations may undergo cancerous transformations; but it is certain that they may become erosive and malignant. They may appear at any stage or period of venereal disease.

Though vegetations are not infectious in the same sense that a chancre is, they are without doubt capable of being directly transmitted by sexual commerce.

In the *treatment* of these troublesome excrescences, surgeons have employed *ligation*, *excision*, and *cauterization*. In the great majority of cases, they may be destroyed by the application of caustics. I prefer the nitric acid and sulphate of zinc to all others. A very efficacious plan is to touch the excrescences daily with strong nitric acid, and between the applications, keep them covered with anhydrous sulphate of zinc, made into a paste with glycerine.

MUCOUS TUBERCLES. — *Flat pustules*, *mucous patches*, or *mucous pustules*, as they are variously termed, may form on

the mucous membranes, and on parts covered with a delicate cuticle. In the male, the skin of the genital organs, and the margin of the anus, are most liable to be affected; and in the female, the vulva, and neck of the uterus. In both sexes, they appear at the bend of the thigh, at the umbilicus, in the axilla, mouth, on the tonsils, tongue, at the entrance of the nostrils, in the commissure of the lips, &c. Corpulent and uncleanly persons are especially liable to mucous tubercles. They may appear with the first symptoms of venereal disease, or not till after a lapse of several months.

They resemble, very closely, disks, or portions of a disk, adhering to the surface of the integuments, varying in size from a small pimple to that of a dime. Several pustules may coalesce so as to form one of very large size. These excrescences are as readily transmissible by sexual connection as are vegetations.

Rest and cleanliness will often suffice to dissipate them. As they are the product of a peculiar inflammatory action, an attention to diet and bathing is, in many instances, the only special medication required. Should cauterization be necessary in an obstinate case, the sulphate of zinc, nitric acid, or nitrate of silver may be effectually applied.

Some hospital surgeons recommend lotions of chloride of sodium, sugar of lead, iodide of sulphur, alum, &c.; and M. Baumés advises the hip-bath, medicated with from one to three drachms of corrosive sublimate. This may be the death of the tubercles, but it may also be the *salivation* of the patient.

ORCHITIS. — An inflammation of the testicles occasionally is one of the complications of the acute stage of venereal disease, but much more frequently the consequence of the acrid drugs which are prescribed for gonorrhœa. It requires no special medication. The hip-baths and wet compresses, as directed for gonorrhœa, are equally applicable to orchitis, as are also the general bathing and regimenal directions.

CYSTITIS. — Inflammation of the bladder is attributable to

the same causes as the preceding affection, and is to be treated on the same plan. The inflammation affects more particularly the neck of the bladder, causing difficult urination, and in some cases retention. The warm and cold hip-baths alternately, with fomentations followed by the cold wet compress, are usually necessary.

STRANGURY. — An inability to evacuate the urine, except in drops and with severe straining, from an inflammatory swelling, or a spasmodic stricture of the neck of the bladder, may result from the violence of the venereal affection, or be produced by acrid and irritant drugs. Cantharides, which is a favorite remedy for the clap, with some physicians, is very liable to induce strangury. Prolonged warm or tepid hip-baths are the proper appliances.

DYSURIA. — In this affection the urine is voided with difficulty, attended with pain, and a sensation of heat in the urethra. It is often the premonition of strangury. It is much more frequently the result of drug-medication than of venereal disease, except when it exists as a symptom of the acute stage of gonorrhœa. Treat it as recommended for strangury.

PROSTATITIS. — Inflammation of the prostate gland—a small body of the size of a chestnut, situated before the neck of the bladder, and surrounding the first portion of the urethra—is among the numerous sequelæ of venereal affections. This, again, is the result of mal-medication, in nine cases out of ten. The gland often remains permanently enlarged, causing a frequent desire to urinate, with a constant sense of weight or uneasiness in the part. The wet-girdle should be worn during the night, and tepid hip-baths employed two or three times a day. The diet should be rather dry, and moderately abstemious. No drink should be taken at meals.

CONSECUTIVE VENEREAL DISEASES.

Under this head medical authors give us a formidable list of maladies, involving every organ and structure of the body, and presenting almost every variety of atonic fever, inflammation, ulceration, eruption, tumor, obstruction, and destruction. A majority of them are, however, purely drug diseases; and of these a majority are mercurial affections. Of the remaining cases, a majority are complications of venereal and drug disease, while comparatively few are purely venereal. Strange to say, mercury, taken internally and applied externally, is, by the standard authors, recommended as the leading remedy for these mercurial and drug diseases.

SYPHILITIC FEVER. — There is very little feverish disturbance of the system necessarily connected with any form or stage of venereal disease, with the single exception of the acute stage of gonorrhœa. But when the system has been extensively drugged, or has been very gross and obstructed in consequence of bad management or improper dietetic habits, a low form of fever may supervene. It is then irregular in its paroxymal manifestations, resembling rheumatic or hectic more nearly than any form of simple fever. It requires no special management. The warm bath should be employed occasionally, and all the means resorted to which tends to rid the system of drugs and other impurities.

RHEUMATISM. — Rheumatic and neuralgic pains are mentioned by authors as among the *secondary* and tertiary effects or accidents of syphilis. They are in almost every case the direct consequences of mineral and narcotic medicines. They are felt particularly on the head, in the vicinity of the articulations, and frequently in the lumbar region. Vidal says, "these *rheumatoid* pains are not constant, there being often a kind of intermission, and the paroxysms are excited by heat, especially when in bed." Usually there is no discoloration of

the skin, and the temperature of the part remains unchanged. Warm fomentations, followed by the wet bandage, are the specialities of treatment.

CUTANEOUS ERUPTIONS. — Under the names of *syphilidica*, *syphilides*, and *syphilodesma*, authors have described a great variety of skin diseases, which they regard as secondary or tertiary syphilis. I have never known a case of constitutional taint, accompanied with cutaneous eruption, except in patients who had been badly drugged through the primary stage of the disease. The eruptions described by authors as syphilitic assume an almost endless diversity of appearances, and they have classified them into the *exanthematous*, the *papulous*, the *squamous*, the *vesicular*, the *bilious*, the *pustular*, and the *tubercular* forms. These distinctions are of very little practical importance, as they indicate the kind and extent of the medication in connection with the personal habits of the patient, and all demand the same therapeutical management, and that contemplates, simply, *purification*.

Authors have dwelt with much emphasis on the *color* of syphilitic eruptions as indicative of their venereal origin and character. Fallopius described the eruptions as *ham-colored*, and Swediaur as *copper-colored*. Cazenave mentions cases in which the redness is but slight, the tint varying from this to a gray color. Again, the color of the eruptions varies greatly at different stages, at one time being bright-red, then a deep crimson, livid, or dark, a dirty copper-yellow, an obscure grayish-yellow, &c. In persons of bilious temperament, the eruption assumes a brownish shade; and if the habit be strongly cachectic, the tint will be livid, analogous to the spots or blotches seen in cases of putrid typhus fever. The *copper* tint is, however, regarded as altogether the most common appearance, and as the most distinctive symptoms of syphilitic disease. It is enough on this point to add, that the mercurial taint produces precisely the same appearances.

ALOPÆCIA. — This term is applied to be a falling-off of the

hair — baldness. Many causes, aside from syphilitic or mercurial diseases, will occasion it. Any medicines, or poisons, or stimulating aliments, or condiments are liable to induce it, as are severe fevers. Some authors have observed a partial loss of hair from the head, to follow soon after attacks of chancre and blenorrhagia; a circumstance which induces me to suspect that such patients were treated more heroically than judiciously. M. Baumés says: "In such cases there is sometimes a purpuraceous eruption, a slight desquamation of the epidermis at the roots of the hair, and alopecia occurs; but this sometimes takes place without any apparent alteration of the epidermis. Friction, a slight traction, the action of a comb, detach the hair on the scalp: occasionally the hair of the body is removed in the same manner."

In most cases the roots of the hair are not so much affected as to prevent its growth, so far as the scalp is concerned; but when alopecia affects the hair or other parts of the body, it is usually complete and incurable. Universal alopecia occurs only in an extreme syphilitic, mercurial, or cachectic diatheses; but then, in the language of Brassavole, it gives to the patient a ridiculous aspect, for we cannot refrain from laughing when we see men without beards, without eyebrows and eyelashes."

M. Vidal says: "I have seen an instance of complete, universal alopecia. The man was examined by several syphiligraphers, for he passed from the care of one to another. So completely was his system saturated with syphilis, that the whole habitude of his body was changed; his visibility was completely annulled; and so degraded was he, that his sex could hardly be recognized. Brassavole would have thought him more than ridiculous. He had lost all the hair on his head and body; his eyebrows, beard, hair on the pubes and in the axilla, were all wanting."

The frequent application of cool or cold water, with very gentle friction, and exposure of the surface to the fresh air, so much as can be made agreeable to the patient, constitute the specialities of treatment. I lay especial stress on the "air-bath" in these cases. The hair should be cut short (not shaved), on the first appearance of the affection.

ONYXIS.—An inflammation and ulceration of the matrix of the nail, or loss of the nail without any appreciable alteration of the skin, is sometimes the accompaniment or the consequence of venereal taint, or of the drugs which have been administered to cure it, or of both combined. The part affected should be frequently soaked in tepid water, and at other times covered with a light, soft, wet bandage.

ULCERATIONS OF THE MUCOUS MEMBRANES.—All portions of the mucous membranes are as liable to venereal or mercurial ulcerations as all parts of the skin are to eruptions. The mucous membranes of the nose, mouth, tonsils, and throat, are most frequently affected. Ulceration often appears as a secondary or tertiary affection long after the primary disease has disappeared. Sometimes it affects the epiglottis and larynx, sometimes the ears and eyes, and, more frequently still, the arms, rectum, urethra, vagina, and uterus.

Whenever the destructive evidences of a disorganizing constitutional dyscrasy may appear, the plan of treatment is the same. Personal cleanliness and free ventilation must not be neglected; bathing in every way which will conduce to purification, without weakening the system, must be resorted to; and, above all, the patient must be kept to a rigidly simple and abstemious diet. In no cases is the "Hunger-Cure" more appropriate. The patient should never be allowed to satisfy the appetite; while the food should be restricted very nearly to bread and water, with a little fruit.

SYPHILITIC IRITIS.—Various forms of ophthalmia are among the remote consequences of venereal affections and their treatment; but the affection which is prominently noticed by medical authors is inflammation of the iris. This is supposed to be intimately connected with the affections of the skin, as it frequently follows in their train. Ricord and some other authors seem to think there are as many forms of iritis as there are of cutaneous affections, and that they are respectively related to each other. Prof. Schmidt, of Vienna, was one of the first

writers to describe syphilitic iritis ; but later authors object to the term, on the ground that other structures of the eye are as much involved as is the iris : they regard the affection as properly "deep-seated syphilitic ophthalmia." Several eminent authors, among whom are Morgan and Travers, regard this affection of the eye as due to "the conjoint agency of syphilis and mercury."

The prominent symptoms are : a preternatural vascularity of the opaque cornea and iris ; a change in the form and motions of the pupil ; impaired vision, and pains in and around the eye ; a production of pus or lymph, with adhesions. The color of the iris is changed : if it is naturally blue, it becomes green ; and if of a red disk color, it changes to brown. The effused lymph may become partially organized, forming bridges or adhesions ; and in some cases tubercles or pustules result, terminating in abscesses in the iris.

Blood-letting, mercury, blisters, and narcotics, rigorously employed, are the chief remedial means of the drug-doctors in this dangerous complication. Should they save the eyes, — the possibility of which I doubt in any case, — they are sure to ruin the constitution, rendering the eyes practically useless.

The Hygienic and the rational treatment are hip-baths, hot and cold foot-baths, wet cloths over the eyes so long as there is heat and pain in them, with such attention to the general health as the particular circumstances of each case demands.

SARCOCOLE. — This is a tumor commencing in the *epididymis* (a small oblong body lying along the upper portion of the testicle), sometimes also affecting the testicle, and, in its more advanced stages, attended with a serous effusion into the *tunica vaginalis* (the serous membrane which envelops the testicle). It may affect one or both sides, and may be produced by other causes than venereal. It is sometimes a consequence of injuries and of masturbation. It usually appears first on one side ; but if it continues long, the other testicle will pretty surely become similarly affected.

In the treatment of sarcocole, the standard authors generally

recommend mercury, iodine, and bleeding, without reference to the mercury, iodine and bleeding to which the patient may have been previously subjected, and which may, possibly, have been among the causes of the ailment. In some cases castration has been resorted to. A few years since it was my good fortune to rescue a very worthy gentleman of this city, in the full prime and vigor of life, from the hands of one of our most eminent surgeons, who had already extirpated one testicle, and proposed to perform the same benevolent act for the benefit of the other! I succeeded in convincing the patient that even a deformed organ was better than none, and by rigid adherence to Hygienic management, of which a very strict dietary was the leading feature, the man has arrested the progress of the malady, and now enjoys a comparatively comfortable condition of the remaining member. This disease does not always destroy virility.

Frequent cool hip-baths, with friction, are always to be advised in the treatment. Should the swelling be so great as to occasion a painful sense of weight, or dragging down, a suspensory bandage should be worn.

AFFECTIONS OF THE BONES. — The various diseases of the bony structure, which are supposed to be among the remote effects of syphilis, and which are certainly the frequent consequences of mercurial drugging, are *osteocopes*, *periostitis*, *ostitis*, *exostosis*, *caries*, and *necrosis*.

The term *osteocopes* is applied to painful sensations, fixed or wandering, about any portion of the bony skeleton. Sometimes they are dull, heavy, aching, and seem, in the language of the patient, to come from the "very marrow of the bones." At other times they are acute and lacerating, the patient feeling as though the bone were strongly pressed in a narrow space, or as though it were being bored. The most remarkable feature of the pain is its nocturnal tendency. Frequently it is very trifling or entirely absent during the day, and exceedingly exasperated at night.

Periostitis is, as the term implies, an inflammation of the

periosteum, — the lining membrane of the bone. It is attended with a swelling or chronic enlargement (*periostosis*), or with several tumors of a doughy feeling, which may be resolved or terminate in exostosis or ulceration.

Ostitis is an inflammation of the substance of the bone itself. The bones most likely to be affected are those of the leg, forearm, breast, and cranium. Its symptoms, progress, and terminations are similar to those of periostitis, with which it is always complicated.

Exostosis is a term applied to an indurated tumor which not unfrequently results from peritonitis or ostitis. Hypertrophy, or abnormal ossification, sometimes occurs, however, without previous inflammation; and in some cases new bony structure is superadded, constituting the tumors (*epiphyses*) termed *osteophytes*. Exostosis of the cranial bones may induce amaurosis, convulsions, delirium, strabismus, paralysis, and a variety of affections resulting from compression of the nervous centres, while exostosis of the spinal column is liable to induce paraplegia, — palsy of the lower extremities.

Caries is an ulceration of the bony structure, and *necrosis* its mortification or death. The bones of the head and face are most frequently the locality of these affections, but no part of the osseous system is exempt. The vertebræ are often affected with caries.

The treatment of these affections is both medical and surgical. The medical consists in arresting the local inflammation or disorganization by the constant application of wet compresses, of the temperature that will give most immediate relief, so long as the nocturnal pains are troublesome; after which the wet-bandage, covered with a dry cloth, and re-wet as often as it becomes dry, should be worn constantly. The surgical treatment consists in excising the tumor whenever it can be done with safety to the adjacent parts.

INFANTILE SYPHILIS.

It is certainly true that the new-born infants of syphilitic parents are often shrivelled and emaciated, with soft, flabby flesh, wrinkled skin, and an earthy color: in the language of Doublet, "minatures of decrepitude." Others are born with all the appearances of good health, but after a few weeks or months evince unmistakable evidence of venereal or other taint in various affections of the skin and mucous membranes. None of the affections, however, which are described by authors as indicative of venereal inheritance are decisive, as all of them may be occasioned by other causes. Syphilis in one or both parents is the only ground on which we are authorized to pronounce the dyscrasia of the child to be of venereal origin.

Affections of the bones, and enlargements of the glands, usually denominated scrofulous, are among the occasional manifestations of infantile syphilis; and a still more frequent affection is *purulent* ophthalmia. But all of these diseases, it should be remarked, may be produced by other causes.

The mother may become infected before conception, or during pregnancy: in this last case the chances of the child being seriously contaminated decrease as pregnancy is advanced at the time of infection. There can be no doubt that a diseased father may so affect the ovum in the act of impregnation, as to develop syphilitic disease in the child if the mother be perfectly sound. The healthy child may derive syphilis from an infected nurse, while an infected child may communicate it to a healthy nurse. M. Vidal says: "Nurses under the influence of the syphilitic diathesis, and yet having no external evidence of this diathesis, have communicated syphilis to sound children, born of sound parents. In these cases the milk has been the vehicle of the poison." It is also generally supposed that syphilis may be communicated to the female, and to the germ of the foetus, by the semen of the infected male.

Respecting the best method of treating syphilitic infants, and syphilitic females in a state of pregnancy, practitioners

are somewhat discordant, but the strong tide of medical authorship runs in the direction of mercury. With the great majority of them, the *sine qua non* of medication is mercury and salivation. Need we wonder that authors, in delivering their *prognosis*, tell us, that "the mortality among children born with syphilis is frightful"? The practice is frightful.

In view of the frightful results of the *direct* mercurial treatment, some authors have proposed an *indirect* method of mercurializing the little victims. This indirect method consists in administering the mercury to asses or goats, until the milk of the doctored animals is thoroughly poisoned, and then feeding the *mercurialized milk* to the syphilitic infants. This is adding "cruelty to animals" to the "frightful mortality."

The proper treatment of syphilitic infants contemplates a rigid perseverance in Hygienic appliances of every kind. Abundance of pure fresh air is of the first importance. Even the influence of light is not to be disregarded; for a syphilitic infant, like a scrofulous child, is always benefited by being much exposed to "sunshiny weather," and invariably damaged by living in dark, dingy apartments. A tepid bath should be employed daily. When the eyes are affected with redness, heat, or pain, the wet cloth should be applied; and if purulent matter forms, tepid water should be frequently injected between the lids, or the contact of the irritating pus may produce disorganization of the cornea, with irretrievable blindness. The quality of the milk which is fed to these infants must be carefully looked after. In most of our large cities, a large proportion of the milk consumed by the infantile population is badly poisoned, not with mercury, but with the distillery slops with which the cans are dosed; and notwithstanding that, in the "Swill-Milk Investigation" which took place in this city two years ago, a member of the New York Academy of Medicine testified that the alcoholic quality of distillery milk only rendered it the more wholesome, and a distinguished chemist of Columbia College testified that the results of his analysis proved swill milk to be even more nutritious than the pure article (for which wonderful discovery, demonstration, or inven-

tion, the city paid him a reasonable professional fee), I am still inclined to the opinion, that pure milk is better than the distillery article, for all infants, whether sick or well.

PROPHYLAXIS.

On the subject of the prevention of venereal disease, says M. Vidal: "It may be said, that folly, wisdom, benevolence, and charlatanism have vied with each other in the effort." An infallible plan is, of course, the avoidance of the source of infection. This, however, is not always practicable, while, as society is now constituted, thousands will totally disregard it. Many directions have been given to enable persons, who will or must be exposed, to avoid infection, as the employment of medicated washes, oils, ointments, acid and astringent lotions, &c. But more important than all of them together is personal cleanliness.

Many hospital surgeons have their favorite preventives. Lanfranc, Fallopius, and Ricord have recommended the use of urine and wine. Saleratus is a favorite with English physicians. M. Langlebert believed that he had found a prophylactic in a mixture of soft soap, rectified alcohol, and essential oil of rectified citron. And so confident was he of the efficacy of his specific, that he is said, on one occasion, to have inoculated two of his students with the pus from a phagedenic chancre, and, in six minutes thereafter, applied his prophylactic. As no chancreous symptoms appeared at the expiration of one week from the time of inoculation, it was concluded that the preventive was successful.

The fact does not, however, prove the principle, although it gives much plausibility to it; for some persons have been exposed the natural way, without being infected. Indeed, it is recorded in the medical journals, that certain medical students (not of the Hygeio-Therapeutic School) of Paris have exposed themselves repeatedly to the worst forms of infection, with perfect impunity.

Many countries, in order to mitigate or repress the disorders

resulting from sexual debauchery, have placed houses of prostitution under the supervision of a medical police. For two or three centuries prior to the present one, prostitutes, who had become affected with venereal disease, were treated, in most of the cities of Europe, by punishment and banishment. More recently, these creatures have been looked upon as unfortunates as well as criminals, and placed under medical as well as moral discipline; and, since the evil is not easily prevented, certain governments have taken it upon themselves to regulate it. This is not the place to discuss the moral or political principle involved; but there is no question that it has, at least to some extent, checked the spread of venereal diseases among the people. In France, every town has its dispensary, the expense of which is borne by the municipality. In Paris, the prostitutes living by themselves are examined twice a month; and, in many of the towns, they are visited weekly. But there are many prostitutes, of the most debauched character, who escape the surveillance of the medical police; so that there is no safety even there, in a life of debauchery.

Part Second.

SPERMATORRHEA.

By the term spermatorrhea is understood a profuse, morbid discharge of the seminal secretion, whether occurring periodically, in the form of "nocturnal emissions," or constantly, at the time of the urinary and fecal evacuations. Young men are generally the subjects of this disease, though married men are not unfrequently troubled with it. As a consequence of this drain upon the vital power, a long train of dyspeptic, cachectic, and nervous affections make their appearance, usually and emphatically expressed by the phrase, "ner-
vous debility."

It would surprise those who are not posted in the medical literature and practice of the day, both in their "regular" and irregular phases, to see the flood of small books published and circulated under the titles of "Human Fertility," "Nervous Debility," "Spermatorrhea," &c., all intended to advertise certain "infallible" specifics which are delaying the land, and robbing this class of invalids of millions of hard-earned dol-
lars. But so it is, and will be, until the reason of these miser-
able sufferers can be so addressed as to direct their attention, and their hopes for relief, away from drugs and drug-doctors, away from charlatans and quack nostrums, and to the unerring laws of nature. It is quite immaterial, whether these "cure-
dies" are recommended by educated physicians or illiterate empirics: the effect is the same. They never cure the disease. They always injure the constitution. Nature is the only true

Part Second.

SPERMATORRHŒA.

By the term *spermatorrhœa* is understood a preternatural, morbid discharge of the seminal secretion, whether occurring periodically, in the form of "nocturnal emissions," or constantly, at the time of the urinary and fecal evacuations. Young men are generally the subjects of this disease, though married men are not unfrequently troubled with it. As a consequence of this drain upon the vital powers, a long train of dyspeptic, cachectic, and nervous affections make their appearance, usually and emphatically expressed by the phrase, "*nervous debility*."

It would surprise those who are not posted in the medical literature and practice of the day, both in their "regular" and irregular phases, to see the flood of small books published and circulated under the titles of "Human Frailty," "Nervous Debility," "Spermatorrhœa," &c., all intended to advertise certain "infallible" specifics which are deluging the land, and robbing this class of invalids of millions of hard-earned dollars. But so it is, and will be, until the reason of these miserable sufferers can be so addressed as to direct their attention, and their hopes for relief, *away* from drugs and drug-doctors, away from charlatans and quack nostrums, and *to* the unerring laws of nature. It is quite immaterial, whether these "remedies" are recommended by educated physicians or illiterate empirics: the effect is the same. They never cure the disease. They always injure the constitution. Nature is the only true

physician. The remedial power is ever in the inherent vital properties, and never in anything outside of and foreign to the organic domain. Though these persons have grievously sinned, though they may have brought these terrible evils on themselves by disobedience to the laws of nature, Nature is still their friend. She is always working for their restoration. All she requires is favorable conditions. All she enjoins is obedience to her laws. The disease, in itself, is a struggle to defend the living system against abnormal influences, and to repair the damages they have occasioned. "Cease to do evil, and learn to do well," is here, as everywhere, her inexorable requirement to peace, health, and strength in her vital machinery; and this requirement contemplates nothing but the best and permanent good of the transgressor and sufferer — the sufferer *because* he is a transgressor.

All the poisons on earth never did, and never can, cure a case of spermatorrhœa. And if I could succeed in fully impressing the minds of these patients with the conviction that they can never, under any circumstances, experience any permanent benefit from this source, so that they would henceforth and forever abandon drugging of every kind, I should do them more good than all the drugs of the apothecary shop can do them. The idea that poison can change debility into strength; that a stimulant drug can augment the vitality of a living structure; that a noxious agent can impart vigor to an enfeebled organism; is a proposition so thoroughly absurd, and so ridiculously preposterous, that no one who exercises his untrammelled common sense can entertain it for a moment. And yet it is on this very doctrine, or dogma, that all the drug treatment of the medical profession is and ever has been predicated, so far as the malady under consideration is concerned.

CAUSES OF SPERMATORRHŒA. — In a majority of cases this disease and all of its painful evils are the consequences of masturbation, or of some form of sexual abuse. And this habit, which is so rapidly exhausting the unreplenishable

fund of life, in the risen as well as in the rising generation, is certainly increasing in our country, and among the youth of both sexes. A large practice and an extensive correspondence with this class of invalids for many years have convinced me that the worst that has ever been apprehended or published on this subject is but too true. And to my own observations I might add those of many well-known physiologists and distinguished teachers. The following extracts, however, from a few who have called public attention to this alarming evil, will be sufficient for my purpose.

Says Dr. Howe, in a Report on Idiocy, presented to the Legislature of Massachusetts, in February, 1848: "A knowledge of the extent to which the habit of self-pollution prevails would astonish and shock many." . . . "The above remarks apply to *all* of our public schools, for I have become too well acquainted with the alarming extent to which it prevails, often in the most open manner. The extent of it is amazing, for it exists both among the teachers and the students."

Dr. Howe remarks again: "There are cases recorded, where servant women, who had charge of little girls, deliberately taught them the habits of self-abuse, in order that they might exhaust themselves, and go to sleep quietly. This has happened in private houses, as well as in the almshouses, and such little girls have become idiotic."

William C. Woodbridge, in his "Annals of Education," says: "A topic in physiology which 'artificial modesty' has covered up, until a solitary but fated vice is spreading desolation through our schools and families, unnoticed and unknown. The experience of teachers, the case-books of physicians, and the painful experiences which accident, or the dreadful diseases which follow in its train, have occasionally produced, have at length forced it upon public attention; and we hope it will not be again forgotten. We would warn parents and teachers, that those who have been most confident of the safety of their charge have often been most deceived; and that the youthful bashfulness which seems to shrink from the bare mention of the subject is sometimes the blush of shame for concealed

crime. We feel bound to add, what abundant and decisive evidence has shown, that ignorance on this subject is no protection from the vice; nay, that it is often the original cause or encouragement of it; that it gives tenfold power to the evil example and influence which are so rarely escaped."

George Combe, in his "Constitution of Man," presents the subject from the phrenological stand-point: "The organ of Amativeness is the largest of the whole mental organs; and being endowed with natural activity, it fills the mind spontaneously with cautions and suggestions, the outward manifestations of which may be directed, controlled, and resisted by intellect and moral sentiment, but which cannot be prevented from arising, or eradicated after they exist. The whole question, therefore, resolves itself into this: whether it is more beneficial to enlighten the understanding so as to dispose and enable it to control and direct that feeling, or (under the influence of an error in philosophy, and false delicacy founded on it) to permit it to riot in all the fierceness of blind, animal instinct, withdrawn from the eye of reason, but not thereby deprived of its vehemence and importunity. The former course appears to me to be the only one consistent with reason and morality; and I shall adopt it, in reliance on the good sense of my readers, that they may at once discriminate between practical instruction concerning this feeling addressed to the intellect, and lascivious representations in obscene medical compilations (quack-books) addressed to the propensity itself; with the latter of which the enemies of all improvement may confound my observations. Every function of the mind and body is instituted by the Creator; each has a legitimate sphere of activity: but all may be abused, and it is impossible regularly to avoid the abuse of them, except by being instructed in their nature, objects, and relations. This instruction ought to be addressed exclusively to the intellect; and when it is so, it is science of the most beneficial description."

Among the indirect or predisposing causes of precocious sexuality and self-abuse, few writers give sufficient prominence to the dietetic habits of children and youth. Stimulating

beverages, irritating condiments, gross food, and especially everything which induces constipation of the bowels, are among the most common and most efficient causes. The free use of animal food is very objectionable, while pork, ham, sausages, lard, and salted meats of all kinds are especially execrable. Nor should another cause be overlooked, by those who duly regard the prophylaxis or preventive treatment — *pestilent literature*. The *sensation* fictions of the “great story papers” of the day are doing immense mischief, in developing in the minds of the young and impressible a morbid sentimentality, a prurient curiosity, and a debauched, misdirected sensibility. In its demoralizing effects on society, this evil may be placed in the category of liquor and tobacco.

Says O. S. Fowler on this subject: “The fashionable reading of the day is still more objectionable. As to its amount, let publishers, and the editors of family newspapers, testify. Whose sales are the greatest? Whose patronage is the most extensive? Those who publish the most novels, and the best (worst) love-tales. Let those weeklies which boast of their thirty thousand * subscribers, and claim “the largest circulation in the world,” have a red line drawn across any column containing a story the substance and seasoning of which is love, and more than half their entire contents will be crimsoned with this sign of Amativeness! Country newspapers, also, must have a part or the whole of some love-tale every week, or else run down. These stories, girls are allowed and encouraged to read. How often have I seen girls, not twelve years of age, as hungry for a story or novel as they should be for their dinners! A sickly sentimentalism is thus formed, and their minds are sullied with impure desires. Every fashionable young lady must of course read every new novel, though nearly all of them contain exceptionable allusions,

* Since Fowler wrote the above, “story-papers” have rapidly increased among us. Now they boast of 50,000, 100,000, and 150,000 subscribers; and the leading story-paper of the day (best or worst) claims a circulation of more than 300,000!

perhaps delicately covered over with a thin gauze of fashionable refinement; but, on that very account, the more objectionable."

SYMPTOMS OF SPERMATORRHŒA. — The local symptoms have been explained in the definition of the term. An habitual loss or discharge of the seminal fluid, in any unnatural or abnormal manner, constitutes the disease. But there are numerous constitutional indications of the local debility, many of which are ranked as distinct diseases, and too often treated without regard to the primary malady and essential cause. They are as various as are the habits, temperaments, and idiosyncrasies of the individuals who are the subjects of them: nevertheless, there are certain symptoms common to all cases, amounting to a diagnosis, which the experienced observer can hardly mistake. They are well described by many authors, and may be summed up in the following fearful catalogue:— Weakness; emaciation; listlessness and languor; mental indolence, or stupidity; loss of memory; dimness of vision; vertigo; a wandering or dreamy state of the mental powers, with inability to concentrate the mind on any particular object or pursuit; aversion to society, especially that of females: melancholy; indifference to ordinary sports and social pleasures; palpitations of the heart; shortness of breath; coldness of the extremities; flushed face; cadaverous appearance of the skin, often accompanied with a peculiar and very disagreeable odor; irritation, uneasiness, or a creeping sensation in the spinal marrow; gnawing at the stomach; voracious appetite; puffy or œdematous eyelids; soft and flabby flesh; oppression or flatulence after eating; vacant expression of the countenance, &c.

Some of the above symptoms may be absent in a given case, but the majority are usually noticeable. In some cases the patient will be timid and confused; easily agitated; hypochondriac; discouraged about trifles; annoyed with constant apprehensions of indefinable calamities; especially weak in the loins, back, and legs; bent forward, or otherwise incurvated in the spine; absent-minded; querulous, &c.

Impotence, loss of sexual power or passion, or the opposite extreme, constant and insatiable desire, convulsive and epileptic affections, paralysis, confirmed dyspepsia, marasmus, consumption, mania, and idiocy, are among the final and fatal consequences.

TREATMENT OF SPERMATORRHŒA. — No class of invalids requires a nicer discrimination in applying the resources of our system to the circumstances of each individual case. These patients present all degrees of debility, from the person able to keep about and even do a fair day's work, to the frail and trembling creature who can scarcely walk across the room. I have had patients so reduced as to be unable to sit up more than a few minutes at a time. They differ, too, greatly in mental conditions, and in resolution or will-power; all of which circumstances must be taken into account in prescribing the remedial course.

A *general plan* of management, applicable to the majority of cases, is substantially the following: —

1. A towel wash or dripping-sheet in the morning on rising, followed by thorough friction with dry towels, or rubbing over the dry sheet. In cold weather the room should be comfortably warmed before bathing; and the temperature of the water should always be *cool*, but never *very cold*; that is to say, it should be as cold as the patient can comfortably react under, without prolonged or very disagreeable chilliness. I have known great errors committed, even by hydropathic physicians, in using water of too low a temperature, in feeble, anemic patients.

2. A hip or sitz bath twice a day — at 10 to 11 A. M., and again at 4 to 5 P. M. The same rule should be observed in regulating the temperature, as mentioned above. In the majority of cases, 75° to 85° will be suitable. The time may vary from ten to twenty minutes. In a majority of cases I find ten minutes better than a longer period. I have known patients kept in the sitz-bath tubs, at a temperature of 50° and 45°, for an hour or more. Such "heroic" treatment can have no

other effect than to still further exhaust the enfeebled system. These heroic practitioners ought to understand that the indication is not to *reduce inflammation*, but to *soothe irritation*.

3. When there are decided dyspeptic symptoms, without very great weakness or coldness of the surface, the wet girdle should be worn during the night in cold weather, and during the day in warm weather.

4. When the feet are inclined to be disproportionately cold, or the head hot, or the patient restless and fidgety after going to bed, the hot and cold foot-bath should be resorted to at bed time. It is also advantageous in these cases to take one or two tepid foot-baths during the day.

5. Patients of a plethoric habit, without deficiency of external temperature, should take the wet-sheet pack occasionally — once in two or three days — for an hour, followed by the half-bath, dripping sheet, or towel wash. In my establishment, I generally give the pack daily, so long as the temperature of the system is fully maintained; but I would recommend all persons under home-treatment to be careful, and *underdo* rather than *overdo* the bathing. Very active treatment is liable to induce *crises*; and, although they are very easily managed, they are very apt to frighten patients from their propriety, when they have no one to counsel and direct them. For this reason, patients under self-treatment are safer to pursue a more moderate course.

6. Drink a tumbler of water each morning *after* the ablution; at all other times drink only according to thirst. Do not drink at meals. Do not drink in the after part of the day or evening, unless actual thirst demands, and then just so little as will satisfy that demand.

7. Eschew all seasonings, condiments, stimulants, and grease from the dietary. Nearly all of the food should be solid, so as to secure thorough mastication. Unleavened bread of unbolted meal is the only kind fit to be used. This, with good fruit, should be the whole breakfast. At dinner, vegetables may be taken also. Supper should be exceedingly abstemious, or omitted altogether. For many years I have been in the

habit of observing the relative advantages of two or three meals a day. My experience is altogether in favor of two meals, at 8 A. M., and 2 or 3 P. M. The only exceptions I find are in the cases of a few patients who have a morbid craving which they cannot or do not control at table. And even these always do better to have their meals apportioned to them twice a day, and not allowed to go to the table. The morbid craving can easily be *starved out*, but it can never be subdued by *over-feeding*.

I regard flesh as objectionable. I advise also against the use of milk, and all of its products or preparations. I have had many patients who could not use milk at all without provoking increased urination, and thus indirectly exciting seminal emissions.

8. Exercise should be frequent and regular, but never violent or exhausting. Nothing is worse than idleness, or sedentary habits; yet overheating the blood and greatly fatiguing the muscles are very detrimental. Exercise should be as varied and agreeable as possible, whether of work or play. The same remarks apply to mental exercise or occupation. Indeed mental hygiene is often the most difficult part of the remedial plan to manage. The patient is often so distracted, despondent, melancholy and irresolute, that he is inclined to do nothing except meditate on his miseries.

9. Sleep is an important consideration. This can hardly be overdone. Patients should not, however, lie abed mornings to doze and dream. Early rising is always advisable; but the time should be regulated by the termination of sound, quiet sleep. And in order to secure quiet repose in the fore-part of the night, the patients should retire early, and avoid all exciting and disquieting occupation and amusement, either of body or mind, which tends to wakefulness. On this account, suppers are especially objectionable. Sleep is always more sound and refreshing on an empty stomach.

Hard beds are indispensable. Nor should any more bed clothing be allowed than is absolutely necessary for comfort. Warm and soft feather beds are among the exciting causes of

self-abuse, and should be carefully avoided by all who desire to invigorate their constitutions. Hair, corn-husks, straw, &c., are the proper materials for hygienic beds or mattresses. Nothing can be better than a bed well filled with fresh oat-straw.

10. Passional and social influences are not to be disregarded. One of the worst of the adverse influences with which the patient has to contend is the opposition of ignorant friends and mistaken physicians. They cannot appreciate his condition, nor understand the ordeal through which he must pass to arrest the drain upon his vital stamina; and while he needs the sympathy, encouragement, and co-operation of all around him, he frequently meets with nothing but opposition and ridicule.

COMPLICATIONS AND SEQUENCES. — A very frequent result of the debility caused by spermatorrhœa is *prolapse of the testicles*. This is usually unequal on the two sides. In some cases, one testicle will fall down several inches below the normal position, and sometimes both descend. The frequent application of very cold water — several times a day — with gentle friction, and a suspensory bandage, if the sense of weight, or dragging down, is disagreeable, constitute the special treatment.

Varicocele. — An enlargement of the veins of the scrotum and spermatic cord is occasionally the result of sexual abuse. This disorder was termed *spermatocele* by the ancients, who supposed the swelling to be caused by an accumulation of sperm, or seminal fluid, in the part. It has also been called *cirsocele*.

The affection appears in the form of a soft, doughy, unequal, knotty, compressible, and indolent tumor, increasing from below, upward, in the course of the spermatic cord. It requires the same special treatment as prolapsus. Very bad cases require a surgical operation to obliterate the varicose vessels. The best of the many operations which have been resorted to is that of subcutaneous ligation. It is not dangerous when

performed by a competent surgeon, with due regard to hygienic conditions. Sir Astley Cooper cured some cases by removing a portion of the scrotum, rendering the remainder a natural and effectual bandage.

Sarcocoele — a hard, heavy, oval or spherical swelling of the testicles — is sometimes the consequence of onanism, though most frequently resulting from other causes. It is usually preceded by an inflammation of the organ. Sometimes it assumes a scirrhus or cancerous form. If the measures applicable to prolapsus and varicocele do not arrest it, the only chance for the patient is extirpation of the testicle.

SPINAL CURVATURES. — This affects both sexes — the female more frequently than the male — and is a very common sequence of sexual debility. In these cases, the patient must especially avoid all crooked bodily positions, and employ all possible means of strengthening the whole muscular system. A moderate use of the dumb-bells, and gentle lifting exercises, are among the special appliances to be recommended. In very bad cases, "the Movement Cure," or passive manipulations by a competent operator, are advisable.

SATYRIASIS. — This term is applied to a morbid sexual appetency, usually defined as an irresistible desire in man to have frequent sexual connection with females. It is attended with almost constant erection, and frequent nocturnal pollutions. A gross inflammatory state of the blood is among the predisposing causes, while irritating condiments and certain acrid drugs are among the most common exciting causes. Constipating food readily excites the paroxysms, where the predisposition is strong; and the same may be said of all kinds of highly seasoned flesh-food. There are certain drug-medicines which are supposed to have a specific influence in exciting the venereal desire, as cantharides, phosphorus, camphor, &c.; and on this account they are termed *aphrodisiac*, and constitute, in the *materia medica* of the medical schools, a class of remedies for restoring the sexual appetite and power where they

are deficient. So far as these agents are aphrodisiac, it is only because they occasion an inflammatory state of all the pelvic viscera, including the genital organs, with a degree of congestion that may provoke erections, and corresponding, and perhaps, in some cases, uncontrollable sexual desire. But because they may do this, it by no means follows that they are proper remedies for the opposite condition. To excite venereal appetite by poisoning the system, so as to induce an inflammatory state of the sexual organs, is like whipping an exhausted horse to make him draw a heavier load. It may cause the poor animal to make a preternatural effort, but it is attended with preternatural expenditure of power, and so increases the exhaustion in the end. Rest, and not excitement, is the remedy for fatigue or exhaustion.

Most of the nervines, as tea and coffee, and the stimulant narcotics, as opium, alcohol, and tobacco, provoke precocious and preternatural sexual appetite at first, and for this very reason they preternaturally exhaust sexual power.

The remedial plan for this affection is, in all cases, frequent *tepid* sitz-baths, a tepid sponge-bath to the whole surface once a day at least; free water-drinking, and a mild, unstimulating, unconstipating, unseasoned, and abstemious diet, of which fruit should constitute the leading article. At first the bowels should be freed with copious enemas of water.

DRUG-TREATMENT AND CAUTERIZATION. — I should do injustice to the afflicted for whose especial benefit this book is intended, were I to omit some further allusion to the drugs, nostrums, and mal-medication, which are so disgustingly paraded in the newspapers, and fraudulently put forward in quack advertisements all over the country, for the cure of spermatorrhœa, and its consequences. And first, of *cauterization*.

The practice of cauterizing the orifices of the seminal ducts originated with M. Lallemand, a French surgeon, who candidly admitted that it was only applicable to *some cases*; yet we find charlatans and ignoramuses, who, on the strength of Lalle-

mand's professional position, are pretending to treat *all cases* successfully by cauterization. And some of the pretenders, I regret to say, call themselves Water-Cure physicians. The cauterization is essentially absurd, to begin with; always a failure as it progresses, and more or less pernicious in the end. Lallemand conceived the idea that the seminal emissions were due to inflammation of the seminal ducts. If this were so, it would not justify the practice. But the essential condition of the seminal vessels, as well as of the whole genital apparatus, is that of irritation, relaxation, and debility. The parts affected need rest more than burning.

Again, to apply caustic to the seminal vessels, requires a perfectly accurate knowledge of the minute anatomy of the parts, and the most careful manipulations of the instrument; and even then, much depends on luck or accident, whether the orifices of the seminal vessels are cauterized, or the parts adjacent. Nor does it matter much whether the caustic be applied to them, or to any portion of the mucous surface of the bladder, so far as the cure is concerned. I have seen some scores of young men who had been subjected to this cauterizing treatment, and not one of them was benefited even temporarily; while some of them were obviously and seriously injured.

Among the evils which are liable to result, and have resulted, from the attempt to apply nitrate of silver to the orifices of the seminal ducts, are *incontinence of urine* and *stricture of the urethra*. Several eminent surgeons have noticed and recorded these consequences of this cauterizing practice, among whom are the celebrated Bohn and others.

Another phase of medico-chirurgical absurdity is a "*medicated bougie*." This is recommended in connection with a preparation of hellebore and iodine, constituting a truly "medico-mechanical" — humbug.

As a specimen of the advertising style of writing medical books *ad captandum*, I quote a single sentence from the author and inventor of the *bougie* and *hellebore* nostrums: —

"Accident, rather than design, first caused me to employ this remarkable remedy [*veratrum viride*, or poke root] as an

anti-venereal, anti-scorbutic, and *nervo-seminal* alterative and *arterial regenerator*."

It would be astonishing if any reasoning mortal could be misled by such meaningless twaddle; but the truth is, the people who patronize such nostrums do not reason at all on the subject; and the language of the nostrum-dealers is intended to be so cunning an arrangement of pseudo-technicalities, that the reader will be so mystified that he will not attempt to exercise any reason whatever.

Among the various mechanical contrivances is one called the "Perineum Compress." Although its professed object is to restrain seminal emissions, its actual effect is to cause the seminal secretion to be passed into the bladder, and expelled with the urine. It can, therefore, only aggravate the evil it pretends to remedy.

I have not space to enumerate all the "specifics," "lithon-
triptics," "Nervine Tonics," "Manhood Restorers," "Invig-
orating Cordials," "Triesemars," &c., which are, by a shrewd
method of advertising, palmed off on these half-distracted in-
valids. To those who have faith in Nature, and not in drugs,
they need only to be mentioned to be despised. And to those
who have more faith in drugs than in Nature, all that I could
say would not benefit them, until they are taught to think for
themselves.

Part Third.

FEMALE DISEASES.

THE class of diseases we are now to consider concern especially the uterine system and the menstrual function. They are confessedly the *opprobrium medicorum* of the Profession, although not less than three-quarters of the business of modern physicians is in prescribing for them. Their general prevalence may be inferred from the facts that new medical books are continually being published on the subject; that the medical journals of the day are constantly teeming with original essays, remarkable cases, and new methods of treatment; and that specialists all over the country are doing a large business in this exclusive line of practice. One author—Dr. Bennett, of London—has written a large work on a single topic of this extensive range of subjects; namely, “Chronic Inflammation of the Neck of the Uterus.” And surely if one phase and locality of uterine disease can afford material for a volume of several hundred pages, there are data enough in the one or two hundred maladies which nosologists have recognized as belonging to this group, to make a very respectable library.

Of the diseases before us, it may be said with especial and peculiar emphasis, that they have increased in number and fatality as doctors have become more common and drugs more numerous. Thousands of adult women can trace their feeble health and shattered constitutions to the drug-remedies which were prescribed for some trivial indisposition at the commencement of menstruation—an indisposition which nature would

soon have relieved, had the patient been left to the unaided resources of her own organic instincts and common sense.

I do not, of course, impute all the ill health of women to physicians and their physic. There are many other causes. But I believe that drug-medication is the chief cause. I do not believe that all other causes combined are so disastrous in their effects on the general health and constitutional stamina of the American women of this day, as are the effects of the drug-poisons which modern medical science — if science it can be called — administers as curative agents.

The frailty of American women is everywhere a prominent theme of medical journals, and a common topic of discussion in the newspapers of the day. The testimony of Catharine E. Beecher, who, in careful inquiries among an extensive circle of female acquaintances, could not find more than one healthy woman in twenty, could be corroborated by many others whose attention has been called to the subject.

So far as the unphysiological habits of society and the falsities of fashion are concerned, females are more unfortunate than males. Their more in-door and sedentary occupations render them greater sufferers from constipating food, hot and stimulating beverages, and the ruinous and ridiculous fashions of dress.

And here I may, pertinently perhaps, repeat what I have said in another work, entitled "Uterine Diseases and Displacements." "I have no hope that the increasing prevalence of female diseases, with their inevitable consequences, feeble offspring, and degeneracy of the race, will be stayed, until we can thoroughly indoctrinate the public mind, fathers and mothers especially, into the great principles of a physiological education."

MISMENSTRUATION.

Under this head are properly included all forms of painful, defective, or excessive discharges of blood at the menstrual periods. Much confusion exists in medical books on account of

confounding the sanguineous discharge, which accompanies menstruation, with menstruation itself. This error, too, has led to a false pathology and a most injurious practice. Many authors of standard works on obstetrics, as do many physiologists, regard the menstrual flux as a *secretion*;—in the language of Dr. Good, “a species of blood thrown off from the common mass.” Nothing can be more erroneous. The menstrual flux is a real hemorrhage of ordinary blood, and nothing else. Menstruation proper is a very different process. *It is evolution.* It is the passage of an ovum, egg, or germ, from its ovarian bed to the uterus; and, unless there impregnated and fixed upon the uterine parietes, its passage to the external world. This process is in most cases attended with the discharge of one, two, or three ounces of blood. But in some cases the hemorrhage is scarcely apparent, and in rare but well-authenticated instances there is not the least trace of any sanguineous discharge.

It is on this false notion that the menstrual fluid is a secretion, that the use of our emmenagogue medicines are predicated, as the preparations of iron, iodine, mercury, and many acrids and diuretics, as capsicum, myrrh, savin, tansy, &c. These agents are said to promote the menstrual secretion. The truth is, they only increase hemorrhage by destroying the constitution of the blood-corpuscles, and inducing an inflammatory condition of the uterine vessels. Hence they are never restorative, and are always a cause of greater debility.

RETAINED MENSTRUATION.—The term is applied to that form of menstrual disorder in which the blood is periodically effused into the uterine cavity,* but, in consequence of some abnormal impediment, is not expelled. In some cases where the monthly hemorrhage is considerable, and the obstruction complete, a very large quantity of blood is collected in the cavity of the uterus, producing very dangerous distention, or even rupture of the organ.

The principal symptoms are, a constant sense of weight or fulness in the pelvic region, increased at each menstrual

period; pain and sense of weakness and heaviness in the back and loins; aching sensations down the thighs, and general lassitude. Frequently palpitations of the heart, and rushes of blood to the head, are among the most prominent symptoms. When the body is full or plethoric, the pulse will be frequent, the face flushed, and the system inclined to feverishness. Swelling of the feet and ankles, especially at night, and an œdematous or dropsical condition of the eyelids, are occasional symptoms.

The causes are, an impervious state of the uterine canal, a closure of the mouth of the uterus, an imperforate hymen, vaginal adhesions, or an obliteration of the vaginal passage. The most frequent of these causes are imperforate hymen, and obstructions in the canal of the neck of the uterus from concreted mucus.

The treatment is mainly surgical. The imperforate hymen can readily be divided by separating the labia, or by a crucial incision. When the cervical canal is obstructed, a few applications of the probe will usually clear the passage. It should always be introduced very gently, and violence should never be employed to the extent of causing much pain. The process will be greatly facilitated by occasional injections of warm water, or better still, the warm vaginal douche.

Adhesions may generally be ruptured by separating the labia and vaginal walls; but when these measures fail, there is no resource but to divide them with the bistoury or trocar.

SUPPRESSED MENSTRUATION. — When the menstrual flux is interrupted after having once appeared, it is said to be *suppressed*. The term *obstructed menstruation* is applied to both this and the preceding disease, and both are often included, as are all forms of deficient menstruation, under the head of *amenorrhœa*.

Suppressed menstruation is caused by sudden colds, depressing passions, bodily injuries, mental shocks, acute diseases, and by inflammation or induration of the ovaries or uterus.

The causes of simple amenorrhœa, says Dr. Locock, "are

generally found in the previous habits of the patient; for it is most frequently met with in those who have led sedentary lives, who have indulged in luxurious and gross diet, and been accustomed to hot rooms, soft beds, and too much sleep."

Constipating food and sedentary habits may be placed at the head of the predisposing causes. The result of these things is directly to impair the respiratory function. Thousands of American females do not more than half breathe. Without full respiration, the blood cannot be properly oxygenated, nor the tissues duly replenished. And no part of the organism suffers more from imperfect respiration than the uterine system. And I might add, in this connection, that many a mother who is herself in apparently good health gives birth to a scrofulous and cachectic child, simply because she does not inhale oxygen enough to supply the demands of the embryonic being.

Menstruation usually occurs, in this climate, at fifteen years of age, though it may appear a year or two sooner or later. The non-appearance of the periodical hemorrhage should not, of itself, however, be regarded as evidence of any disorder requiring the interference of art. Immense mischief has been done by physicians in resorting to "forcing" medicines, when the girl did not, at the age of fifteen, sixteen, or seventeen, manifest the usual symptoms of the catamenial flow, in ignorance of the fact that females may menstruate without any hemorrhagic discharge at all. It is only when the general health suffers, that the absence of the sanguineous discharge is to be regarded as abnormal, and as requiring medication.

It has long been a prevailing opinion with medical men, and also with non-professional persons, that menstruation commences several years earlier in hot climates, and several years later in cold ones; for example, at eight or ten years of age in the East Indies, and at about twenty in Greenland. But recent investigations have shown very conclusively, that, although there is a difference in these respects, it is by no means so great as has been supposed. The truth seems to be, that, in very warm climates, sexual intercourse frequently, if not generally, takes place at a very early age, which provokes pre-

ternatural development of the sexual functions, with correspondingly feeble maturity and premature decay. Instances of maternity have been known at ten years old, with a cessation of menstruation, or "turn of life," at thirty.

The usual symptoms which accompany suppressed menstruation are, pain in the back and loins, occasional headaches, often very severe, a throbbing pain or sense of fulness in the head, irregular pains in the side, stomach, and bowels. Paroxysm of difficult breathing and hysteria are common, and the patient sometimes complains of intolerance of light and sound.

In the treatment of this form of mismenstruation, we should have recourse to whatever means will tend to promote the health generally, and the circulation of the uterine system particularly. And first of all in importance is active exercise in the open air, when the strength of the patient will admit of it, and frequent passive exercises, especially directed to the pelvic viscera, when the patient is too feeble for active exercises.

Walking, dancing, jumping the rope, horse-back riding, &c., are among the best of the active exercises; carriage-riding, rubbing and kneading the abdominal muscles, are examples of appropriate passive exercises. Many kinds of Calisthenic exercises, especially such as energize the respiratory function, as swinging the dumb-bells, pulling the ropes, &c., are very serviceable. All active exercises should be commenced very moderately, and increased in severity as the strength improves, always taking care to avoid any considerable disturbance of the circulation, or great fatigue.

The tepid sponge-bath should be taken each morning, provided the patient is not absolutely chilly; but if so, the dry rubbing-sheet should be substituted. The hip-bath, of a temperature suited to the circulation of the patient, should be taken once or twice daily; twice, when the external temperature of the patient is not deficient, and the baths are not followed by prolonged chilliness. The temperature should never be *very* cold; the feelings of the patient are the proper guide in all cases; from 85° to 70° Fahrenheit will be the ordinary range. I do not approve the prolonged hip-

baths—from half an hour to two hours—which have been recommended by certain heroic practitioners. Ten minutes is usually long enough. In some cases a five minutes' bath is better still; and cases are exceedingly rare in which fifteen or twenty minutes can be exceeded with advantage.

The wet-girdle should be worn during the night in cold weather, provided always that it does not produce any permanent chilliness, and, in warm weather, during the day.

If the patient be plethoric, the wet-sheet pack, once or twice a week, is advisable.

Electro-magnetism is frequently a valuable auxiliary. A moderate electrical current may be directed daily, for twenty to thirty minutes, through the uterus and ovaries.

During the abortive monthly efforts, when the patient is troubled with pains in the side or back, with headache, feverishness, or other symptoms of an ineffectual attempt to establish the menstrual action, warm fomentations to the abdomen, warm hip-baths, and warm vaginal injections should be employed with a frequency proportioned to the urgency of the symptoms.

In no class of diseases is a proper, and, indeed, a purely physiological dietary more indispensable than in those of malmenstruation. Everything which has the least tendency to induce abnormal excitement, or constipation, should be rigidly excluded. Good fruit, plain, coarse bread, and unseasoned vegetables, are the perfection of the dietetic plan. Fine flour, starchy preparations, as corn-starch, sago, tapioca, &c., should be avoided; as also should all greasy preparations. Milk and all of its products are objectionable, and particularly injurious where the tendency to constipation of the bowels is considerable.

If we turn from this simple, natural, and successful method of treating all forms of functional amenorrhœa—every kind of *obstructed* or suppressed menstruation which does not depend on structural derangement as its cause, to the drug-treatment recommended in the standard books of the popular medical system, the contrast is, to say the least, appalling. All

authors recognize debility and obstruction as the essential conditions to be altered or obviated. But how do our scientifically educated medical men propose to meet these indications? Bleeding, blistering, poisoning — destructive agencies all — constitute the essentials of their *methodus medendi*.

To sum up the ordinary drug-treatment in few words, the nerves must be quieted with opium, assafoetida, valerian, &c.; pain must be subdued with henbane, prussic acid, poison hemlock, aconite, gelseminum, chloroform, deadly night-shade, belladonna, &c.; feverish excitement must be reduced with lancets, leeches, digitalis, nitre, antimony, lobelia, &c.; irritation must be counteracted with blisters, caustic, issues, setons; weak places must be strengthened with plasters, bandages, braces, supporters, &c.; obstructions must be removed with calomel, iodine, hydriodate of potassium, &c.; constipation must be obviated with aloes, rhubarb, magnesia, salts, &c.; the blood must be fed with various preparations of iron and cod-liver oil; debility must be counteracted with alcohol, quinine, ammonia, beef-tea, blood-gravy, mineral waters, phosphorus, strychnine, and a host of aromatic stimulants and tonics; while the uterine system itself must be especially energized with all the “forcing medicines” known in the long list of emmenagogues, as ergot, actea, myrrh, tansy, cantharides, savin, cotton-seed, black hellebore, madder, senega, turpentine, copaiba, &c.

With such missiles to war upon disease, and upon human constitutions, let no reflecting mind wonder at the unsuccessful practice and the ruined constitutions which are everywhere, in the language of one of the most eminent authors and teachers of the Allopathic system — Dr. Ramage, of the Royal College, London — “a burning shame to the professors of the present system.”

Among the exceedingly foolish as well as pernicious prescriptions which we find recommended by eminent practitioners, and recorded in standard medical books, are the following: —

Dr. Loudon recommends the application of leeches to the breasts. Drs. Dewees and Paterson advise the application of

blisters to the breasts. Cupping glasses to the breasts are recommended by Sir James Murray. Siebold proposes warm fomentations to the breasts. M. Rostan prescribes the application of leeches to the mouth of the womb. Lest the reader may suppose that I have fabricated these facts for effect, I may as well inform him that they may all be found, with many similar ones, in a standard work, published by Blanchard & Lea, Philadelphia, and entitled "Diseases of Women, including Diseases of Pregnancy and Childhood," by Fleetwood Churchill, M. D., F. C. D. & E., M. R. I. A., Fellow of the King and Queen's College of Physicians in Ireland; Corresponding Member of the American National Institute; Hon. Member of the Philadelphia Medical Society; Author of a "Treatise on Midwifery," "Diseases of Infants," &c.

PAINFUL MENSTRUATION.—This is the *dysmenorrhœa* of authors. It is also denominated *laborious menstruation*, on account of the labor-like or *bearing-down* pains which accompany it. The term, *difficult menstruation*, is frequently applied to it. It consists essentially of a painful discharge of the menstrual fluid. The quantity of blood expelled may be much or little. In the majority of cases, however, the discharge is very trifling; in a less number of cases the discharge is very defective during the first part of the menstrual period, and excessive afterwards; and in some few cases it is copious and very debilitating.

The pain varies greatly in degree in different cases, and in the same patient at different times. It may be moderate, and last but a few hours, or excruciating for one or two days. The varying degree and character of the pain, and the diversity of the accompanying symptoms, have caused authors to distinguish the malady into three varieties, the *neuralgic*, the *congestive*, and the *inflammatory*. Some authors have distinguished another variety, which they term *mechanical*, dependent on some obstruction in the uterine canal. But this form is exceedingly rare.

The above distinctions are not very important, and merely indicate the prominence of some one or more symptoms. All

cases are attended with more or less congestion, with some degree of inflammation, and with pains more or less of a neuralgic character.

Dr. Tyler Smith, author of a work on Obstetrics, observes: "In dysmenorrhœa, or painful menstruation, the greater portion of the pain consists, I am convinced, of neuralgia; the deep lumbar pain is decidedly ovarian, and not uterine. Many women suffer so much lumbar pain at each menstrual period, that it resembles, and, indeed, almost amounts to a monthly attack of *ovaritis*. Almost all women suffer so much pain and disturbance from menstruating, that we may almost venture to say that menstruation, like parturition, lies in debatable ground between physiology and pathology."

This is a strange misconception of a very simple matter. The author does not distinguish between normal functions and abnormal conditions. It is most true, that a majority of women do suffer at each menstrual period. But this does not prove that menstruation is a pathological process. It only proves that the women are in pathological conditions. They are diseased: hence a physiological process, which is painless in health, is imperfectly and painfully performed. No woman in sound health suffers at all during the menstrual period. Dr. Tyler Smith might as well argue that, because we are a nation of dyspeptics, and suffer more or less pain before and after our meals, it is a disputable point whether digestion is a natural or a morbid process. Nor is there anything to debate in the matter of parturition. Child-bearing is a normal and a physiological process, and not painful, nor in any sense pathological, in healthy conditions. But women, like men, live in continual violation of the laws of life, and incur, as the inevitable consequences, multitudinous diseases and infirmities, rendering every functional process more or less morbid and painful. But it is very strange that medical men, who have been studying these subjects for three thousand years, cannot yet distinguish between nature and disorder; between a normal or an acquired condition; between health and disease.

Dysmenorrhœa is usually accompanied with an inflammatory

state of the mucous membrane of the uterus, which inflamed mucous membrane is very liable to secrete a semi-organizable lymph, forming on the mucous surface a *false membrane* analogous to that which takes place in *membranous* or *true croup*. The preternatural formation is commonly cast off in fragments, mixed with shreds or clots of blood; but sometimes it is expelled from the whole mucous membrane entire, in the form of a cyst or sac, attended with severe and often most excruciating bearing-down pains. Some authors, and among them Professor Simpson of Edinburgh, Scotland, have mistaken this concretion of coagulable lymph for the mucous membrane itself, and, mistaking dysmenorrhœa for normal menstruation, have supposed that the monthly casting-off of the mucous membrane of the uterus was an essential part of the menstrual process.

During the process of expelling the false membrane, the pains occur in paroxysms, with intervals of comparative ease, as in actual parturition.

Patients of a thin, pale, nervous temperament are more liable to pains of the neuralgic character; while the more sanguine and plethoric manifest more of the ordinary symptoms of local inflammation.

Nearly all forms of dysmenorrhœa are relieved and some are cured by the occurrence of pregnancy, although conception is extremely difficult, and in some cases impossible, when the false membrane is formed, for the reason that the uterine contractions necessary to expel the adventitious structure would also disorganize and expel the ovum, even if it had been impregnated.

The attacks of dysmenorrhœa last from one to four or five days. Many patients are unable to walk, or even stand, during the expulsive or bearing-down contractions of the uterus; while some are obliged to keep the bed for one or two days, unable to find relief except by warm fomentations, and an amount of bedclothing that keeps the whole body in a lax and perspirable condition.

Among the most efficient causes of this form of menstrual

disorder are, sudden colds at the menstrual period, or soon after delivery, and powerful mental emotions or shocks at or near the menstrual or parturient periods.

Dysmenorrhœa is sometimes mistaken for abortion, on account of the resemblance of the periodical expulsive efforts which occur in both cases. It may be distinguished readily by the fact that the menstruation has occurred each preceding month.

I have the statistics of some cases in which the patient has suffered from dysmenorrhœa every other month, the alternate periods being without abnormal disturbance of any kind. This fact seems very strikingly to corroborate the theory that the laws of sex, as explained in a work I have published, entitled the "Mysteries of Nature," is correct, and is connected with alternate menstruation between the right and left ovary.

In the treatment of dysmenorrhœa, little can be done during the attack except to alleviate the sufferings of the patient. The cure must be attempted by means of treatment during the intervals. Fomentations, vaginal injections of warm water, and warm or hot sitz-baths, as in *suppression*, are the leading measures. Should there be constipation, the bowels should be freed by enema of tepid water. The full warm-bath, for fifteen to twenty minutes, or, better still, the electro-chemical or hydro-electrical bath, when practicable, should be employed daily in severe cases.

The remedial plan, during the intervals, is the same, with some modifications, as that recommended for suppression. Vaginal injections and sitz-baths should be employed once, twice, or thrice daily. The temperature of the water must be carefully adapted to the predominance of the inflammatory or the anemic condition. Some patients are most benefited by cool and even cold applications, 75° to 60° — but for the majority a higher temperature, 75° to 90°, will be better. It is always a judicious plan to commence with a mild temperature, and gradually reduce it so long as a soothing effect is attained without permanent or disagreeable chilliness.

In patients of a sanguine temperament and plethoric habit,

the wet-sheet pack, daily or semi-weekly, should be employed, especial care being taken to have the system in a comfortable glow of temperature at the time, and securing reaction, if need be, by warm application to the feet and sides.

The wet girdle should be worn, in the manner and with the conditions mentioned in the case of suppression. And all the rules and regulations concerning diet and exercise mentioned as applicable to suppression, apply also to dysmenorrhœa.

Hard water, which is injurious in all cases of mismenstruation, is especially so in cases of dysmenorrhœa. And the same remark will apply to all kinds of impure, medicated, or mineral waters, which are sometimes recommended as remedies.

The principal drug remedies recommended by the standard authors, and prescribed by the most eminent physicians of the popular system, are opium, conium, camphor, morphia, hyoscyamus, Indian hemp, guaiacum, acetate of ammonia, ergot of rye, chalybeate waters, tincture of cantharides, preparations of zinc, veratria, borax, senega, blisters or caustic issues to the lower portion of the back, injection of carbonic acid gas, bleeding from the arm, cupping the loins, &c., &c.

To these abominations other authors add scarification of the cervix uteri. M. Trousseau recommends leeches to the interior surface of the knee! Mr. Whitehead has invented an instrument for the purpose of drawing blood from the uterus. Churchill recommends mercurial or saline purgatives, with various febrifuge or cooling medicines, and the application of strong tincture of iodine, once a week, to the cervix uteri.

But Churchill, in view of the treatment he recommends, makes one very judicious qualifying remark. He says: "The danger is lest these prompt measures should supersede menstruation, and our care must be, so to proportion the amount of depletion, and the evacuations, as to obtain relief from the distress without interfering with the function itself."

The admission sufficiently attests the uncertain and disastrous results of the practice. The remedies proposed "supersede" menstruation most effectually by destroying the power of the constitution to rectify itself. It is time that physicians under-

stood that such violence can never be done to living organism without very seriously interfering with the integrity of the menstrual function.

In rare cases dysmenorrhœa is connected with, if not caused by, a stricture of the uterine canal, usually the result of a chronic induration and thickening of the mucous membrane: this is the consequence of inflammation. In most cases the stricture will disappear on a restoration of the local or general health. Should it not, however, dilating bougies may be employed. An instrument has lately been devised to excise the strictured portion; but I regard this as a dangerous practice, and useless at least; the slower and safer method of the bougie is always the best. I have known horrid mischief to result from the rash and needless use of instruments, where a proper hygiene was all that was necessary. Last year a worthy and accomplished but sensitive and nervous woman, of Brooklyn, N. Y., in the agony of despair, committed suicide, because of the injury she had received by the improper and unwarranted introduction of a mechanical dilator, where no obstruction at all existed, and where the whole trouble was caused by extreme irritation. What possible motive induced the physician — who was a regular M. D. in good standing — to perpetrate so empirical an act, I could never ascertain.

In a late work on "The Diseases of the Sexual Organs of Women, by F. Von Scanzoni, Professor of Midwifery and the Diseases of Females in the University of Würzburg; Counsellor to His Majesty, the King of Bavaria; Chevalier of Many Orders, Translated from the French of Dr. H. Dorr and A. Socin, and Annotated, with the Approval of the Author, by Augustus K. Gardner, A. M., M. D., Professor of Clinical Midwifery and the Diseases of Women in the New York Medical College; Author of The Causes and Curative Treatment of Sterility; Editor of Tyler Smith's Lectures on Obstetrics," etc., the author, in treating of a form of dysmenorrhœa which he terms *hysteralgia*, concludes the subject in the following words: —

•• *Treatment.* — In the treatment of *hysteralgia*, we have almost

entirely exhausted all the series of medicaments recommended in the books of modern authors: narcotics in large doses, the derivatives in the intestinal canal, iron, mercurials, quinine, arsenic, and many other means, we have tried without the least result. Topical treatment has been no more useful: we have omitted neither deep scarifications of the ostinæ, so much recommended, nor the application of leeches, the dilatation of the cervical canal by means of sounds and prepared sponge, the introduction of narcotic agents or pieces of ice into the vagina, lavements of the tincture of opium, and the extract of belladonna, etc., etc., but all without success. Only once we procured some relief to a patient by the local application of the fumes of cloroform, but this good effect was not of long duration."

Could any commentary add to the force of this stinging condemnation of the ordinary practice?

EXCESSIVE MENSTRUATION. — This form of menstrual disorder is technically termed *menorrhagia*. It means, simply, inordinate loss of blood at the menstrual periods. But the term is also applied to uterine hemorrhages occurring between the regular or usual periods. And again it is applied when the hemorrhage occurs at unusual times, or during gestation or lactation. The term, "uterine hemorrhage," is, however, more generally and more properly applied to the "flowings" connected with pregnancy and parturition.

The quantity of blood lost during menstruation varies so much with different females, that we can only predicate the idea of disorder on the failure of the general health. When the quantity of the menstrual flux, or the frequency of its recurrence, is attended with manifest debility, it is always to be regarded as morbid. When the discharge is mixed with clots of blood, the case is clearly one of *menorrhagia*.

In some cases the bleeding is very copious for a short time; then ceasing for hours, to recur again, and so alternately through the usual menstrual period. In other cases there is a moderate discharge, but it is prolonged for ten, fifteen, or twenty days,

so that the patient is not free from the discharge of blood more than one-third or one-half of the time.

I have collected the statistics of several thousands of cases, which show the average period of the menstrual discharge to be three to four days. There is no question that the majority of females in civilized society menstruate excessively, or rather bleed excessively, during the menstrual period. It is perfectly certain that some females have excellent health, and perfect menstruation, without any hemorrhage whatever; while my observations, which have been extensive in relation to this subject, seem to prove that all hemorrhage beyond the third day is abnormal, and a source of debility. Many patients, under proper Hygienic treatment, will have the menstrual flux, so far as any hemorrhagic appearance is concerned, entirely suspended for months, not only without disadvantage, but with absolute benefit. I have known scores of such cases, and never knew any patient fail to be ultimately benefited, when there had been no maltreatment in the case.

The usual constitutional symptoms of hemorrhage are languor, lassitude, disinclination to exertion, weakness across the loins and hips, headache, throbbing of the temples, giddiness, ringing in the ears, and paleness of the countenance — precisely such evidences of general debility resulting from loss of blood as one should naturally anticipate.

When this form of malmenstruation has existed a long time, leucorrhœa is apt to supervene, adding to the constitutional exhaustion, and aggravating all the symptoms. The face then becomes sallow, a very distressing aching pain is experienced about the small of the back, often extending round the lower part of the abdomen; pain is also often felt in the left side, and the patient suffers of severe and repeated headaches, with derangement of the stomach and bowels. Diarrhœa and dropsical accumulations occasionally attend extreme cases.

Amongst the more prominent causes of excessive menstruation are frequent child-bearing, excessive coition and emmenagogue medicines. All the ordinary causes of uterine congestion and irritation predispose to it, as frequent colds, mental

shocks, constipation, &c. I am persuaded that the excessive and even the free use of common table salt, as a dietetic article or condiment, is among the most efficient causes of excessive hemorrhage during the menstrual periods. This must be so, for the simple reason that a highly salted alimentation tends to destroy the constitution of the blood corpuscles, and induce the hemorrhagic diathesis, as in the case of scurvy. I have been able to trace several cases of bleeding from the lungs and stomach, clearly to the excessive dietetic use of salt, and to cure them readily by prohibiting the use of the article entirely — a hint which may be serviceable to all invalids or others who are predisposed to hemorrhages of any kind.

In very severe cases of menorrhagia, conception is impossible; and in the milder cases abortion is very liable to follow conception, thus greatly aggravating the complaint, and inducing *prolapsus* or “falling of the womb,” and sometimes also prolapsus of the vagina. It is obvious, therefore, that conception should always be avoided during the existence of this disease, as it may render the case much more miserable and complicated, and even imperil life. Sexual intercourse ought to be totally abstained from until the cure is complete and permanent; but, unfortunately, many females do not have the control of this matter as they should, and are actually doomed to a wretched present existence, with no better prospect than a premature death.

The subject, then, of the prevention of pregnancy, often becomes a question of life or death. There are methods at the control of every woman, both safe and efficient; but, for many reasons which will occur to the considerate reader, it would not be proper to give publicity to them in a work of this kind. I can, therefore, only prescribe for such cases through private and professional correspondence.

It is sometimes important to distinguish between menorrhagia and polypi tumors, and other organic diseases which are attended with bloody discharges; and this can always be done at once by a speculum and digital examination.

In the treatment of excessive menstruation all predisposing

causes should be removed, so far as possible, and all exciting causes obviated. As the loss of blood is always a source of increased debility, it should be promptly restrained. The patient should keep very quiet, in the horizontal posture; cold wet clothes should be applied to the abdomen; and cold water, in small quantities, occasionally injected into the bowels. If the feet are inclined to be cold, they must be kept warm and comfortable with hot bottles or pediluvia, or warm flannels. The cool but not very cold hip-baths may be employed once or twice a day.

When these measures all, together, fail, as they may in extreme cases, mechanical appliances become necessary. "Plugging the vagina" — filling the vaginal canal with lint, linen cloth, or something similar — has been tried as a *dernier resort*; but authors entertain quite opposite opinions as to the propriety of this practice. Churchill terms it an unscientific application, because the discharge is a secretion and not a hemorrhage. The Doctor's premises are wrong: hence his practical conclusion may be erroneous. Menorrhagia is a hemorrhage, and *not* a secretion: therefore we have nothing to do with any secretion, but are simply to regard the hemorrhage in our remedial measures.

And this being so, "plugging" becomes an important measure. I have seen many cases wherein the patient's life was obviously indebted to this mechanical process. A piece of soft fine sponge, introduced into the os uterus, will generally answer every purpose. It occasions a coagulum which obstructs the orifices of the bleeding vessels at once. The bleeding part should also be exposed as much as possible to cool air, which is one of the best styptics in existence.

During the intervals, the measures generally recommended for obstructed and painful menstruation should be rigidly enforced, with the difference that the exercises, in the case of menorrhagia, should always be moderate, and mainly passive. Riding, sailing, swinging, &c., should take the place of running, jumping and dancing.

Turning now, for a moment, to the drug-treatment, as recom-

mended in the standard books, it seems to me to be a little more horrid than anything we have yet seen.

The disease, be it recollected, is essentially hemorrhagic, and hence the chief evils resulting from it are attributable to *loss of blood*. Can the reader believe that bleeding — a loss of more blood — would ever be thought of as a remedy? Yet such is the fact. The majority of the standard authors recommend bleeding, general or local, in many of these cases. Is it common sense, that the abstraction of more blood will remedy the effects of blood already lost? Yet such is the philosophy of modern medical "science!" It is medical science with a vengeance.

Says Churchill, in his work on "Diseases of Women," already referred to: "It may be necessary, in persons of a full habit of body, and where the attack is recent, to take blood from the arm, cup the loins, or apply leeches to the anus."

The difficulty is not too much blood, but unequal distribution. The congested vessels of the uterine system should be unloaded, not by taking the blood out of *other vessels*, but by promoting its circulation to other parts of the body, where it is deficient; for, let it be understood, that when one or more parts or organs of the system has too much blood, other parts or organs have correspondingly too little. There never is, and never can be, too much *pure blood* in the body. It is quite a mistake to suppose that persons of a full habit — plethoric persons — have too much blood. They do not have enough. True, their capillary vessels are distended, congested, overloaded; not with blood, however, but with effete or excrementitious matters — with impurities *in*, but not *of*, the blood. These impurities should be separated *from* the blood, not drawn out *with* it. The indication is, therefore, not to take out the blood, but to *purify it*. And this is precisely what the hygienic does do, and what nothing else can do. The action of all the depurating organs — the skin, liver, lungs, bowels, and kidneys — must be attended to, each organ made to perform its own appropriate duty — no

more, no less — in the general process of cleansing the blood, and, as a consequence, promoting free circulation everywhere, and correcting morbid secretions throughout the whole organic domain.

So much for bleeding. What have we next? Sugar of lead and opium! If these fail, then ergot of rye is to be exhibited. And to restore the general health during the intervals, Churchill recommends a blister applied to the sacrum; mineral tonics, as sulphate of iron (copperas), with aloes and myrrh; blue pill; wine; sulphuric acid; decoction of logwood; gallic acid; turpentine; etc.

So much for Churchill. Turning to other authors of celebrity, we find prescriptions equally pernicious, not to say ridiculous.

Thus Dr. Maguire recommends tincture of the resin of Indian hemp.

Dr. Osborne recommends ipecacuanha.

Dr. Dewees recommends vaginal injections of sugar of lead and laudanum, with the internal administration of elixir of vitriol.

Dr. Mackintosh proposes enema of powerful doses of sugar of lead — each to contain a scruple.

Dr. Kölle recommends the application of leeches to the breasts.

Dr. Ashwell proposes drastic purgatives.

Sir James Eyre prescribes the oxide of silver.

Dr. Ginestet recommends the juice of the nettle.

These examples of discrepancies in the drug-treatment could be extended indefinitely, but they will answer as illustrations of the whole system.

VICARIOUS MENSTRUATION. — This term is applied to a hemorrhage occurring at the usual monthly periods, from any part of the system other than the uterus. Of course the term is a misnomer, for menstruation proper cannot take place elsewhere. *Vicarious hemorrhage* is the correct pathological phrase. The hemorrhage may take place from the nose, eyes,

ears, gums, arms, bladder, nipples, the stumps of amputated limbs, ulcers, varicose tumors, and even from the joints or surface of the skin; but the pulmonary and intestinal mucous membranes are most frequently the seats of it. When occurring from the lungs or stomach, it presents the ordinary accompaniments of *hæmoptysis* and *hæmatemesis*. In some instances other discharges, as diarrhœa, salivation, diabetes, &c., supplant the menstrual hemorrhage.

Dr. Churchill, who regards the catamenial discharge as a secretion, mentions the following case, which, superficially examined, might seem to confirm that theory: — “ Mary Murphy, *Æt.* 21, had been in bad health, and subject to distressing headaches, previous to her admission into the Hospital. During her stay she missed a menstrual period, and was shortly afterwards attacked by hemorrhage from both ears, which was repeated at intervals of from three to five nights, each attack lasting some hours. Very often from fifteen to twenty ounces of blood were collected, which did not coagulate, neither did that taken from the arm.”

Those who entertain the theory that menstrual blood is a secretion, and, therefore, entirely different from the blood of the general mass, predicate that opinion, in part, on the assumption that menstrual blood does not coagulate like ordinary blood. But the above case proves nothing for the theory, because the blood taken from the system did not coagulate. And the fact that the blood taken from the arm, and that vicariously discharged from the ears, were alike in this respect, certainly militates in favor of the opposite opinion. The idea of a vicarious menstrual *secretion* is absurd, when we recollect what menstruation really is — the evolution of an ovum. How can this evolution take place from any organ except the ovaries?

Dr. Churchill remarks: “ In general, the vicarious discharge consists of blood solely; it comes on suddenly, and continues at intervals of some days, unless the quantity be very great, in which case the first hemorrhage may be the only one. This irregular evacuation may take place at one period only, or it

may occupy several successive monthly returns, preceded a day or two each time by the usual symptoms of menstruation."

The immediate cause of vicarious menstruation is, usually, the sudden arrest or suppression of an accustomed discharge. The locality of the hemorrhage is determined by the condition of the various organs. Wherever local plethora, with its consequent relaxation of vessels, exists, there will be the place most liable to the hemorrhagic attack.

Vicarious menstruation is to be distinguished from ordinary hemorrhages by the complication of amenorrhœa.

This disease is not usually dangerous. Restoring the normal menstruation, as in the case of obstructed menstruation, will, of course, put an end to the difficulty. To aid in the accomplishment of this object, and also to save the patient from the consequences of a serious loss of blood, all obstructions should be removed from the various emunctories as soon as possible. The bowels should be freed by means of copious enema of tepid water; and the whole surface, when plethoric and feverish, "packed" daily, or subjected to the tepid dripping sheet. Cold water, in small quantities at a time, should be the only drink, and all the hygienic circumstances of the patient carefully attended to. Among the special appliances applicable to this form of menstrual disorder may be mentioned the warm-and-cold vaginal injection, and the warm-and-cold spray and douche baths, moderately applied to the spine, loins, and hips. The electrical bath is also excellent.

Churchill recommends opium, mineral acids, sugar of lead, blisters, subnitrate of bismuth, cupping over the sacrum, and leeches to the vulva and anus.

IRREGULAR CESSATION OF MENSTRUATION. — The "turn of life," or "time of life," as the cessation of the menstrual function is usually termed, commonly occurs between the ages of forty-five and fifty. But certainly this is not to be regarded as morbid in itself. It is only when, in consequence of constitutional or local disease, that eventful period in the life of

woman is attended with frequent and exhausting hemorrhages, either uterine or vicarious, that the term *mismenstruation* can be properly applied. It is true that, on the cessation of the menstrual function, women who are not healthy are peculiarly liable to the supervention of a variety of maladies, among which medical books enumerate inflammations, vertigo, hysteric paroxysms, colics, hemorrhoids, rheumatism, cutaneous eruptions, ulcers of the legs, dyspepsia, cancers and other affections of the breasts, profuse sweats, adipose accumulations, leucorrhœa, polypous tumors, apoplexy, palsy, insanity, &c.

"It is not unnatural," says Dr. Churchill, "reasoning *à priori*, to expect a predisposition to disease upon the cessation of menstruation, which may be considered as the somewhat sudden stoppage of a constitutional drain, which, in other instances, is observed to have similar results. The imminence of the danger in such attacks may perhaps depend upon the abruptness of the menstrual obstruction."

I cannot understand that there is any "menstrual obstruction" in the case. I can conceive of no two ideas more distinct than the *cessation* and obstruction of a function. One is normal: the other is pathological. Nor is the predisposition to disease in any manner connected with the menstrual cessation, but it depends solely on the morbid conditions of the patient at the time. If she is in sound health, the cessation of the periodical ovulation will cause no more trouble nor suffering than does ordinarily the cessation of lactation or dentition.

Women who are plethoric, who live on constipating food, and who do not exercise sufficiently, are liable to become fatter at this time; and the abdomen and breasts frequently enlarge so much as to give rise to the suspicions of pregnancy.

Those who are liable to menstrual derangements, will be peculiarly liable, on the cessation of the menstrual function, to structural disorders, polypi, cancers, &c.

As the cessation of menstruation is not a disease, we can lay down no special indication of cure. The treatment must be adapted to whatever form of disease presents itself as the

accident or complication. Hemorrhage, which is the most frequent of the morbid accompaniments, is to be treated precisely as in a case of menorrhagia, which it really is: the patient should carefully avoid all extremes of heat, cold, mental or bodily disturbance, and keep the bowels and skin free by means of plain simple food, bathing, friction, &c. Nervous or organic affections are to be managed as when occurring at other times.

Churchill recommends an artificial drain, by means of a perpetual blister, issue, or seton. Dr. Corfe advises a medicamentum composed of hydro-chlorate of ammonia, extract of dandelion, compound decoction of aloes, compound gentian mixture, tartrate of soda and potassa, and compound tincture of lavender, — a combination of between twenty and thirty drug medicines.

Other authors prescribe leeches, with various sedatives, antispasmodics, and narcotics; while stimulants and tonics are among the favorite remedies of others.

CHLOROSIS. — This affection, in common parlance termed "green sickness," in reference to the pale, wan, bilious, and greenish appearance of the whole surface, is regarded by some authors as a consequence of amenorrhœa, and by others as the cause of it. It is neither. It is a general cachexy of the system, of which the reproductive organs partake in common with all other parts of the body. It has a great tendency to terminate in consumption. Indeed, this is the usual result of the fatal cases.

Medical books are prolific of crude speculations and absurd hypotheses respecting the nature and causes of this very simple ailment.

Churchill says: "By some it has been attributed to the anemial state of the body, arising from various causes, such as bad nutrition, disease, loss of blood, &c., and by others, to deficient uterine action." This is making the morbid condition to be the cause of itself!

M. Roche regards chlorosis as the result of menstrual de-

rangements; but he refutes his own theory in admitting that he has observed a similar disease in males.

Cabenis assigns as the cause of chlorosis, "the languor and inertia of the genital organs, and the deficient or irregular action of these organs upon those of nutrition and sanguification." This is mistaking *effect* for *cause*.

Dr. BlewdeU regards the disease as owing to a deficiency of the circulating fluid. This is mistaking a condition of the disease for the disease itself.

Dr. Ashwell, Lecturer on Midwifery in Gray's Hospital, in an elaborate paper on "Chlorosis and its Complications," puts forward the following philosophy, which is worth preserving in some Museum of Medical Curiosities:—

"The following are the principal positions which I shall attempt to illustrate. 1. That chlorosis, complicated with amenorrhœa, is the most common derangement of the menstrual function; and that between these affections, although there are many points of similarity, yet there are numerous marks of distinction. 2. That if 'chlorosis, complicated with amenorrhœa,' be of aggravated character or long duration, it will be productive of functional disturbance, at least of the nervous, vascular, respiratory, and digestive systems; and that if the disease terminate fatally, it will frequently, if not generally, be in phthisis. 3. That the treatment of chlorosis, to be extensively successful, must be early commenced, and most sedulously prosecuted."

It seems to me the pith of these three propositions, so learnedly and so circumlocutorily expressed, can be better stated in non-professional language, thus: 1. That females frequently have a disease which medical men term chlorosis. 2. That it is attended with derangement of the general health. 3. That if they do not recover, they will be liable to die.

Sir Henry Marsh says: "For my own part, after careful examination, I am inclined to consider the disease to result from the absence of uterine action, though how far that may be the consequence of a vitiated state of the blood, I cannot decide. The consequences of anemia, both in men and

women, by whatever cause induced, undoubtedly resemble the disease called chlorosis."

I cannot conceive how the *absence* of a thing can be the *cause* of anything. It is making an absolute negative a positive entity. The whole subject is relieved of all embarrassment when we understand that the essential causes are in the personal habits of the individuals affected. Whatever impairs the general health, also occasions vitiated blood, imperfect nutrition, and uterine inaction — all, together, constituting "the disease called chlorosis."

Among the more prominent causes are, sedentary habits, constipating food, emmenagogue medicines, particularly the preparations of iron, the early or very free employment of stimulating viands, as tea, coffee, flesh-meat, &c. When I place the preparations of iron among the special causes of bloodlessness and debility, I do not forget that they are regarded by medical men of all the drug medical schools as the indispensable remedies for anemic and chlorotic patients — even as the natural "blood-food." But the facts, admitted by all the standard authors on *Materia Medica* and *Therapeutics*, that all the preparations of iron, when freely employed for any length of time, invariably occasion a feverish and inflammatory state of the system, a diminution of the secretions, and a hemorrhagic condition of the blood-vessels, sufficiently attest their vitiating effect on the constitution of the blood-corpuscles, and their exhausting influence on the nervous energy. Iron is "blood-food" in the same sense that calomel, arsenic, or alcohol is, and that is in the sense of *blood-poison*.

Chlorosis prevails to a much greater extent in large manufacturing towns, and among servants who are closely confined to the house, than in the rural districts.

In a strongly-marked case of chlorosis, the surface of the body is pale and exsanguined, and the skin has a flabby and "doughy" feel; it is also of an abnormal and variable temperature, with more or less of a clammy or cold perspiration. With these symptoms are various derangements of the digestive, nervous, and circulating systems. The patient is liable to

frequent and severe headaches, with diminished sensibility and loss of memory. Chorea, epilepsy, and hysteria are occasionally met with. The bowels are irregular, usually constipated, often obstinately so, but sometimes there is diarrhœa. Nausea and vomiting, with a long train of dyspeptic aches and pains, are ever present. The breath is short, the heart palpitates on slight exertions, and active exercise produces a hurried breathing, amounting sometimes to a painful sense of suffocation; repeated hemorrhages are apt to occur, and œdema of the extremities, or general dropsy, not unfrequently results. But, as already remarked, consumption is most frequently the manner in which the case terminates fatally.

There is not, usually, much difficulty in the diagnosis of chlorosis. The only malady with which it is liable to be confounded is, the condition of the system resulting from loss of blood. But here the history of the complaint is sufficient to enable us to discriminate. The celebrated Marshall Hall has proposed, as a means of diagnosis, *the effects of loss of blood!* In chlorosis, the abstraction of a few ounces of blood will cause fainting; whereas, in inflammatory affections, three times as much may be drawn without producing faintness.

Of this method of diagnosis, Dr. Churchill well remarks: "There is one serious objection to this test, namely, that abstracting blood from the chlorotic or anemical patients is the most *hazardous experiment possible*." It seems to me that the physician who cannot distinguish between anemia and inflammation, without taking out a portion of the blood, must have very erroneous notions as to the nature of both diseases.

In the treatment of chlorosis, the simple and sole indication of cure is, to invigorate the patient. Air and exercise are the leading measures, and next in order come diet, bathing, passional influences, &c. The patient should exercise moderately at first, but regularly and perseveringly; partly, too, in the open air, all that the strength will admit, short of exhausting fatigue. A variety of gymnastic and calisthenic exercises, as recommended for the various forms of amenorrhœa, are useful here as in-door exercises. Respiratory exercises, by

means of blow-guns, spirometers, &c., are not to be neglected. And "movements," where the proper machinery and a competent manipulator can be had, are among the curative resources. The diet should be mostly solid, so as to secure ample mastication, and consist in a large proportion of good fruits. As constipation is usually one of the leading symptoms, the bread-food should be made wholly of unbolted flour or meal, and without yeast or risings, except atmospheric air.

Much judgment may be required, especially in extreme cases, in managing the bathing appliances. In most cases it is advisable to commence with tepid or warm water, gradually reducing the temperature as the circulation improves. Hot-and-cold baths are frequently to be preferred, especially when the skin is very torpid. The dripping sheet, pack, hip, and foot baths may be applied as warm as the patient can well bear, followed by the tepid wash, and this succeeded by active friction. The hydro-electrical bath is admirable in cases of extreme inactivity of the skin.

Turning to the standard books of the drug schools, we find that aloetic purgatives, and various preparations of iron, constitute the leading features of their *methodus medendi*. There is scarcely a salt or oxide of iron known, that is not the favorite of some physician or author; and some prefer the metallic iron itself, in a state of minute division. The fanciful notions of medical men on this subject may be inferred from the following: MM. Raciborski, Miqueland, and Quevenne, prefer the metallic iron, prepared by passing a stream of hydrogen over an oxide of iron enclosed in a tube, exposed to a red heat.

Sir H. Marsh prefers the "natural waters" at a chalybeate spring.

Churchill thinks the citrate of iron and ammonia are valuable in cases characterized by coldness of the extremities.

Bromley recommends a chalybeate in a state of effervescence.

M. Beneditti prefers the tannate of iron; M. Bland highly recommends the sulphate of iron.

Dr. Ashwell gives ammoniated iron; Marshall Hall combines the sulphate of iron with an equal quantity of aloes.

M. Lohn commends the iodide of iron; M. Ledade thinks that the hydrochlorate of iron, or the carbonate of iron, or the lactate of iron, is the best preparation.

But enough of iron. Other remedies named in the books as "deserving of a trial" are blisters, alteratives, mercurial inunctions, stimulating vaginal injections, &c.

INFLAMMATIONS AND ULCERATIONS.

LEUCORRHŒA. — This term is applied to a whitish or colorless discharge from the vagina: hence the term "*fluor-albus*," or "whites." The discharge may be a morbid secretion from the mucous membrane of the uterus or vagina, or both. Leucorrhœa is, to a greater or less extent, an accompaniment of nearly all forms of malmenstruation, and of almost every variety of uterine displacement; yet it often occurs independently of those affections. In chlorotic females, it sometimes occurs periodically, in place of the ordinary or sanguineous menstrual flux; and, in cases of suppressed menstruation, a leucorrhœal discharge often takes the place of the hemorrhagic. Menorrhagia is frequently accompanied with this discharge, which is augmented just before and after the menstrual flow, and is occasionally excessive between the periods. Unhealthy females will almost always suffer more or less of leucorrhœa about the time of the cessation of the menses. After abortion, also, the discharge is liable to trouble the patient for months, and to become a source of weakness, predisposing to future accidents of the same kind.

The morbid secretion is clearly the result of inflammatory action, though not usually attended with appreciable structural disorganization. The discharge varies greatly in consistence and sensible properties, from a thin white, odorless, cream-like fluid, to a thick yellowish, or greenish, and extremely fetid matter, dependent, of course, on the degree of local irritation, and the grossness or impurity of the system.

The discharge and local symptoms are usually more annoying than painful. There is more or less general languor, weak-

ness in the back and loins, and occasional headache; but in more aggravated cases, there is much local distress and constitutional excitement; the pulse is frequent, the skin feverish, with thirst, and deranged secretions generally. There is also, in the severer cases, a constant aching or pain in the back, a sensation of heat and weight in the pelvis, and frequently of bearing down. In these cases, too, the skin is flabby and moist, with a yellowish or greenish bilious tint, the eyes sunken and surrounded by dark circles, the bowels torpid, the appetite fastidious, and not unfrequently an eruption on the forehead and face resembling *rosacea* (rose rash).

An examination with the speculum shows a more open and flabby state of the os uteri than exists in health, with more or less discoloration of the mucous membrane. Not unfrequently, ulcers of the os uteri are co-existent. The discharge varies greatly in quantity, from very slight to exceedingly profuse, requiring the patient to employ several napkins daily.

The causes of leucorrhœa are almost as numerous and various as the causes of ill health. Cold, fatigue, improper or constipating food, enervating drinks, as tea and coffee, sedentary habits, ill-ventilated rooms, mental depression, repressed eruptions, sexual excesses, emmenagogue medicines, worms in the rectum, pessaries in the vagina, &c., are among the causes usually assigned in medical books.

It is sometimes difficult to distinguish leucorrhœa from gonorrhœa, as in extreme cases of the former disease there may be a considerable degree of smarting or burning sensation on urinating, as happens in gonorrhœa. But in gonorrhœa there is more of a burning sensation all along the vaginal passage, a scalding sensation on passing urine, with more or less urethral discharge. The circumstances, history, and character of the patient should also be taken into account, in making up a differential diagnosis.

Leucorrhœa may be symptomatic of displacement of the uterus, and can then only be cured by repositing the displaced organ.

In the treatment of leucorrhœa, we are to pursue the general

plan, as applicable to the various forms of menses, so far as the general health is concerned. Among the most important of the local appliances are, obviously, hip-baths, vaginal injections, and the wet girdle. The hip-baths may be employed two or three times daily, for five, ten, or fifteen minutes. The injections may be employed at the same time for one, two, or three minutes. The temperature of the water must be adapted to the temperature and sensibility of the patient; and the practitioner cannot be too careful in his discriminations in this respect; for such is the diversity of constitutional conditions and habits, that some patients will be most benefited by a temperature as low as 60° , while others require it to be but little below blood-heat. From 70° to 85° will be well adapted to the majority of cases. The rule, however, always to keep in view, is, to have the water as cool as may be, short of producing disagreeable chilliness.

The wet-girdle should be worn about half the time. A very good general rule is, during the night in the cold season, and during the day in warm weather, regard being had here, as in all cases, to the comfort of the patient. Those who are very sensitive to cold should only wear it two or three hours at a time, meanwhile taking especial care to keep in active exercise, or in a warm place, so as to avoid chilliness.

General bathing, as in all cases, must be regulated by the general circulation and temperature. When the patient is greatly debilitated and anemic, the dry rubbing sheet in the morning, and a tepid ablution in the course of the day, will be sufficient. When the system is plethoric, and inclined to feverishness, the wet-sheet pack is to be preferred; while in intermediate conditions, the tepid half-bath is the most advisable. When there is a tendency to cold extremities, or headache, the hot-and-cold foot-bath at bedtime should not be omitted.

In many cases of leucorrhœa, as also in many cases of all forms of female diseases, the dress is an important consideration. The "Bloomer," or "American Costume," is unexceptionable on physiological and therapeutical ground; but as popular sentiment does not seem quite ready for so radical a change in the fashion

of woman's apparel, we can only indicate the correct principle, and leave our fair patients to do the best they can under the circumstances. Above all, the clothing should be light and easy around the hips. A load of skirts, constricting and over-heating the body around the loins, is one of the common causes of genital weakness, leucorrhœal discharges, and even of prolapsus of the womb. Supporting the whole dress by shoulder straps is a great improvement on the ordinary method, and a variety of contrivances have been invented, patented, and sold for this purpose. Certainly the best we have yet seen are those manufactured and patented by Dr. H. F. Briggs, of New York. Dr. Briggs is Professor of Voice, Speech, and Gesture, in the New York Hygeio-Therapeutic College, and has long made the subject of dress an important element in the system of physiological training of which he is an admirable teacher.

As regards air, exercise, diet, ventilation, &c., the rules already laid down in this work, and frequently alluded to in treating of the various forms of menses, will be a sufficient guide to the careful reader; and to the careless student, a repetition of them would avail nothing.

The treatment of leucorrhœa, as we find it in the standard medical works, and practised by the majority of physicians, may all be resolved into a promiscuous jumble of astringents, antiphlogistics, narcotics, and caustics. Among the prominent remedies may be named, cupping the loins, leeching the vulva, blisters to the sacrum, balsam of copaiba, sulphate of iron, muriate of iron, blue pill, decoction of logwood, ergot of rye, solutions of nitrate of silver (Churchill testifies that this *has proved fatal!*), colchicum root, cortex simaroubæ, cubebs, crabs' eyes, tincture of cantharides, elder-tree root, conium, hyoscyamus, iodine, chalybeate waters, a combination of blue pill mass with rhubarb, a mixture of aloes and assafœtida, sugar of lead, and a multitude of other things, equally foolish, pernicious, and ridiculous.

VULVITIS.—This term is applied to inflammation of the *vulva*, or external organs of generation. The symptoms are

sufficiently obvious — heat, pain, redness and swelling of the *labia* and entrance of the vagina, extending perhaps to the *clitoris*, *nymphæ*, and *meatus urinarius*. In severe cases there is considerable constitutional febrile disturbance. The inflammation may be of the *erysipelatos* character, with an acrid erosive discharge, of the *phlegmonous* form, tending to suppuration. When the inflammation is more particularly confined to the mucous membrane, it is attended with a leucorrhœal discharge, and, when occurring in childhood, has received the name of *infantile leucorrhœa*. When the labia are inflamed, there is throbbing pain in the part, extending to the groin, and frequently swelling of the inguinal glands. All within aggravates the pain, as does sitting in the upright posture. In very gross persons extensive ulceration and even gangrene may result.

In the early stage of the disease, the uneasiness felt in the part induces the patient to attempt to relieve it by rubbing, which practice increases the inflammation and aggravates the suffering.

Mesdames Boivin and Dugés give the following description of the cases which occurred in the Hôpital des Enfants Malades (France), during a catarrhal epidemic, in which the affection of the mucous membranes sometimes presented the appearance of erythema, erysipelas, or apthæ, and sometimes of superficial ulceration.

“The instances which occurred were of two kinds, — the one attacked the weak, cachectic, and exhausted, and followed after incrustated pustules, or rather superficial gangrene of the skin: the other affected the robust and stout, accompanied with swelling, redness, pain, and fever, and beginning directly by an ulcerous point. Both presented a yellowish-gray aspect, the edges abrupt like those of chancres; they occupied, however, the exterior rather than the interior of the pudenda; they increased in the same way as phagedenic ulcers, or wounds affected with hospital gangrene, of which they presented all the characters; the fever increased with their surface, and emaciation and death frequently ensued in the first form. In the second, real gangrene sometimes took place, though most

frequently the inflammation subsided easily, and was entirely cured by cleanliness, emollient lotions, moderate diet, and change of air."

Mr. Kinder Wood, in his "History of a Very Fatal Affection of the Pudendum of Female Children," which prevailed in 1815, thus describes the cases : —

"The patients were from one to six years of age. Of twelve who were attacked, only two recovered. The inflammation of the labia was preceded by rigors, pain in the head, dulness, nausea, loss of appetite, thirst, &c. The distress of the patient on passing urine first attracted attention ; and on examination, the labia were found inflamed, swollen, and of a dark color. Very soon the parts within the vulva became affected, and, from this discharge, it appeared that the lower portion of the vagina was involved. The process of ulceration set in rapidly, twenty-four hours sufficing for the production of vesications within the labia ; and when these burst, the denuded surfaces coalesced, and formed large ulcers. The discharge then becomes offensive, copious, dark-colored, irritating the neighboring parts, and forcing the extension of the disease to the thighs, perineum, and anus. The pulse was quick and irritable after the commencement of the inflammation, but the face pallid. The bowels were constipated, and the stools brought away by medicine were dark, slimy, and offensive. In some cases, apthæ had spread extensively round the anus and over the perineum. The ulcerations in this affection varied in depth and appearance, some being deep and dark-colored, and others superficial and sprinkled with small red granulations. After the occurrence of ulceration, the external organs of generation were progressively destroyed, the peculiar pallor of the countenance increased, the pulse became quick and weak, the appetite failed, the bowels became loose, the skin of the thighs hung loose and flabby as in marasmus, the discharge from the parts increased, and became more and more offensive, till the patient was worn out and expired."

The duration of the disease, in the favorable cases, varies from two to four weeks. Among the consequences which

sometimes result are adhesion of the inflamed surfaces, impeding, at a future period, the menstrual flow, and, if not remedied by a forcible separation of the labia, presenting an obstacle to sexual intercourse or parturition.

In adults the inflammation is more circumscribed, less apt to destroy the structures by extensive ulcerations; but the pain is much more severe—in some cases absolutely excruciating. Newly-married females are more liable to the disease than others; for the reason that excessive sexual intercourse, unaccompanied with a due regard to hygienic conditions, is frequently the exciting cause.

Dr. Oldham, who has published a paper on this subject, gives a very lucid description of the leading symptoms as they occur in many cases:—

“The inflammation is limited to symmetrical patches of membrane at the posterior entrance of the vagina, and under the urethra: examined at the commencement of the disease, a number of small, highly injected points are seen, and the mucous membrane looks much inflamed. At first these points are solitary, and slightly raised on the surface, and a minute speck of ulceration is frequently seen in the centre. These correspond to the follicular crypts of the mucous membrane, and the ulcerated portion to their central pore. After a time the points lose their appearance of being isolated; they coalesce, and a band of vividly injected membrane is formed. The sphincter vagina is always contracted, and the mucous membrane is much puckered. In several cases the disease extended to the lowest folds of the vagina, the tops of which become very red, and bleed on being touched or separated. In one case the whole tract of the mucous membrane of the vagina was thus affected. When the disease is of long standing, the color of the mucous membrane of the vulva and lowest part of the vagina is changed to a whitish appearance, especially in women who have ceased to menstruate. The disease is exceedingly intractable, often tormenting the patient for years. The earliest symptom is leucorrhœa, with more or less irritation of the external genitals, particularly after much

standing or walking. The discharge is at first thin and whitish, afterwards thicker and yellowish. It never assumes the viscid, gluey character, but it soils the linen with a yellowish tinge, sometimes having a darker color from the admixture of a small quantity of blood, and occasionally having an offensive smell. The part of the mucous membrane affected becomes the seat of a most painful and almost incessant smarting, with now and then a severe attack of pruritus. The patient sits down with pain and adjusts her seat with care, resting on one ischium, and then gradually sinking down on the chair. Sexual intercourse is painful at first, but when the disease is established, it is altogether abandoned, from the intense suffering it causes. Pain in passing water is a very rare symptom. The local symptoms are often aggravated just before a menstrual period, or by mental depression, or fatigue, or by constipation. The patient also complains of pain in the loins and about the sacrum, extending to the inguinal regions and thighs. Separating the parts, for the purpose of examination, gives great pain; and when put on the stretch, the inflamed follicles sometimes bleed. The vaginal orifice is generally contracted, but above the orifice there is neither pain, tenderness, nor heat."

Of the terminations of this disease, Churchill says: "Inflammation of the vulva almost always terminates in resolution, but in many cases it assumes a chronic form, and is tedious and obstinate, occasionally resulting in hypertrophy of the tissues involved. Should the inflammation spread deeper, so as to reach the submucous tissue of the labia, an abscess may be the result."

I am at this time treating a very severe case of chronic vulvitis, of several years' standing. The young lady has been confined to her room, and most of the time to her bed, for more than four years. A number of Allopathic physicians have tried their skill upon the patient, each of whom succeeded in damaging the constitution and aggravating the local disease. Two years ago, one of her physicians applied a strong solution of nitrate of silver to the whole mucous surface of the vagina,

which greatly increased the pain, tenderness, and swelling of the part, rendering the introduction of the smallest speculum very difficult and distressing. The patient is now rapidly improving, and I confidently anticipate her complete recovery within three months.

The causes of this disease are chiefly to be found in gross food, the vitiated atmosphere of ill-ventilated apartments, inattention to personal cleanliness, constipation, hot enervating drinks, strong seasonings or condiments, especially the free use of salt, repelled humors, &c. The free use of saleratus and other alkalies in modern cookery is a prolific source of chronic inflammation, apthæ, canker, &c., of all the mucous membranes. I think I have many times been enabled to trace *vulvitis*, *vaginitis*, "throat-ail," and duodenitis — all of which are inflammatory affections of different portions of the same structure — to the excessive dietetic employment of salt and "dietetic saleratus." In corroboration of these views is the fact that infantile leucorrhœa has been known to prevail extensively during an epidemic catarrh of the mucous membranes. The vaginal discharge has been imputed, although erroneously, to an attempt at criminal intercourse.

In the treatment of vulvitis, there need be no difficulty in ordinary cases. The main point of skill on the part of the physician consists in adapting the bathing part of the treatment to the particular circumstances of each case. In some cases the morbid sensibility is so great, and the constitutional powers so exhausted, that water, of a temperature to be useful, may be injurious if five degrees too high or too low. Sitz-baths once, twice, or thrice a day, are always applicable; and in the commencement of the treatment, the temperature should be very mild — usually about 85°. When the local tenderness is extreme, the temperature should be gradually raised, while the patient is in the tub, as high as she can bear without discomfort, and then, after a few minutes, gradually reduced to as low a temperature as she can well bear.

There is usually a constant sense of heat in the lower abdomen, and this part should be constantly covered with a wet

towel, which should be renewed several times a day. The general system must, in all cases of local inflammation, be treated according to the general temperature. In some cases the wet-sheet pack, in others the dripping sheet, and in others the half-bath may be preferable.

Vaginal injections of tepid water are not to be neglected. The rules applicable to sitz-baths, in the same cases, should also be observed in the employment of injections.

The diet should be rigidly simple and exclusively vegetarian. Even milk and all of its products should be abstained from.

There are many cases in which the use of caustic is necessary. When deep indolent ulcers, with callous or ragged edges, or warty excrescences or fissures, exist, their surface should be destroyed, so as to expose a sound tissue from which healthy granulations can spring. This part of the treatment, which is essentially surgical, cannot be intrusted to non-professional hands; and I have known extensive mischief to result from the improper management of caustics in the hands of regular and experienced physicians. The caustics which I most frequently employ are sulphate of zinc, bicarbonate of potassa, nitric acid, and nitrate of silver.

The Allopathic treatment of this disease is perfectly consistent with its whole philosophy of drugs and destructives. It may be thus summed up: leeches to the inflamed parts; fomentations of poppy heads; the blackwash, composed of calomel and lime water; lotions of the sugar of lead; lotions of sulphate of zinc; solutions of the nitrate of silver; hydrocyanic acid; diacetate of lead; lime water and opium; poultices made of crumbs of bread saturated with a decoction of conium leaves, to which the liquor of the acetate of lead has been added; brisk saline purgatives; *a mercurial course!* &c.

VAGINITIS. — Some portion of the vaginal mucous membrane is always more or less inflamed in the disease we have just considered under the head of vulvitis. But there are cases in which the inflammation is very nearly limited to the

mucous membrane of the vaginal canal, constituting the disease before us. In its chronic form, vaginitis is termed by Churchill and others "*chronic vaginal leucorrhæa*."

It differs from the preceding disease only in locality; is attended with much less suffering, and is readily amenable to treatment on the same general plan.

PRURITUS. — An erythematic inflammation of the vulva, attended with an intolerable itching of the part affected, is designated by the term *pruritus*. An itching sensation is usually a more or less prominent symptom in most inflammatory affections of the genital organs; but it is only when this becomes the leading symptom, that it is regarded by nosologists as a distinct disease.

It occurs in women at all periods of life, though the married and middle-aged are most subject to it.

With the intolerable itching of the external genital organs, the patient experiences sensations which are described as burning, prickling, and tingling. In bad cases the suffering is intense, and the patient can hardly resist the desire to rub the parts, which scarcely affords even temporary relief, and always aggravates the complaint.

The disease sometimes runs into actual *nymphomania*, or ungovernable sexual passion. Dr. Churchill remarks: "In severe cases, when the parts are very tender, there is no sexual desire excited; but in other and slighter cases, where friction does not occasion distress, this is sometimes the case; and that which was at first adopted for the relief of the pruritus, may give rise to other sensations as imperious in their desire of gratification, and which increase by indulgence, so that the patient is reduced to a very melancholy condition; utterly unfit for society, she is injured by solitude, which leaves her to the uncontrolled dominion of her imagination; her mind, influenced by the excitement of the organs affected, is occupied with lascivious thought and impure desires, and her conduct (in defiance of herself, as a patient expressed it) towards the other sex shows the influence of the bodily disorder."

In some cases the itching extends along the vagina canal to the neck of the womb, causing extreme restlessness and sleeplessness.

An examination of the part affected does not, in all cases, disclose any morbid appearance. But in a majority of instances, the vulva and vagina will be found inflamed and swollen, of a deep florid or crimson color, and extremely sensitive. The whole surface is sometimes excoriated, and discharges an acrid matter.

The following case, reported by Professor Dewees, is instructive: "A lady, whose husband was more notorious for his gallantries than for his domestic virtues, was attacked, in the incipient stage of pregnancy, with an intolerable itching in the pudendum, and even within the os externum along the vagina. Suspecting she was infected by a venereal disease, we were sent for, and she giving such an account of her feelings as to make us think it might truly be the case, we proposed an examination of the parts, which was finally acceded to. Upon separating the labia, the whole face of the vulva, to the os externum, and the vagina, as far as could be viewed, was covered with an incrustation of apthæ. We assured our patient that her complaint was not as she had expected."

A question has arisen, which is of some importance in medical jurisprudence, as well as in the domestic and marital relations, whether a female laboring under this disease may communicate, in sexual intercourse, a similar disease to the male. I have known several cases in which this has occurred. Dr. Dewees' testimony is also conclusive on this point. He says: "We have known a complaint communicated to the male by intercourse with a woman laboring under pruritis; it was very similar to that which affected the female, in its general character: that is, there was great itching and swelling of the prepuce, the whole internal surface of which, together with the glans penis, were covered with apthous efflorescence."

As to the peculiar cause of this affection, authors are singularly crude in their speculations. It has been attributed to the secretion of the sabaceous glands, which are very numerous

in this situation ; to a superabundance of hair on the genitals ; to the increased circulation of the sexual system during pregnancy ; to the discharges which naturally take place after parturition ; to constipation of the bowels, and to worms in the rectum.

These can never be more than exciting causes when the predisposition exists ; and this predisposition will always be found, when found at all, in the unphysiological habits of the patient. The same causes which predispose to the diseases we have already treated of are the efficient predisposing causes of pruritus.

The proper remedial plan differs but slightly from that applicable to vulvitis and vaginitis. The whole mass of blood should be purified of its grossness and irritating humors as rapidly as possible. The wet-sheet pack, and the prolonged tepid half-bath, are usually indicated. Sitz-baths, of a mild and soothing temperature — 75° to 85° — should be employed with a frequency proportioned to the urgency of the case. The bowels must be thoroughly cleared of all irritating fecal matters by means of copious enemata of tepid water ; and the patient's diet should be extremely abstemious, and restricted to plain bread and unsugared fruit, until the local irritation is overcome. It is of much importance, in these cases, to avoid the drinking of hard water, as its earthy, alkaline, or mineral particles are always irritating to inflamed or abnormally sensitive mucous membranes.

In some cases lice (*pediculi*) will be found on the skin which is covered by hair, and the parts adjacent, adding greatly to the irritation and itching. Thorough ablutions of soap and water, with friction, will usually remove them. Turpentine, infusion of tobacco, sulphur, and mercurial ointment, will destroy them.

The philosophy of druggery recommends bleeding, drastic purgatives, local applications of various astringents and narcotics, as sugar of lead, alum, sulphate of copper, sulphate of zinc, poppy heads, dilute sulphuric or nitric acid, borax, morphia, prussic acid, lime-water, nitrate of silver, creosote,

sulphur ointment, mercurial ointment, Plummer's pill, decoction of sarsaparilla, balsam of copaiba, cicuta, hyoscyamus, ointment of laurel and lard, powder of starch and camphor, leeches behind the ears! (in cases of nymphomania), &c. A Dr. Blundell has suggested *extirpation of the ovaries*, when all other means fail! If he will try the hygienic method of cure, he will never find any occasion for the *spaying* process.

After recapitulating and commending all the above-mentioned remedies, Dr. Churchill refers us, for further information, to the works of Bienville, Robian, Hespian, Jolly, and M. Senyer Villermay, on this subject. In my judgment, the Profession has already quite enough of "information," so far as the treatment is concerned, unless it is of a different kind.

METRITIS. — Acute inflammation of the uterus rarely affects the unmarried, unless as the result of contusions or other local injuries. Violent exertion, or sudden colds, during menstruation, have been known to induce it. Astringent injections administered for the cure of gonorrhœa are among the most frequent causes.

The symptoms are, a sense of heat and uneasiness in the pelvic region, preceded by chills and feverishness; occasional paroxysms of sharp pain in the back, extending or darting down to the groin and thighs, and to the *symphysis pubis*. The pain is increased by coughing or sneezing, and usually accompanied with a bearing down sensation. The pain is also increased by deep pressure on the lower portion of the abdomen. The uterus is considerably fuller, constituting an abnormal tumor in the pelvis; and by a vaginal examination the organ will be found more or less depressed from its normal position.

In severe cases the irritation is extended to the neighboring organs, so that urine and feces are discharged with difficulty. In many cases the whole system is involved in the feverish disturbance. The breasts become swollen and painful; the stomach irritable; nausea and vomiting frequently occur; the bowels are constipated, and the patient is unable to sit up without faintness.

In the *chronic form of metritis*, the constitutional disturbance is slight, and the local symptoms much less severe. Indeed it not unfrequently exists for months and years, without being suspected by the patient, or recognized by the attending physician. I have had hundreds of cases of long-standing ulcerations of the mouth and neck of the womb to treat, which were the result of chronic inflammation existing for years, the poor patient, meanwhile, being continually doctored for hysteria, nervous debility, kidney complaint, spinal irritation, and various other diseases which she did *not* have.

The most constant symptoms attending chronic inflammation of the uterus are, a dull pain in the lower part of the abdomen, more or less sense of weight or heaviness, some degree of depression of the organ in the vaginal passage, and a discharge of mucus. Menstruation is but slightly, and often not appreciably disturbed; but there is usually more or less pain and inconvenience in the evacuation of feces and urine, dependent mainly on the pressure of the enlarged uterus on the rectum and bladder.

Inflammation of the uterus predisposes to retroversions and anteversions, and leads to a variety of morbid changes in its structure, most prominent among which are *hypertrophy* or *induration*, *ramollissement* or *softening*, *abscesses*, and *gangrene*.

In the treatment of metritis, the degree of local heat and pain, and of general feverishness, are the landmarks by which the remedial appliances are to be regulated. The wet girdle should be constantly worn and frequently renewed, so long as there is preternatural heat in the uterine region. Moderately cool sitz-baths may be advantageously employed two or three times a day. The whole surface of the body should be sponged with tepid water as often as the general superficial heat increases to the febrile standard, and the wet-sheet pack, once a day for an hour, will be appropriate when the whole surface is very hot and dry. Injections of tepid, cool, or cold water into the vagina and rectum, are valuable auxiliaries to the other bathing appliances.

The patient should occupy a cool and well-ventilated room, and take no food until the violence of the disease is abated, and afterward it should be, for several days, as bland and simple as possible — ripe, mild, juicy fruit, water gruel, toasted bread, mealy potatoes, &c.

The above plan applies more especially to acute metritis. Should the disease, however, assume the chronic form, the same measures may be employed, but with a moderation in the temperature and frequency of the baths, proportioned to the diminished amount of pain, heat, and fever. In the chronic form, the uterus will occasionally be found hypertrophied, in which case the warm and cold douche should be employed to promote absorption. The hydro-electrical baths are advisable also in these cases.

Churchill and other authors recommend general blood-letting, cupping the loins, leeches to the vulva, leeches to the arms, leeches to the uterus itself, *punctures of the uterus!* setons to the sacrum, a succession of blisters to the sacrum, decoction of poppy heads, embrocations to the loins, calomel and opium; saline purgatives, antimony with laudanum, diaphoretics promiscuously, and diuretics generally, iodine, &c.

I have never found any difficulty in curing this disease with hygienic treatment in a few days; nor have I even known a patient treated according to the usual routine of druggery, who was not crippled for life, if not killed outright. I know of no word more expressive of my opinion of this combination of bleeding, blistering, calomel, antimony, and opium, for the treatment of uterine inflammation, than — *savageism*. Barbarity is too mild a term.

ULCERATION OF THE CERVIX UTERUS. — Ulceration of the neck of the uterus, resulting from chronic inflammation, is a very prevalent, and often a very distressing ailment. No disease is more mal-medicated by physicians; and there are few specimens of bed-ridden invalidism more deplorable than the thousands of American women whose health has been nearly destroyed, and whose constitutions have been almost ruined by

the poisonous drugs and destructive processes which have been prescribed for the *cure* of uterine ulcerations.

Dr. Churchill says: "We might anticipate that the lower portion of the uterus, the cervix, would be especially liable to irritation and a certain amount of inflammation, on account both of its peculiarities of structure and its situation. And, accordingly, we find that it is one of the most common, if not the most frequent disease to which women are subject. Many of the cases of leucorrhœa proceed from this cause, rather than from uterine catarrh; and cases of dysmenorrhœa and displacement are traceable to this special cause. Congestion, inflammation, and erosion of the cervix uteri may occur in unmarried women and virgins, as Dr. Bennett has shown, but much more frequently in married women, whether they conceive or not: indeed, it is one cause of sterility, as I have repeatedly found."

Among the chief exciting causes may be named cold, and over-action at or near the menstrual periods, and excessive sexual indulgence. The disease is almost universal among prostitutes. Irritating injections, and the introduction of foreign bodies, occasionally excite it. Among the predisposing causes habitual constipation is the most prominent. The whole list of drugs which are termed emmenagogue, or "forcing" medicines — iron, calomel, iodine, myrrh, capsicum, savin, &c., may be regarded as both exciting and predisposing causes of uterine inflammation and ulceration. Nor should we omit to notice the free dietetic use of salt, saleratus, vinegar, and spices, as common causes of the most aggravated forms of erosive inflammation of the uterine mucous membrane.

The prominent symptoms are: pain and aching in the back and pelvic region; sense of weight or dragging in the lower abdomen, extending down to the thighs, all of which are increased by walking or standing; a general sense of lassitude and weakness, and, frequently, a sense of bearing down: there is a mucous discharge at first, but as the disease progresses it becomes leucorrhœal, and is more profuse after each menstruation. The discharge may be of a milk whiteness and consistence, or thick, sisy, colored, and offensive. The men-

strual discharge may be but little disturbed, or become more profuse in the early stage; but usually it gradually diminishes, so that eventually the customary hemorrhage is nearly or quite supplanted by the leucorrhœa. Occasionally the disease will be complicated with menorrhagia, or the prolongation of the menstrual flux from one monthly period to another. Dr. Bennett remarks: "The pain of menstruation is increased in these cases, and is most severe during the first day or two. Unlike the ordinary menstrual pain, it often persists with great severity during the entire period, and for some time after: occasionally it is most agonizing and continued, so much so as to confine the patient to her bed, and to render sleep impossible for several days and nights. It is then nearly always accompanied by nausea and sickness, and by some degree of general febrile reaction. The pains are of the same nature as those experienced during the menstrual interval, lumbo-sacral, ovarian, and hypogastric. The dorsal, uterine, and ovarian pains are, generally speaking, alike intense. They are constant, but diversified by occasional uterine tormina. The entire lower abdominal region is painful in these extreme cases, and often so sensitive as scarcely to bear the pressure of the bedclothes."

As may be readily supposed, sexual desire is enfeebled in all cases, and entirely destroyed in many; intercourse being always painful, and invariably aggravating the disease. This is an important point to be regarded in the treatment of these affections, and is quite generally overlooked or disregarded by both patient and physician. In my treatment of uterine ulcerations, and even in the prior stage of chronic inflammation, I enjoin unconditional abstinence from sexual intercourse; and without this restriction a radical cure is entirely out of the question, however much the symptoms may be alleviated for a time.

The existence of extensive ulceration, or of any considerable degree of inflammation, tends, of course, to the prevention of pregnancy, and renders the patient liable to abortion should pregnancy occur.

In order to ascertain precisely the condition of the parts

diseased, it is generally necessary to make both a digital and speculum examination. A little experience will give the practitioner the requisite tact for determining at once the various degrees of congestion or inflammation, and the different forms of ulcerations with which the organ may be affected.

When in a state of simple *congestion*, the cervix, or presenting part of the uterus, feels larger to the finger than usual, softer, more spongy, and somewhat depressed, with some degree of tenderness on pressure. By introducing the speculum, it is seen to be swollen, more or less discolored or deeper colored, and often having a bruised appearance. In most cases the os uteri is more open than in the normal state, while the discharge is thicker and more opaque.

In *inflammation*, the cervix is enlarged but soft, and the mucous surface loses its unctuous feel. When examined by the speculum, its surface presents a vivid red tinge, instead of the normal pale rosy color. Frequently it presents a uniform preternatural redness, dotted with white pustules or florid papillæ, or distended with a muco-purulent matter; or it may exhibit all shades of discoloration, from the bright florid red of arterial blood to the deepest livid hue of venous blood. The degree and kind of discoloration, as well as the consistence and offensiveness of the discharge, depend wholly on the state of the constitution, and this means the purity or impurity of the blood.

Dr. Bennett attaches much importance to the patulous state of the os uteri, in the diagnosis of inflammation of the cervix. He says: "Whenever the finger, instead of passing over a scarcely perceptible orifice, meets with a well-marked depression, into which its extremity may be inserted to a greater or lesser extent, we may nearly conclude at once that inflammation, with or without ulceration, is present, and it becomes advisable to pursue the investigation further. The mucous membrane that lines the cavity of the cervix, when inflamed, presents a dark livid red hue, which may be traced with the eye to a considerable depth by depressing with a sound the lower part of the os. This surface bleeds easily on being

touched with a probe, especially if excoriated or ulcerated, which is not the case in the healthy condition. The inflamed mucous membrane of the cervical canal also secretes muco-pus in more or less abundance, and this muco-pus, filling up the cavity, can often with difficulty be wiped away. I generally use for that purpose a small piece of cotton inserted into the cleft of the fluid caustic holder, which may be passed into the cavity of the cervix, owing to its dilated state, and with which the mucus may be removed. Even when there is no pus present, the cavity of the cervix is often completely filled with transparent glairy mucus, evidently secreted by the mucous follicles of the inflamed lining membrane. This glairy mucus, which may be compared to the uncooked white of an egg, has much attracted the attention of writers on female discharges, and is considered to be secreted by the uterine organs generally as the result of debility, whereas, in reality, it is secreted by the cavity of the cervix, and is nearly always the concomitant of inflammation. It is sometimes produced in very great abundance, and seems to take one of the principal forms of the vaginal discharge, commonly called whites. The presence of this glairy mucus, along with an open state of the os uteri, may be considered as pathognomonic of inflammation of the cavity of the cervix."

Granular Inflammation of the Cervix Uteri is described by several authors as a distinct disease. It is distinguished by the presence of little tumors, from the size of mustard seeds or less, to that of peas, on the lips and external surface of the cervix uteri. When large, they are of a firm consistence, of a whitish color, and few in number; and when small, they are very numerous, soft, and vesicular. The contact of the finger, or the speculum, and sometimes the mere act of defecation, gives rise to a discharge of blood from the surface occupied by them. Coition is often painful, and is frequently followed by hemorrhage. Pruritus is an occasional concomitant.

Erosion or abrasion of the cervix is the usual result, sooner or later, of long-continued inflammation. Most commonly, the ulcerative process commences around the os uteri, and extends

to the cervix. The ulceration may be more or less superficial, and assume all the conditions of destructive inflammation in any part of the system, as irritable, indolent, phlegmonous, erythematic, &c. Dr. Bennett remarks: "When an abrasion or excoriation only is present, the cervix is generally of a vivid red, and the granulations are often so minute, that it is at first difficult to ascertain whether the membrane is abraded or merely congested, or to perceive the limits of the ulceration when once it has been ascertained to exist. The doubt, however, may be solved by lightly touching the suspected surface with nitrate of silver. The abrasion immediately assumes a much whiter hue than the region which is merely congested, and its margin becomes well defined and evident. An abraded or excoriated condition of the mucous surface is generally the form under which ulceration presents itself in the cavity of the cervix, granulations of any size being seldom met with in this region. In virgins, also, ulceration often presents this character, especially when it is limited to the contour and cavity of the os."

Many varieties of erosive ulceration, complicated with granulations and other excrescences, are mentioned by authors, and familiar to most practitioners who have had extensive experience in the treatment of uterine diseases, the most prominent of which are well described by Dr. Emory Kennedy: "*The Granular Ulcer* may commence on the lip, or may extend from within; it may occur at one spot on the os, or spread over both lips. It frequently would appear to extend from within the os, and is thus very commonly found combined with the same state of disease in the mucous membrane of the uterus itself. The granulations are redder and more distinct than in the former case, and almost always combined with increased development of the lip or lips engaged, and often with symptoms either of congestion or chronic inflammation of this part. When this affection extends upwards into the lining membrane of the uterus, a muco-purulent discharge exudes as well from the uterus as the ulcerated surfaces exposed to view. These surfaces would not account for the

amount of discharge which very often accompanies this affection, and which evidently also comes from the upper part of the vaginal canal, which is usually of a dusky brick color, with occasional papillæ.

"The *Cockscomb Granulation* generally engages the immediate margin of the os, consisting of larger, sprouting, papillous granulations with or without intervening fissures dividing them into lobulated portions; the lobes, when present, appearing to dip a good way into the cavity of the uterus.

"There is another form of ulceration which resembles that just described, but is less sprouting in its granulations. It assumes, like that, a vivid red tint generally, engages one or both lips of the os close to the aperture, although not necessarily found here, and occasionally extends completely into the neck, engaging the entire of both lips: it is generally in its advanced stage very lobular and fissured in its character, although not necessarily so at first, or when at some distance from the os: it is what might be called *doughy* or *boggy* in its structure, the caustic or sound sinking very deeply into it without any resistance being offered, and its bleeding very slightly on the slightest touch: it is commonly attended with irregular red discharges, appearing at intervals, and particularly after intercourse; this occasionally amounts to debilitating hemorrhage, with discharges of clots, &c."

Dr. Churchill has found many obstinate cases of leucorrhœa, which have resisted the usual methods of treatment, to be dependent on erosive ulceration of the cervix uteri—a remark which accords with my own experience.

Deep Ulceration of the Neck of the Uterus may assume different forms, dipping into its substance, or extending in various directions around the os uteri, or of one half of it, or forming a groove or fissure in its substance. The depth may extend to one quarter or even to half an inch; and in some cases the whole cervix is nearly destroyed. The edges of the ulcer are usually neither elevated nor hard, and the surface is covered with purulent matter; but in some cases the granulations are very abundant and firm, of a vivid red hue, scarcely bleeding

on pressure ; or they may be large, fungous, livid, and bleed profusely at the slightest touch.

In these deep-seated ulcerations there is much pain in the back, and in the centre of the pelvis, from which all the pain seems to radiate. The pain may be of the burning or stinging kind, and is sometimes agonizing during menstruation or during sexual intercourse. Leucorrhœa is always present, and there is frequently a considerable degree of hemorrhage.

The principles which are to regulate the general treatment, so far as the inflammation and feverishness are concerned, have already been sufficiently explained. I may remark, however, that there are no diseases the successful management of which requires a more stringent perseverance in hygienic measures of every kind, and a more rigid abstinence from irritating and morbidly exciting influences of all kinds, bodily and mental. Quiet and rest, both of body and mind, are indispensable.

So far as the general or constitutional treatment is concerned, the bathing, dietary, exercise, ventilation, mental, social, and domestic influences, &c., must be governed and regulated by the principles already laid down. As a general remark, I would observe, that, in the majority of cases of ulceration or chronic inflammation of the uterus, the disease will have been of long standing at the time the patient applies to the physician. She had suffered, probably, through agonizing months and weary years, perhaps uncomplainingly, till existence was no longer endurable without relief, before applying for medical assistance. And when the family physician was finally called upon, the only consolation the poor patient received was a damaging medley of blisters, leeches, calomel, and antimony, as though destructive processes and poisonous drugs were the allies of health and vitality, instead of the emissaries of disease and death !

In managing the bathing processes, we must always have a strict regard to the treatment the patient has previously received, for this affects her vitality and reactive power by which bathing in every form should always be regulated. In many cases the superficial circulation will be extremely low, the

pulse feeble and thready and intermitting, the extremities inclined to coldness, with a tendency to cerebral congestion, palpitation of the heart, throbbing of the carotid and temporal arteries, and a host of indefinable and indescribable but most perplexing and distressing "nervous" sensations.

Of course, with these patients, *cold* bathing is out of the question; nor will it always answer at first to apply even tepid water to the whole surface. We may commence with warm, even at blood-heat, and gradually and very cautiously lower the temperature as the patient can bear it without disagreeable chilliness. A warm or tepid sheet or ablution in the morning, and a sitz-bath in the middle or after part of the day, will, in these cases, be sufficient. But in those who have comparatively a good external circulation, and have not been reduced by long confinement, bleeding, drugging, blistering, etc., the tepid or cool dripping sheet, or half-bath, or even the wet-sheet pack, may be the most appropriate morning bath; while the sitz-baths may be taken once, twice, or thrice daily, according to the degree of local heat. Vaginal injections may be employed of the same temperature, and at the same times, as the sitz-bath.

There are many cases of even severe and long-standing uterine ulceration, which will recover by means of the management thus far pointed out, if persisted in for a sufficient length of time. But there are cases, also, which cannot be reached short of the appliances and processes which bring them within the department of surgery. And here, unfortunately, the popular medical system gives us no settled landmarks to go by; and in the management of astringents, caustic, and instruments, taking all the medical practice of our country together, the evil results vastly preponderate the good.

The great error with ordinary surgeons — and the same remark will equally apply to some so-called Water-Cure physicians — is in not attending properly to the hygiene. Astringents, the knife, the ligature, and caustics of any required potency may always be safely employed, provided the hygienic treatment is judiciously managed; but otherwise they are

always dangerous, and frequently disastrous. I have had several cases to treat, in which the former physician had, by a single injudicious application of caustic, produced a distressing aggravation of the local inflammation which lasted for several months.

The grand rule which should always be regarded by physicians or others in this matter — but which is almost always disregarded — is this: never apply caustics nor astringents to an inflamed or ulcerated mucous membrane, until the bowels are free and regular, the blood and secretions purified by bathing and diet, and the acute stage or paroxysm of the inflammation has subsided. I have employed caustics freely for many years, from the mildest agents to the most powerful known to chemistry and the arts, and have never had any serious or permanent mischiefs to deplore. But I have invariably observed the rule above indicated.

As a further illustration of the importance of this principle, I may mention that, in the treatment of *ophthalmia* — inflammation of the eyes — thousands of eyes are annually destroyed because this rule is not attended to. The best authors on ophthalmic surgery, and the most experienced physicians and surgeons, bear abundant testimony to the hazardous and ruinous effects of irritants, astringents, and caustics, as ordinarily employed. *Per contra*, I have long been in the habit of applying caustic freely to remove films, specs, excrescences, reduce enlarged vessels, &c., and without damaging the structures or sight of the eye in a single case.

Much diversity of opinion exists among authors respecting the necessity or propriety of cauterization in any case of uterine inflammation or ulceration. And some hydropathic practitioners have opposed the practice on the ground that it was veritable *drug-medication*, and hence a surrender of the cardinal principle of Hygeio-Therapy. I do not see it in this light. Drug-medication implies the taking of medicine into the system, and its diffusion throughout the organic domain, for the purpose of changing, subverting, or suppressing the peculiar action or condition which constitutes the essence of

disease. Cauterization, which is the local application of a drug, is performed for the purpose of destroying a morbid structure, which is the consequence of diseased action. Thus, ten grains of calomel, taken into the stomach, would pervade and poison the whole system. But a drop of nitric acid, applied to a wart, would destroy that, and leave the structures beyond untouched and uninjured. When, therefore, we talk of *curing* ulcers with caustics, or curing cancers, polypous tumors, and fungoid excrescences, we mean *killing* the morbid product of inflammation, so that a sound surface may be exposed on which healthy granulations can form. This is the principle on which fistulous ulcers are so frequently cured. An abnormal, callous surface has formed, which may be exceedingly tender and painful, and which secretes, in greater or less abundance, an acrid mucous or purulent matter; and this condition may remain for years. But if the callous surface can be removed, by the knife or caustic, as may be most convenient in the particular case, and the part kept quiet, a healthy surface soon forms, and the part is well.

This principle applies also to the treatment of uterine ulcerations. The chief points of skill are, 1. To prepare the patient for the application of caustic, by the general hygienic management. 2. To select the kind and strength of caustic, which will thoroughly destroy the morbid surface, and no more.

But some more perplexing questions arise here: Under what circumstances are caustics absolutely necessary? and in what cases are they justifiable? They are necessary when the ulcer does not evince a tendency to heal, soon after the general system has been put in good condition by the general treatment; when the ulcer presents a firm, indurated, or fungous border or surface; and also when it is rapidly spreading wider and deeper. They are justifiable, though not always indispensable, when the heat, redness, and turgescence of the structure surrounding them is reduced to nearly the normal condition and appearance. In many of these cases they will greatly accelerate the healing process, and, if judiciously managed, will never do injury.

What caustic materials shall be employed? When the ul-

ceration is very superficial, and spreads over a large surface, a strong solution of tannic acid, or the powdered tannin, is sufficient. This is not regarded as a cauterizing agent, but as a mere astringent, by the authors of our *materia medica*. But the truth is, all-powerful astringents, when applied to living tissues, are, in effect, mild caustics. They do, in fact, occasion the destruction, to some slight extent, of the surface to which they are applied. This is the case with common table salt, with alcohol, the preparations of iron, and various other articles of the kitchen, restaurant, and apothecary-shop. Liebig and other chemists inform us, that they actually combine with and decompose the substance of the muscular and membranous tissues, and destroy the albuminous element of the structures.

For deeper ulcerations with well-defined edges, the solid nitrate of silver is as convenient and probably as efficacious as anything. I object, decidedly, to the strong solution of lunar caustic, so commonly used in these cases. It is impossible to limit its application to the surface we wish to destroy: its effect is too slight where we desire to produce a sloughing of the morbid surface, and too great where we desire no effect at all. In a word, it is unmanageable, and its employment, though not always appreciably injurious, is, nevertheless, in all cases a dangerous experiment.

The solid stick, introduced through the speculum by means of that convenient contrivance, the caustic-holder, can always be applied to the exact place and extent we desire to cauterize, and nowhere else. The end of the caustic pencil is to be dipped in water, and held for a few seconds against the ulcerated surface. The part to which it is applied almost instantly becomes white as though burned with a hot iron. It is attended, when the patient has been properly prepared for the operation, with very little pain, and in most cases almost none at all. The application may be repeated once or twice a week until the whole of the ulcerated surface begins to fill up and heal over. It should not be applied during menstruation, nor for two or three days succeeding the menstrual flow.

There is another form of uterine ulceration for which the powdered anhydrous sulphate of zinc is the preferable caustic. I mean that form in which the ulceration dips somewhat deeply into the substance of the os and cervix uteri, running in various directions, and forming an irregularly defined groove around the whole or a part of the mouth of the womb. The ulcerated surface may be crusted over with the powder once or twice a week, by means of a camel's hair pencil brush, or any other convenient instrument. The pain is usually insignificant and brief; but if it should prove severe or prolonged in any case, it can be at once relieved by syringing the part with warm water.

Granular tumors, warty or fungoid excrescences, &c., may be removed by repeated applications of nitrate of silver or nitric acid, as either can be most conveniently managed. The "actual cautery" — an iron rod heated to a white heat — is, no doubt, the most prompt and efficacious as well as the most harmless material possible for getting rid of these morbid growths, and the callous surfaces and indurated edges of ulcers; nor is the process at all painful, as most persons would naturally suppose. But it requires considerable tact to manage the process; and I would not recommend it to the "uninitiated."

The drug-treatment recommended by the authors is a promiscuous medley of cupping, scarifying, leeching, blistering, purging, and cauterization. Among the most prominent of the remedial measures named are: taking blood from the loins by cupping; bleeding from the cervix uteri by scarifying; bleeding by leeches applied to the vulva; emollient vaginal injections; mild laxatives; blisters to the sacrum; astringent injections; astringent ointments; mercurial ointment; ointment of sugar of lead; pernitrate of mercury; the actual cautery; proto-nitrate of mercury; chloride of zinc; nitrate of silver; acid nitrate of mercury with scarifications; *potassa cum calce*; *potassa fusa*; nitrate of copper; alterative medicines, as calomel and antimony; nitric acid; muriatic acid; chlorate of zinc; tincture of iodine; Vienna paste, &c.

In a "multitude of counsel" there is said to be safety; but when I see such a multitude of incongruous drugs and chemi-

cals paraded as remedies for a particular morbid condition, I cannot help being suspicious that it is because none of them are employed very successfully.

OVARITIS. — Acute inflammation of one or both ovaria rarely occurs, except when connected with inflammation of the uterus or *peritoneum* (the lining membrane of the abdominal and pelvic cavities), succeeding to abortion or delivery. When it occurs as an idiopathic affection, it is generally just before or immediately after the appearance of the menses.

Nanche regards young women of a sanguine temperament as most liable to this disease; but I am not aware of any evidence which corroborates his opinion. It sometimes follows a tedious or difficult labor, and, according to Dr. Martin Sohn, may be the consequence of suddenly suppressed menstruation.

The peculiar symptoms are, deep-seated and severe pain, accompanied with a burning sensation, in the ovarian region; the pain is relieved by quiet, and greatly aggravated on rising. An aching sensation extends to the groins and thighs; the patient complains of extreme weariness; the urine and feces are discharged with difficulty. When the inflammation involves the *peritoneum*, the pain will be more diffused and more acute. There is more or less general feverishness, hot skin, quick pulse, thirst, nausea, &c.

Dr. Löwenhardt, in the *British and Foreign Medical Review*, has given the best description of the symptoms I have seen:

“So long as the inflammation is confined to the ovarium itself, the seat of the disease can only be shown by the pain, since there is no functional disturbance to mark its presence. Immediately over the symphysis pubis of the affected side (both ovaries are seldom inflamed at once), between the groin and the uterus, the abdomen is painful and somewhat tense: at times it is distinctly swollen, and hotter than natural. The pain is seldom violent, rather dull, but becomes sharper and darting as soon as the *peritoneum* is involved: the part is painful on pressure, and on suddenly assuming the erect

posture; and as long as the inflammation does not spread, remains confined to the affected spot. Usually, however, the inflammatory process rapidly extends, at an early period, to the peritoneum; especially when under circumstances which predispose the membrane to inflammation, namely, the puerperal state; and besides the darting pain above mentioned, produces affections either of the bladder or rectum. In the former case, patients complain of frequent desire to pass water, and scalding, even to a painful degree, when evacuating the bladder, so as to be easily mistaken for inflammation of its mucous lining: the neighborhood of the bladder is felt tense, and is very tender on pressure. The urine also is mostly high-colored, and is passed in the usual quantity, in spite of frequent interruptions. The function of the rectum is but little impeded. On the other hand, when the irritation has spread to the posterior portion of the peritoneum, the characters of the disease were very different; the bladder now is less affected than the rectum. In this case, the patient has a sensation of painful pressure in the cavity of the pelvis, amounting to bearing down: the hypogastric region is not so tense or hot, and is less sensitive to external pressure. Fruitless forcing to evacuate the bowels arises, frequently amounting to tenesmus."

In cases of difficult diagnosis, an examination, per rectum, becomes important. On introducing the finger so far as the side of the uterus, the swollen and painful ovary may be distinctly felt.

Milder forms of this disease have received the appellations of *subacute ovaritis*, *chronic ovaritis*, and *ovarian irritation*; but they do not require a separate consideration.

The treatment is substantially the same as for metritis. Frequent hip-baths, of a temperature suited to the degree of heat, pain, and feverishness; the constant employment of cool or cold wet cloths to the abdomen, enemata of tepid water to free the alimentary canal, and occasional ablutions, half-baths, or "packs," as may be demanded by the superficial temperature, are the essentials of the remedial course. I need scarcely add, that perfect quiet, as in all acute inflammations, is indispensable. The diet must be very plain and abstemious.

In the subacute and chronic forms, the alternate warm and cold applications will often be found more efficacious in relieving the local pain than the cool or cold ones; and in such cases they should always be preferred.

The "drug and destructive" medication prescribed for ovaritis in the "regular" medical books on the Diseases of Women, is, if possible, a little more deadly than anything we have yet seen. It is well summed up by Churchill in a single bloody and *murderous* sentence: "Venesection, leeches to the iliac region, to the groins, anus, or labia, poultices and fomentations to the lower belly, calomel and opium."

Part Fourth.

MISCELLANEOUS AFFECTIONS.

Under this head, I propose to treat very briefly of a variety of organic malformations, displacements, morbid growths, excrescences, and tumors, whose treatment is, in most cases, chiefly surgical. The limits of this work will not permit of elaborate descriptions of these maladies, nor allow me to do more, in relation to the treatment, than merely indicate the remedial principle or operation required. This work being intended more for popular than professional reference, I shall endeavor, in all cases, to point out the most successful means, and to give sufficiently full and particular directions therefor. Yet many who are afflicted with diseases which are not common will doubtless be troubled by such a description of them, as will enable them to understand their nature and character, and to judge for themselves what measures must be resorted to for relief.

ADHESION OF THE LIPS.—One of the consequences of inflammation of the vulva, when not properly attended to, is a more or less complete closure of the passage by an adhesion of the labia majora, or external lips of the vaginal orifice. It occurs most frequently in young girls, sometimes during the period of early infancy. It may be congenital. The adhesion may generally be broken up by forcibly separating the lips, or, if this is impracticable, an incision will be

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The adhesions may generally be broken up by forcibly separating the lips, or, if this is impracticable, an incision will be

necessary. The raw edges must be covered with lint until a new cuticle is formed.

ABSENCE OF THE LABIA. — One or both of the large or small labia may be wanting at birth, in which case there is necessarily a large and unprotected entrance to the vagina. This deformity is said to be more frequent among people where the excision of these parts is performed as a religious rite. The malady is irremediable.

EXCESSIVE DEVELOPMENT OF THE LABIA. — The Hottentot women are said to have so great a development of both the greater and lesser labia, as to constitute a kind of apron. The same affection has been met with in European and Asiatic women. This malconformation is usually accompanied with a copious and troublesome secretion of the sebaceous glands and sudoriferous follicles of the part, and is sometimes a serious impediment to coition. The proper operation is nymphotomy or circumcision, which consists in excising the superfluous portions of the labia with a bistoury.

LABIAL HERNIAS. — A portion of the intestine or mesentery may descend through the *inguinal canal* (as in the scrotal hernia of men) into the greater labia, producing the disorder before us. In some cases the lateral wall of the vagina is elongated, constituting the variety termed *labio-vaginal hernia*. The predisposing cause is laxity of the muscular tissue, and the exciting cause violent exertions, as lifting, jumping, coughing, sneezing, &c.

These derangements are not generally painful, are easily reducible, but readily reappear on any sudden and violent exercise, particularly coughing or sneezing.

The form of the tumor is round or oval, and the skin over it is not discolored. The reduction of the hernia is accomplished by manipulations with the hand, called *taxis*. By uniformly compressing the labia, the tumor is pressed into the upper part of the vaginal canal; then by means of two fingers carried into

the vagina, the lateral wall of which is swollen, it may be pushed higher still, and until it is beyond reach, where it may be retained by placing a piece of sponge in the vagina.

ELEPHANTIASIS OF THE LABIA. — An extraordinary hypertrophy of the tissues of the labia constitutes the affection before us. It is a rare affection; but cases have been recorded, in which an irregular mass of tumors, originating from the subcutaneous areolar tissue of the labia, have hung down to the middle of the thighs. The morbid structure has but few blood-vessels, and its surface is usually brownish, unequal, and knotty. If ulcerations occur, the part becomes very painful. This affection is very frequent in the island of Barbadoes, where its kindred malady, elephantiasis of the leg, is also common.

Thus far surgery has done but little to relieve this ailment. Extirpation of the tumor is admissible when it involves only a portion of the labia; in other cases, we can only hope to arrest its further progress by a rigid application of all the rules of hygiene, with an abstemious diet, on the "Hunger-Cure" plan.

ENLARGEMENT OF THE CLITORIS. — This organ, which is the analogue of the male penis, and the principal seat of sexual sensibility in the female, is sometimes morbidly developed to the extent of several inches, and resembling very much the male organ. The deformity has been mistaken for the virile member, and given rise to the erroneous notion of hermaphrodisia in the human subject. In some cases the clitoris is found divided at its extremity, which abnormality has been mistaken for a double clitoris. The remedy for the hypertrophy is, extirpation with the knife, or by means of the ligature. The resulting hemorrhage may be checked with cold applications.

It was formerly supposed that the principal cause of a preternatural development of the clitoris was excessive sexual indulgence. But modern investigations seem to disprove the

opinion. Amongst six thousand registered prostitutes of Paris, but three cases of enlarged clitoris could be found.

PARALYSIS OF THE CLITORIS. — I know of no better term to designate a morbid condition of the clitoris, characterized by a partial or complete loss of sensibility. This affection is nowhere mentioned in medical books ; but I have had occasion to prescribe for many cases in which it was too prominent a condition to be overlooked. It is one of the results of chronic inflammation. In nearly all the cases which have come under my observation, the patient had, in early life, suffered much of dysmenorrhœa. Sexual intercourse is never pleasurable, and frequently disagreeable and even disgusting, so far as the patient is concerned. And this circumstance has often led to coldness, indifference, and alienation in the married relation — circumstances which have been attributed to constitutional incompatibility, mental uncongeniality, &c., indeed to any and every cause except the right one.

It is a common error with non-professional people — and the same error is entertained by many medical authors — that in order to have conception take place, the *sexual orgasm* must be experienced also on the part of the female. This is not necessary. Many women have had children repeatedly who have never known pleasure in the sexual embrace. All that is essential to impregnation is the contact of the male sperm with the female ovum. It is quite immaterial, so far as impregnation is concerned, whether the sensations accompanying the sexual act be those of pleasure or of pain, although pleasure, the most exquisite that the organism is capable of realizing, is the normal order.

The remedial plan consists in the employment of measures calculated to develop to the utmost the circulation and promote the innervation of the part. Among the special appliances are alternate warm and tepid or cold hip-baths and vaginal injections, with abundant friction and judicious manipulations.

PROTRUSION OF THE HYMEN. — In some cases the hymen is so developed by preternatural growth, as to form a prominence projecting between the labia majora to the extent of an inch or less. It is sometimes noticed in early infancy. The protruding portion can be readily excised with a pair of very sharp scissors.

VASCULAR URETHRAL TUMOR. — A very painful affection, and one of the most frequent excrescences of the genital organs, is a small vascular tumor, attached to the orifice of the urethra. It is of a reddish color, of a spongy texture, with an irregular jagged surface, usually extremely sensitive, and when touched, discharges a bloody serum. It occurs most frequently in young and middle-aged married women, but sometimes affects also young single women.

The prominent symptoms attending it are, constant pain at the vulva, more or less severe according to the size and tenderness of the tumor; the pain increased, sometimes to agony, upon motion; sense of weight and bearing down; frequent desire to urinate, with heat and scalding. There is constant, and, usually, a copious discharge of the natural mucus of the part. Sexual intercourse is excessively painful.

By separating the labia, a small projecting tumor is readily seen, close to the external orifice of the urethra, of variable size, which bleeds on being roughly handled.

A variety of processes have been resorted to for the removal of this troublesome excrescence, as ligature, excision, astringents, caustics, &c. The *meatus urinarius* itself has been extirpated. I have had many of these cases to treat within a few years, and never had any difficulty in removing them completely in a short time with the ordinary caustic appliances. Nitric acid and sulphate of zinc are more prompt, but the nitrate of silver is most convenient, and, if the hygiene be duly attended to, will probably always be sufficient.

THROMBUS. — Blood-tumors are sometimes found in the vulva and the vagina. They are occasioned by the rupture of

some of the blood-vessels of the part, ordinarily some one of the veins, from whence a sanguineous effusion takes place into the areolar tissue of the labia. They occur most frequently in pregnant women, and are immediately induced by some violent exertion or shock, as a fall upon the seat, a blow upon the vulva, &c. During labor, the passage of the child's head through the vagina is sometimes accompanied with so much difficulty as to rupture the vessels, and produce considerable blood effusions under the mucous membrane of the genital parts, and in the areolar tissue which unites them with the adjacent organs. The application of the forceps in difficult labors has also occasioned these tumors.

"The *diagnosis* of blood-tumors," says Scanzoni, "generally presents no difficulty, for the simple reason that they ordinarily extend quite to the labia, and are soon recognized by the patient herself, or by the persons summoned. The formation of the tumor, during labor, is sometimes, but not always, accompanied by pains, while in women who are not pregnant, the lip, tumefied in consequence of lesion, is ordinarily the seat of a more or less intense pain. The mucous membrane which covers the thrombus is more or less thinned, smooth and shining, according to the degree of dilatation to which it has been submitted; the blood accumulates below it, and causes it to appear bluish or blackish. When the blood is infiltrated into the meshes of the cellular tissue, where it is already completely coagulated, the tumor is very compact — doughy: it is, on the contrary, soft and fluctuating when a single cavity contains the still liquid blood. With non-pregnant women it sometimes happens that notwithstanding the presence of a little blood effusion of the size of a filbert or a nut, in the substance of the labium majus, the surface of this organ does not appear colored differently, at least during the first hours that follow the formation of the thrombus; the labium has only augmented in violence; it is the seat of quite lively pains, and allows a hard kernel to be perceived very deeply seated. When the infiltration extends to the anterior wall of the vagina, as often happens after labor, by the compression which it

exerts upon the urethra and bladder, it frequently causes an obstinate retention of urine, which is with difficulty made to disappear, even with the aid of the catheter, for its passage by the contracted urethra is not easily affected, or occasions great pain. When to the thrombus there is united a solution of continuity of the superficial layers of the vagina, there is always a hemorrhage, and it is this which provokes an exact exploration when the infiltration does not extend to the vulva. So soon as this exploration is performed, it is scarcely possible to confound the tumors, which occupy our attention, with the other diseases of the genital parts; for simple œdema, hernias, and abscesses of the labia, are accompanied from their beginning, or during their progress, with phenomena which leave no doubt of their nature."

The indications of treatment are, 1. To arrest the hemorrhage; 2. To moderate the inflammation; 3. To promote the absorption of the effused fluid. Fortunately the remedial measures best calculated to fulfil either indication are also best adapted to all. The hemorrhage can best be restrained by the application of iced compresses, after which the part should be kept cool by the constant application of cloths wet with cold water, and frequently renewed. When the bleeding is obstinate and alarming, it may be necessary to introduce pieces of ice, enclosed in a bladder or thin cloth, into the vagina. Pieces of ice introduced into the rectum are also useful auxiliary means. The resulting inflammation may result in abscess, more or less extensive; but the mischief can be limited to the smallest possible degree by moderating the inflammation, and this can best be done by keeping the temperature of the part affected and the adjacent tissues so nearly as possible to the normal standard by means of cold or cool applications, as the circumstances of the case may demand. Hip-baths will be proper where there is much general heat of the abdominal and pelvic regions; and tepid ablutions to the whole surface should not be neglected when the patient is feverish.

SPASM OF THE VAGINA. — This affection is seldom mention-

ed by authors, nevertheless it is sufficiently troublesome and frequent to require a passing notice in a treatise on sexual diseases. It consists in a spasmodic contraction of the muscular fibres of the vaginal walls, which may be limited to the constrictor muscle of its external portion, or extend to the entire organ. Persons of a very nervous and irritable temperament are most liable to the affection, and it may be excited by mal-positions of the uterus, by tumors, and by inflammatory conditions. I have been consulted by three young married couples who were unable to consummate the matrimonial relation on account of a spasmodic condition of the sphincter muscle of the vagina.

The most prominent symptom of this affection is, generally, a very disagreeable sensation of tightness and retraction of the part, without any external cause operating at the time; but in some cases it is only experienced under the influence of exciting causes, as violent emotions, severe exercises, the menstrual flux, &c. Some women are always affected with it during sexual connection. It is obvious that, where the predisposition exists, the excitation of the genital apparatus, combined with some degree of mental agitation consequent on the first attempts at coition, would naturally induce such a spasmodic constriction as would operate an effectual prohibition of the act.

Those few authors who have treated of this affection recommend, among other foolish things, blood-letting locally, lavements of opium and belladonna, preparations of iron, Fowler's arsenical solution, and various narcotics.

I have never found any difficulty in overcoming the malady. Warm and tepid hip-baths, prolonged warm vaginal injections, enemata to free the bowels, and a dietary that will obviate all tendency to constipation, are the necessary remedial measures. The judicious physician can always suggest such manipulations, adapted to the peculiar circumstances of each case, and to the social condition of the patient—whether married or single—as will accelerate the cure, with those who cannot be content to wait the slower results of the processes I have named.

FISTULOUS ULCERS.— Among the most deplorable affections to which woman is liable are *vesico-vaginal fistula* and *recto-vaginal fistula*. The former consists of an ulcerous perforation of the coats of the vagina anteriorly with the bladder, by which a communication between them is established, so that the urine dribbles away *per vaginam*; and the latter of a like communication between the lower bowel and vagina, by which the fecal matters are discharged more or less through the vaginal passage. Vesico-vaginal fistulæ are much the more frequent malady, but occasionally both exist.

The causes are, wounds of the vagina by instruments intended to induce abortion; the careless or improper employment of instruments during difficult labors; the long-continued pressure of the child's head in tedious labors; the prolonged use of pessaries, &c.

In relation to the symptoms, Churchill remarks: "Whichever organ be wounded, the result is inexpressible distress to the patient. The escape of feces or urine is attended with so marked and inexpressible an odor, that the patient is placed *hors de société*. Obligated to confine herself to her own room, she finds herself an object of disgust to her dearest friends, and even to her attendants. She lives the life of a recluse without the comforts of it, or even the consolation of its being voluntary. It is scarcely possible to conceive an object more loudly calling for our pity, and strenuous exertions to mitigate, if not remove, the evils of her melancholy condition."

In vesico-vaginal fistula, the escape of the urine causes excoriation of the vagina, external parts, and thighs. When the seat of the injury is the neck of the bladder, the flow of urine is constant, but at intervals when the injury is further back.

Until within a few years these terrible maladies were regarded as the *opprobria* of surgery. Occasionally a cure had resulted from the use of caustic, or from an operation devised by some ingenious surgeon. But the great majority were beyond the reach of medico-chirurgery. Now, however, the great majority of these cases are curable. The operation usually performed consists in paring the edges of the wound, then bringing them

accurately together, and then maintaining them by means of the suture until union takes place. The principal source of failure in this operation has hitherto been, the ulceration extending from the points where the threads, used in forming the suture, penetrate the edges of the fistula, thus re-opening the wound. But this difficulty has been obviated by the employment of silver and other metallic wire for the purpose. I need not enter into the details of the operation, as no one will or should attempt it but the experienced operative surgeon.

UTERINE TYMPANITES. — This affection — the *physometra* of authors — consists in an accumulation of gaseous fluid in the uterus. This gaseous fluid may be a secretion by the lining mucous membrane of the uterus, or it may result from the decomposition of any organic material in the uterine cavity, as a clot of blood, portions of a retained placenta, or of the lochial secretions. It is much more common in lying-in women.

In most cases the os uteri is entirely closed, so that the gaseous matters are retained; but in other cases the air escapes as fast as it is produced. In the former case, there is considerable enlargement of the abdomen. The forcible expulsion of the gas is often occasioned by sudden motions and violent exertions, as blows, falls, bending forward, straining at stool, vomiting, coughing, sneezing, &c.

Various symptoms of pregnancy accompany the disease, as suspension of the menstrual flux, enlargement of the abdomen, the secretion of milk, &c. There is, usually, little pain or uneasiness, except what may arise from mechanical distention; but in some cases the patient complains of a sense of weight and heat, with a stinging pain in the tumefied part, extending to the groins, thighs, and vulva. The abdominal tumor is elastic, and yields a clear, loud sound on percussion. Conception is effectually prevented.

The resonance of the tumor will distinguish it from pregnancy, and also from dropsy of the abdomen, and, indeed, from schirrous tumors or steatomous depositions of all kinds.

The special surgical or mechanical treatment consists in the introduction of a canula into the uterine cavity, which is to be retained *in situ* until the organ is entirely empty. This, however, is only a measure for temporary relief. The intra-uterine injection of warm water daily, with alternate warm and cold hip-baths and vaginal injections, are the leading measures of the curative plan. Abdominal manipulations — rubbing, kneading, &c., the muscles of the abdomen and loins, will facilitate the cure. A moderate douche to the spine and pelvic region is also very serviceable. For patients of feeble external circulation, the alternate warm and tepid douches are to be preferred. The water for these purposes may be poured from a coffee-pot, tea-kettle, or pitcher.

The astringent lotions, caustic solutions, tonic medicines, mineral waters, antimonial antiphlogistics, mercurial alteratives, &c., recommended in medical books, had better be allowed to remain quietly in the apothecary shop. They are, one and all, mischievous.

UTERINE DROPSY. — This is the *hydrometra* of authors. It consists in an accumulation of fluid in the uterus, in consequence of the closure of the os uteri, or of the obliteration of the canal of the neck of the womb. The fluid may be secreted by the mucous membrane of the uterus, or discharged from an ulcer. The accumulated fluid may be watery, albuminous, mucous, or purulent. When ulceration exists, it is generally more or less mixed with blood. The quantity may vary from a pint to several quarts, or even gallons. When the canal of the cervix is obliterated by a condensation of its tissue, as in advanced life, an accumulation of the normal secretion of the part may occur, by which the walls of the uterus are thinned, like the *pointing* of an abscess, terminating eventually in a rupture of the organ.

The symptoms of hydrometra, in the early stage, are very obscure. The accumulation takes place very gradually; but at length the enlarged uterus may be distinctly perceived at the lower part of the abdomen; the tumefaction feels elastic, is

movable, with a sense of fluctuation. As the accumulation increases, the part becomes tender on pressure, with a dull pain or sense of uneasiness. There is some degree of difficulty of breathing, and the patient finds it troublesome to stoop forward. The menses may be suppressed or not. The urine is scanty, and deposits a brick-dust sediment. The breasts frequently enlarge, and feel knotty and tuberculated.

Uterine dropsy may be distinguished from pregnancy by the absence of fetal movement, on examination *per vaginam*, and by the distended uterus being rounder and softer than in pregnancy.

The curative plan of treatment is substantially the same as that just mentioned for uterine tympanites. It is always necessary to evacuate the contents of the uterus promptly. The douches and manipulations mentioned for the preceding malady will often suffice for this purpose. A sudden shock, as by coughing, sneezing, vomiting, jumping, sometimes answers the purpose. But in an extreme case, the canula must be resorted to. The wet-gridle should be worn constantly whenever there are evidences of inflammatory action, as heat, pain, and tenderness.

The standard authors recommend ergot, diuretics, purgatives, alteratives, blisters or issues to the sacrum, uterine injections of mineral waters, astringent injections, &c., all of which abominations I would earnestly advise the patient to avoid.

MOLES AND HYDATIDS. — These terms are employed somewhat vaguely in medical works. The term *mole* has been variously applied to masses of coagulated blood, detached tumors, and blighted conceptions, issuing from the uterus. Churchill, however, proposes to distinguish them into, 1. Blighted conceptions; 2. Fleishy moles; 3. Hydatids.

By *Blighted Conception* is to be understood a destruction of the vitality of the fœtus in its process of development; in other words, the death and disorganization of the ovum after impregnation has occurred. In the majority of these cases, the fœtus has been so completely dissolved in the *liquor amnii*

(the fluid or "waters" in which it floats in the womb), that its prior existence can only be traced by the remains of the umbilical cord attached to some part of the inner surface of the uterus. There are also portions of the fetal membranes (*chorion* and *ammion*) which are remains of the placental development.

The disorganized mass is generally expelled at the end of two or three months ; but if not, it degenerates into the fleshy mole.

The *fleshy mole* is supposed to be but a transformation of a blighted conception : it is of a denser texture and more irregular shape, the coagula or depositions having become partially organized.

This tumor, as well as the former species, may be in the form of a solid mass, or it may contain a central cavity, with a lining membrane, and some remains of the *liquor amnii*. When this liquor is absorbed, or escapes through a rupture of the membrane, the cavity becomes obliterated. The solid moles are larger than the fluid ones, and of a more irregular form. Externally, they are lobulated, of a circular or oval figure, and often covered with a layer of chalky matter. They frequently attain the size of the two fists.

Moles generally appear singly ; but instances are recorded of two ovum moles coexisting ; and sometimes, where two ova have been impregnated at or near the same time, one will perish, and the other proceed to healthy development.

These tumors may be distinguished from coagulated blood, and from polypi, by an incision which reveals their internal structure. It will be found spongy, like the placenta, with fragments or remains of the foetus or its appendages.

The third variety — *hydatids* — has received also the name of *vesicular mole*. These tumors exist at first in small numbers on the outside of the ovum, upon which they gradually encroach, until they destroy its figure altogether ; they also grow from the placenta. Mesdames Boivin and Dugés have divided the variety under consideration into three forms : 1. The vesicular mole, containing the embryo ; 2. The hollow

vesicular mole, the foetus being an encephalus, or altogether shapeless; 3. The clustered vesicular mole, where the hydatids are attached to a central part of more solid matter, as grapes are to the stalk.

Individual hydatids vary in size from a pin's head to a grape, and in shape may be round, oval, or elongated. The quantity of them contained in the uterus varies much. Dugés relates a case where fifteen pounds' weight of hydatids was discharged, which had been accumulating for a period of five or six years.

The chief danger attending their expulsion results from hemorrhage. They may be discharged in instalments, the remaining portions prolonging the flooding.

An interesting medico-legal question is connected with the pathology of uterine moles. Are they the results of conception, and consequently of sexual intercourse? The confusion of medical authors on this subject results, doubtless, from confounding fibrinous clots, or polypous growths, with moles proper.

Many authors, among whom may be named Sir C. M. Clarke and Dr. Emory Kennedy, testify that hydatids may occur in virgins, and without previous sexual intercourse. The majority of authors are, however, of a different opinion; and Madame Boivin, whose opportunities for a correct judgment were never exceeded, declares that they are degenerated ova, and always the consequence of impregnation.

While, therefore, we conclude that every variety of mole, properly so called, do not occur without sexual connection and consequent impregnation, we must recollect that this fact does not always imply criminality or impropriety on the part of the unmarried female. A widow may have conceived during the lifetime of her husband, and the death of the embryo not having resulted in abortion, it may have remained in the womb until after his death.

For the first few months, the symptoms, as would readily be supposed, are those of pregnancy. The menses are suppressed, the abdomen enlarges, the breasts increase, the areolæ darken,

and the uterine tumor is distinctly felt; the health of the patient suffers but little, and the mechanical inconvenience seldom exceed that which is ordinarily caused by normal pregnancy. And when the uterus makes the effort to expel its contents, the phenomena are those of ordinary labor or abortion — as preliminary mucous discharge from the vagina, expulsive or labor-pains, more or less hemorrhage, and at length the discharge of the mass.

In the treatment of moles, we have little or nothing to do until the commencement of the uterine effort at expulsion. When repeated hemorrhages occur at that time, or previously, cloths dipped in cold water should be applied to the abdomen and vulva, and, if necessary, the vagina should be filled with lint or soft linen cloth. These measures will generally restrain the bleeding until the uterine contractions detach and expel the mole. But should they fail, and the uterine distention be sufficient — equal to that of pregnancy at seven months — the hand may be introduced, and the tumor brought away. The necessity for this operation is, however, extremely rare. In ordinary cases, the required management is in all respects the same as for abortion.

CYSTS. — Tumors consisting of a membranous sac filled with a watery fluid are occasionally found in the vagina and in the *labia majora* of the vulva. They are of various sizes, from a pea to that of a cherry, or even larger, are more or less tender to pressure, and seriously incommode and sometimes prevent sexual connection. At the menstrual period they are liable to become very much swollen by sanguineous congestion, and the same result often occurs after great fatigue or excessive coitus.

The only remedy is surgical. If the cyst is small, it may be destroyed with caustic. If large, it must be extirpated with the ligature or knife. When the base of the tumor is not well defined, so as to admit of excision or ligation, our only resource is to open the cyst, and into its cavity introduce pledgets of lint with some irritating ointment or powder, as iodine or sulphate of zinc, to produce suppurative inflammation.

CAULIFLOWER EXCRESCENCE. — This disease consists of a morbid growth from a part or the whole of the circumference of the os uteri; but, in some instances, it springs from the surface of the uterine cavity. It is met with in females of all ages, married or single. Still, it is much less frequent than are polypous tumors, magignant ulcers, or even cancers.

The tumor is highly vascular, of a bright flesh color, upon which are numerous small projections. Its surface may be slightly granulated or smooth: its structure is rather firm, but will bleed if roughly handled. It is covered with a fine membrane, which secretes a watery fluid, and this is discharged copiously. Its size is much affected by the dilatibility of the vagina, from which it sometimes protrudes. When removed, it rapidly grows again.

By speculum examination we discover a tumor composed of small irregular globules, collected into masses, projecting unequally, and of a bright-red color.

The symptom which first attracts the attention of the patient is an unusual moisture about the external parts, and which soon becomes a copious watery discharge from the vagina. In some cases this discharge is enormous, amounting to a rapidly exhausting drain upon the constitution. Sooner or later the discharge becomes streaked with blood, and at length profuse and alarming hemorrhages occur. Sexual intercourse and motions of the bowels aggravate the bleeding, and a vaginal examination will cause flooding. The progress of the disease is generally rapid after the hemorrhagic stage is reached, and the patient dies of loss of blood.

Cauliflower excrescence may be distinguished from *fibrous tumors* and *polypus* by its greater softness, its rough granulated surface, by its bleeding when touched, and by the absence of a pedicle; from the *fungous surface of a cancer*, by the tumor being distinct, soft and movable, and by its attachment to the lip of the os uteri; and from the *edge of the placenta*, by the absence of the signs of pregnancy.

This affection has been cured both by excision, ligature, and by caustic. In some cases, however, all of these plans have

failed, probably because they were undertaken too late, or injudiciously managed. Injections of cold water into the vagina and rectum will do much to restrain the excessive sanguineous or watery discharges, and check further development. In using vaginal injections, great care should be taken not to introduce the pipe so far as to come in contact with the tumor, and induce hemorrhage. I have found ice more safe, convenient, and efficient in cases disposed to bleed excessively. As large a piece as convenient may be introduced into the vagina, or this may be filled with pieces of ice, which should be allowed to melt away, the patient meanwhile lying on the back, with the hips moderately elevated. It may be repeated several times in course of the twenty-four hours.

The radical cure consists in removing the excrescence with the knife or the ligature, and the subsequent cauterization of the part.

CANCERS AND CANCROID GROWTHS. — Cancer of the uterus is not a very rare, and is almost always a fatal disease. Cancroid tumors, also, affect the vaginal passage occasionally, and are in most cases associated with cauliflower vegetations of the womb. This complication is beyond the reach of surgery.

Cancer of the uterus commences by a hard indurated tumor, which sometimes seems to be a mere thickening of the cervix, and gradually proceeds to ulceration. Dr. Carswell has well defined cancer as consisting in the "formation or deposition of a peculiar substance, which presents great variety of form, consistence, and color; frequently assumes a definite arrangement, and possesses a vascular organization of its own; gives rise to the gradual destruction or transformation of the tissues in which it is situated; affects, successively or simultaneously, a greater or less number of organs, and has a remarkable reproductive tendency."

In the stage of induration, termed *scirrhus*, the uterus descends in the vagina, consequent on its increased weight; there is often distressing tenesmus, from its pressure on the rectum,

with occasionally lacerating pains in the pelvis. As this stage merges into the ulcerative, called *open cancer*, the mucous discharge is more or less mixed with blood; the os uteri is more open than usual, but the lips are rigid; and the uterus soon becomes fixed and immovable, in consequence of its enlargement. When ulceration is about to commence, some part of the swollen viscus may be felt softer than the rest, indicating the point where suppuration is to commence; and this part will be tender and painful.

The change from scirrhus to ulceration is attended with a great aggravation of most of the previously existing symptoms. The pain becomes often excruciatingly lancinating, as though knives were being plunged into the part. In some cases, however, the pain is described as more burning than lancinating; and I have known one case in which there was scarcely any pelvic pain at all. The pain, when present, is generally constant, aggravated by severe paroxysms, which shoot from the uterus, through the pubes and loins, and down to the arms and thighs. Hemorrhages usually occur soon after ulceration commences, and are not unfrequently mistaken for a return of the menses. The quantity of blood lost is generally greater in the early stages of ulceration than subsequently. When ulceration takes place, the discharges become intolerably fetid. The color of the discharge soon varies from a dirty white to a dark brown, green, or black. It is ordinarily acrid, excoriating the inner surface of the labia, the orifice of the vagina, and extending to the arms and thighs.

It is needless in a work of this kind to go into the details of the treatment of this formidable malady. The majority of cases arrive at the fatal stage before the character of the malady is discovered. Nevertheless, a few cases have been cured, and many more could be, if detected in the early stage, or before ulceration had progressed to any great extent. Cauterization is the only method of treatment that should ever be undertaken with the view of a radical cure, and the sulphate of zinc is, perhaps, on all accounts, the agent to be generally preferred.

FIBROUS TUMORS. — These are dense morbid growths, of a non-malignant character, not liable to ulceration, and which are of a fleshy appearance. They vary greatly in size, although they seldom exercise but little influence on the general health, excepting that which results from mechanical pressure.

Fibrous tumors are of all sizes, from that of an almond to that of a man's head. They may exist singly, or consist of a congeries of smaller tumors, agglomerated into one large mass; and they may be either embedded in the uterine walls, or be situated immediately behind the serous or mucous membrane, in this case causing much alteration in the figure of the womb. They seldom commence near the cervix.

Their structure varies much: some are fleshy, with interlacing fibrous lines; others are more red and vascular, resembling the structure of the uterus; but the majority are composed of white or gray fibrous tissue, with cellular areolæ. Some of the harder portions consist of calcareous matter.

The symptoms in the early stages are very obscure. The patient will complain of a sense of weight in the pelvis, with bearing down, and an aching in the loins. If the tumor be large, its pressure upon the bladder or rectum will cause more or less inconvenience in the evacuations of feces and urine.

A large tumor near the fundus, on the outside of the uterus, may occasion retroversion of the womb. The presence of fibrous tumors often interferes with the menstrual function, and frequently causes menorrhagia. Pregnancy is not always prevented by their presence; but parturition, at full term, may be rendered difficult, and the danger of flooding increased.

If the patient be thin, we may be able to detect the tumor through the abdomen. When it is situated in the lower part of the uterus, its situation, size, and density can be ascertained by a vaginal examination.

These tumors are seldom so situated as to come within the province of surgical treatment. As they are a product of inflammation or perverted nutrition, the correct and only principle of cure consists in supplying the system with pure

nutrition, removing all sources of obstruction, and promoting energetic absorption. The diet must be exceedingly simple and rigidly abstemious, bordering closely on the "Hunger-Cure." The bowels must be kept entirely free, and the skin rendered as active as possible. Moderate douches to the spine and loins are good auxiliaries. The fact that fibrous tumors are frequently absorbed spontaneously affords much encouragement to this plan, and I have certainly known complete success to result from it.

POLYPOUS TUMORS. — Polypi differ but little in structure from fibrous tumors, but more in form and situation. They are not embedded in the substance of the uterus, but attached to some part of it by a neck or pedicle, which is smaller than the body of the polypus. They are generally round or oval in shape, but may vary in form in consequence of the pressure of the uterus or vagina. They are found of the size of a pea, and of enormous magnitude. In color some are white, others reddish, and others dark brown. Some grow from the fundus of the uterus, others from the inner surface of the cervix, and others from the rim of the os uteri.

The manner and place of attachment is of great practical importance. Says Dr. Gooch: "In ascertaining the nature of the tumor, for the purpose of determining the propriety of removing it by an operation, the mode of its attachment is one of our chief guides; and, in this respect, what is true of polypus of the fundus is not true of polypus of the neck or lip. In polypus of the fundus the stalk is completely encircled by the neck of the uterus; and if the finger can be introduced into the orifice, it passes easily round between the stalk of the polypus and the encircling neck. In polypus of the neck, the finger cannot be passed quite round the stalk; it may be passed partly round it, but it is stopped when it comes to that part where it is attached to the neck: the stalk is only *semi-circular* by the neck. In polypus of the orifice or the lip, the stalk does not enter the orifice, but grows from the edge of it: it feels as if a portion of the lip were just prolonged into the

stalk, and then enlarged into the body of the polypus. When a polypus grows within the uterus, it dilates its cavity, neck, and orifice, as in pregnancy. Instead of the orifice, with the projecting part of the neck, forming a narrow chink in a firm, thick nipple, it is a round space with thin edges, as in advanced pregnancy. In polypus of the neck and that of the lip, the projecting part of the uterus preserves more of its ordinary form and consistence."

Polypi are sometimes detached and expelled as round tumors by the contractile efforts of the uterus.

In their structural arrangement, polypi have been distinguished into three varieties, the *glandular*, the *cellular*, and the *fibrous*. They are scantily supplied with blood-vessels, and have no sensibility. They are, however, extremely liable to bleed, and the hemorrhages are nearly as severe from small as from large polypi. The source of the loss of blood is, probably, the enlarged, flabby, and congested vessels at and near their place of attachment.

"In the early stage," says Churchill, "both the local and the general symptoms are extremely slight and undecided; but when the disease is more advanced, they assume a distinct and formidable character. Amongst the most prominent is the excessive loss of blood. Hemorrhages occur repeatedly, but irregularly as to time and quantity. The quantity lost is, in many instances, sufficient to blanch the surface of the body, and even the lips, and to induce all the consequences of anemia. The appetite becomes impaired; the bowels relaxed; œdema of the extremities occurs, &c., and the patient is reduced to the greatest extremity. The attack is at first mistaken for excessive menstruation, and thus advice is not sought until the constitution has severely suffered. In amount of loss the disease goes on ever increasing. The blood may be discharged in a fluid state, without any smell, or it may come away in clots, some of them being accurate moulds of the polypus to which they have been applied, and when retained long in the vagina giving forth a putrid odor, calculated to lead to a wrong diagnosis. There is as much hemorrhage, in many

cases, where the polypus is not larger than a filbert, as where it is the size of a pear: indeed, it would appear that there is sometimes less hemorrhage with very large polypi than with smaller ones."

Frequent vomiting is one of the most constant and distressing symptoms, owing to the loss of blood, the expulsive efforts of the uterus, and the dragging down of the tumor. During the intervals between the hemorrhages, there is either a leucorrhœal discharge, which may be serous, mucous, sanious or sanguineous, or a fetid, discolored fluid.

When the tumor is large, its pressure on the bladder and rectum will excite frequent desire for, and at the same time impede, the evacuation of urine and feces.

Polypous tumors may induce prolapse or even inversion of the uterus.

A vaginal examination will readily detect the polypus, when it is not wholly within the uterine cavity. A round, smooth, insensible, and generally pear-shaped tumor will be present in the cavity of the pelvis, the stalk of which may be traced to or through the os uteri, provided there be room to pass the finger.

If the polypus be very small and wholly within the uterus, the only mode of determining its presence is by dilating the cervix, by means of sponge tents, until the finger can pass into the cavity.

The results of experience, as published by Dr. Montgomery, are valuable here: "1. That small polypi, or polypoid uterine excrescences, are of frequent occurrence. 2. That they are often not discernible by the touch alone, and so escape notice. 3. That they may even elude detection with the speculum, unless the instrument is capable of separating the lips of the os. 4. That they are a common cause of ulceration and menorrhagia, the cure of which requires, as a preliminary, the removal of the polypi. 5. That while thus on the one hand a small polypus may escape detection, there is on the other hand a peculiar condition of the anterior lip of the os uteri, liable to be mistaken for a polypus, and requiring a long time for its

removal. 6. That the very small polypus of the os uteri is seldom solitary; and in common with polypi of other kinds, is very often combined with other diseases of the uterus, especially with fibrous tumors. 7. That these small polypi of the os uteri, when occurring in women of advanced age, especially if they are of a vesicular kind, are often the precursors of a malignant form of disease. 8. That from polypus being very frequently accompanied by ulceration of the os and cervix uteri, and from its concomitant pain and structural alteration, the symptoms are occasionally mistaken for those of cancer; which error is most likely to be committed, if an examination should happen to be made just when a polypus of larger size is passing through, but still engaged in, and distending the os uteri. 9. That in cases of larger sized polypi, ligature is the means most generally eligible, as being safer than excision, though not so expeditious; its application having in general the immediate effect of restraining the morbid discharges, and ultimately curing the disease. 10. That polypi and polypoid growths, of small size, are best removed by torsion, or in some instances their destruction may be conveniently accomplished by caustic. 11. That with large polypi torsion is unsafe, and should not be attempted. 12. That even with one of small size and slender pedicle, excision is not free from risk of troublesome hemorrhage. 13. That in ordinary cases of benign polypus, when no other uterine disease exists, the removal of the tumor by ligature is in a vast majority of instances completely successful, even in apparently hopeless cases. 14. That in malignant growths, such as cauliflower excrescence, removal by ligature will sometimes effect a complete cure; and that when success is not so decided, much good may be done by the operation. 15. That the situation whence a polypus springs makes a great difference in the symptoms which it induces. A polypus on the lip of the os gives rise to fewer symptoms and less discharge than one of smaller size springing from within the os uteri. 16. That fibrous tumors formed in the substance of the uterus may thence descend, pass through the os, and form an ordinary pediculated polypus in the vagina.

17. That in the unimpregnated uterus this change will be effected gradually and slowly, but that, should pregnancy occur, expulsion of the tumor may take place rapidly, under the action of labor. 18. That a polypus of large size may make its first appearance immediately after delivery. Lastly, that the cure of long-standing polypus, with copious discharge, is liable to be followed by a condition of system requiring to be followed by precautions against a determination to the head."

For full details of the management in the removal of the various forms of polypi, I must refer the reader to the works on surgery.

The success of surgery, however, depends much more on the proper hygienic management of the patient than most physicians seem to be aware. And I have known cases in which polypous tumors have entirely disappeared without any surgical interference whatever. A few years since, one of my patients, residing near New Haven, Conn., who has suffered for years from uterine polypus, and who had been blanched to a ghost-like paleness by repeated hemorrhages, was examined by Dr. Knight, of Yale College, with the view of determining on the propriety of severing the tumor by ligature. Dr. Knight deemed it advisable to wait until it was further developed. In one year from this time there was no trace of a tumor to be found. Under a rigid system of diet, and careful attention to every condition of health, the morbid product had been entirely absorbed.

OVARIAN DROPSY. — By this term is understood an accumulation of fluid in the ovary, contained in one or more cells or cysts. The term, *dropsy of the ovarium*, is objected to by some authors, on the ground that the affection is not dependent on an increased effusion of a natural serous secretion and exhalation, but is of the nature of a *cystic sarcoma*, "consisting in a peculiar change of structure, and the formation of many cysts, containing sometimes watery, but generally viscid fluid, and having cellular, fibrous, or indurated substances interposed between them, frequently in considerable masses."

The dropsical fluid varies much in quantity, from a few ounces to several gallons, which generally accumulate again very rapidly after being drawn off by tapping.

When the tumor is composed of a single cyst, or of many which communicate with each other, one puncture will suffice to drain off the whole fluid.

The disease progresses very slowly. It may be months or years, after a slight enlargement and uneasiness is noticed in one side of the lower portion of the abdomen, before the tumor attains any considerable size, or causes much suffering. While the diseased ovary remains in the pelvis, the more prominent symptoms are a sense of weight, suppressed menstruation, and frequently an enlargement of the breast, sometimes accompanied with morning sickness and a secretion of milk, all of which symptoms are liable to be mistaken for the indications of pregnancy.

As the tumor increases in size, its weight becomes painfully inconvenient, and is accompanied with difficult urination, and, generally, with constipation and piles also. The pressure on the rectum often occasions great distention of the bowels, and the patient complains of a dragging sensation in the loins.

A vaginal examination discloses a tumor between the vagina and rectum, with the os uteri in its natural situation or not, according to the size of the tumor. The tumor is not sensible to pressure.

In order to distinguish the tumor from retroversion of the womb, it may be necessary to introduce the finger into the rectum, when the fundus uteri will be found *above* the tumor.

After the enlarged ovary has ascended from the pelvic cavity into the abdomen, the symptoms are variously changed. Instead of difficulty in avoiding the urine, there is difficulty in retaining it long. There is no further sense of weight or bearing down in the pelvis; but as the tumor increases it presses more or less on the bowels, stomach, liver, and diaphragm, causing palpitations, heartburn, difficult breathing, &c.

The disease may terminate in *resolution* by an absorption of the fluid; *adhesions* may take place between the ovary and

adjacent parts — the small intestines, colon, bladder, vagina, &c., by which the fluid is evacuated, and temporary if not permanent relief obtained; *suppuration* may take place, soon carrying off the patient; or the contents of the ovary may be evacuated into the peritoneum, causing speedy death. Favorable terminations are, however, extremely rare.

In the treatment of ovarian dropsy, almost all the drugs and poisons known to chemistry and the arts have been resorted to by the medical profession, with no other result than that of hurrying the patient out of the world. And the standard authors still recommend, in the early stages, various diaphoretics, diuretics, and purgatives, though they do not pretend to record any beneficial results from them. Cupping, leeching, blistering, scarifying, mercurial salivation, antimonial pustulation, &c., have been brought to bear with deadly efficiency on the patient's constitution, as though the disease was not enough of itself to insure a speedy passport to the grave.

Tapping the tumor does indeed, in most cases, prolong life for a few months, and sometimes for a year or two, and in some rare instances has been followed by recovery.

The extirpation of the diseased ovary has been practised by a number of eminent surgeons; but the fact, that the majority of practitioners are utterly opposed to it, sufficiently attests its ill success.

A thorough hygiene, with occasional tappings, comprehends the sum and substance of the appropriate treatment. On the adoption of a physiological regimen, I have known the progress of the disease at once arrested, and in some cases the tumor has to a great extent subsided, so that it was a source of very little inconvenience. The dietary must be very plain, rather abstemious, the bowels at all times kept entirely free, and all impurities depurated from the blood by such bathing processes as are adapted to the state of the circulation.

FIBROUS OVARIAN TUMOR. — Fibrous tumors may be attached to or embedded in the substance of the ovaries, and are often coincident with fibrous tumors of the uterus. Dr.

Baillie describes them: "The ovarium is much enlarged in size, and consists of a very solid substance, intersected by membranes which run in various directions. It resembles in its texture the tumors which grow from the outside of the uterus, and I believe has very little tendency to inflame or suppurate."

Fibrous tumors of the ovaries sometimes become of enormous size — Cruveilhier says from thirty to forty pounds.

As to treatment, the remarks made in relation to ovarian dropsy will equally apply to the case before us.

MALIGNANT OVARIAN TUMOR. — Under this head may be named *scirrhus*, *cancer*, and *fungus hematodes*, all of which may be properly regarded as modifications of the same essential malady. This disease is by no means uncommon, some authors regarding it as more frequent than cancer of the breast.

The symptoms do not differ materially, except in severity, from those which attend non-malignant tumors of the ovary. The case only consists of palliative treatment.

PROLAPSUS OF THE VAGINA. — The mucous membrane of the vagina, in consequence of extreme relaxation — the result of chronic inflammation, too frequent child-bearing, prolonged congestion, leucorrhœa, &c., — may so descend or fall down, as to constitute a tumor within the passage, or protruding from it. Authors, therefore, distinguish three forms of vaginal prolapse — *anterior*, *posterior*, and *complete*.

In the first-named variety, the anterior wall of the vagina descends so as to constitute a soft globular tumor, which is pushed along by the distended bladder, sometimes protruding externally when the bladder is full.

A vaginal examination will disclose a round, soft, elastic, fluctuating tumor, of a red or bluish-red color, at the orifice of the vagina, varying in size at different times, but which can be greatly diminished by drawing off the urine with a catheter. The finger can be passed into the vagina *below* the tumor, and the os uteri can be felt behind and above it in its natural situation. It is always attended with an increased mucous discharge.

When the posterior wall of the vagina is prolapsed, the symptoms do not differ materially from those of the preceding variety; the finger passes *anteriorly* to the tumor, and is arrested posteriorly by the mucous membrane, where it is reflected downward and forward upon the tumor.

The special cause is almost invariably habitual constipation; and when the rectum is greatly distended with accumulated feces, the tumor is protruded through the external orifice. The size of the tumor is always diminished after fecal evacuations.

In complete vaginal prolapse, the whole circumference of the vaginal mucous membrane descends, and sometimes protrudes externally to the extent of several inches. The bladder and rectum are not affected in this form of prolapse, and the evacuation of their contents does not diminish the size of the tumor.

When the tumor has been long exposed, it may become so hard and swollen as to be mistaken for prolapsus uteri; but the error may be detected by introducing the finger, and ascertaining that the os uteri is in its natural situation.

The principle of cure is sufficiently obvious. The indications are, to restore the tone and contractility of the part, and obviate the exciting causes by keeping the bowels free, and avoiding any considerable accumulation of urine in the bladder.

The French and English hospital surgeons have resorted to many expedients to reduce these tumors, the most important of which are, cutting out slips of the relaxed mucous membrane, or destroying portions thereof by means of pincers, so as to induce contraction by the process of cicatrization; others have experimented, with more or less success, with caustics, and with the actual cautery. In all of these ways more or less relief may be obtained in particular cases. They are all, however, extremely objectionable before the "turn of life," as they tend to destroy the normal sensibility and lessen the flexibility of the structure, so important in the act of parturition. Nor do I conceive them to be indispensable in any case. I have always succeeded with general hygienic treatment and

refrigerating local applications. Frequent vaginal injections of cool or cold water, and the occasional introduction of pieces of ice, — allowed to melt away while the patient retains the horizontal position with the hips well raised, — have thus far succeeded in overcoming the difficulty completely. I do not, of course, neglect the most thorough attention to the dietary, and the urinary and fecal evacuations. If there is the least tendency to constipation, enemata must be employed daily until the bowels act freely and regularly. Much of the food should be dry and solid, so as to insure thorough mastication, and no more drink should be taken at any time than is demanded by actual thirst. Salt, sugar, and all kinds of oil or grease, should be excluded.

DISPLACEMENT OF THE UTERUS. — The uterus is liable to be displaced in four several directions: 1. Downward, termed *prolapsus*. 2. Forward, constituting *anteversion*. 3. Backward, or *retroversion*. 4. By the fundus passing into or through the cavity, called *inversion*.

The predisposing causes are, relaxation of the muscular tissues, and congestion of the organ, induced, to a greater or less extent, by sedentary habits, constipated bowels, enervating food and drinks, irritating condiments, emmenagogue medicines, drastic purgatives, &c. Among the most frequent exciting or immediate causes may be mentioned violent exertions, as jumping, lifting, straining at stool, fecal accumulations in the rectum, over-distention of the bladder, the accidents of childbirth, excessive sexual indulgence, &c.

Uterine displacements are much more common among nearly all classes of women than are commonly supposed; and they seem to be on the increase, certainly among what are called the "higher classes" of society. Few disorders are the causes of a greater variety of anomalous symptoms and more aggravated sufferings; and, I might add, few are worse managed by the medical profession, so far as a radical cure is concerned.

Although occurring more frequently in women who have borne many children, malpositions of the uterus are by no means

confined to such ; nor are they very rare affections with maids. I have had occasion to treat many deplorable cases in unmarried females, and even in young girls.

PROLAPSUS OF THE UTERUS. — “ Falling of the womb,” as this variety of uterine malposition is termed in common parlance, is distinguished by authors into three forms, stages or degrees.

1. *Simple Prolapsus*, in which the uterus is merely depressed below its normal situation in the pelvis.

2. *Procidentia*, when the uterus descends to the bottom of the vaginal canal.

3. *Protrusion*, when the os uteri, with more or less of the body of the organ, protrudes externally.

Some authors prefer to distinguish all degrees of falling of the womb into the *partial* and *complete prolapsus* ; limiting the former term to all degrees within the vaginal passage, and applying the latter to all degrees of protrusion beyond.

Dr. Hamilton remarks : “ Of all the chronic diseases arising from a local cause, to which women in civilized society are liable, prolapsus uteri, or displacement of the womb, is perhaps the most frequent.”

Says Dr. Clarke, in his work on “ Diseases of Females,” “ Every degree of prolapsus uteri may be met with, from that case in which the os uteri descends a little lower than its natural situation, to that in which the os uteri projects through the external parts, dragging with it the vagina, and forming a large tumor between the thighs of the woman, equal in size to a large melon. This will cause an alteration in the relative situation of the parts within the pelvis, and of the abdominal viscera, both regarding each other, and also the containing parts, as the parietes of the abdomen and the bones of the pelvis. The bladder, instead of being contained in the pelvis, falls down into the external tumor, dragging with it the *meatus urinarius* ; so that, in order to introduce a catheter in the bladder, the point of the instrument must be turned toward the knees of the woman ; for, being placed in the usual man-

ner in which that instrument is introduced, it will enter the passage, but it cannot be made to push into the bladder in that direction. The rectum, instead of taking the sweep of the sacrum, first dips down into the posterior part of the tumor, and afterwards ascends into the pelvis. The Fallopian tubes and ovaria will of course be dropped down with the uterus, and the centre of the tumor will be filled up by the small intestines which hang down into it (the mesentery being stretched); whilst the omentum will occupy any vacant space which may be left."

Scanzoni gives an admirable description of the progress of the symptoms, as the displacement goes on from partial to complete prolapsus: "The fall of the womb is developed little by little, in consequence of an interior depression of this organ, or, indeed, it takes place suddenly from some violent cause, either interior or exterior. In the first case, the patients complain for a long time, sometimes for months or years, of a painful feeling of tension about the sacrum and the groins, and of a continual or remitted pressure in the abdomen, as if a voluminous mass was being pressed out of the vulva. They are often tormented with tenseness of the bladder, with dysuria, and obstinate constipation, symptoms of which are constantly increasing in intensity, and attain a degree insupportable to the patient at those times when the uterus becomes more voluminous, tumefied, and weighty, in consequence of the menstrual congestion. In the majority of patients, sympathetic symptoms in the direction of the digestive organs are also met with, such as twinges in the epigastrium, cardialgic pains, paroxysmal swellings of the intestines, &c. The alimentation being no longer sufficient, disorders in the functions of the nervous system supervene, inducing all the various symptoms of hysteria.

"The malady thus continues for a certain time. Then, without any exterior cause, there is suddenly seen in the vulva a round or oval tumor, ordinarily formed by the interior wall of the vagina. It is painful, and from the size of a nut it increases very rapidly for some weeks, and, as it augments, it

ordinarily becomes more compact and firm. At this epoch the neck of the uterus has already passed the vulva, and if recourse be not had to proper treatment, or if the patient is forced to perform laborious work, calling into frequent activity the abdominal pressure, the uterus and the vagina progress outward continually toward the vulva, and when their walls are considerably hypertrophied, they may form a tumor as large as the fist.

“This tumor generally presents to the touch a doughy consistence, and it is only by exciting a stronger pressure that we discover the compact tissue of the uterus buried in the centre of the tumor. The tumor often increases many times in size in the course of a day: it is then more distended, especially in its anterior portion, where sometimes even pulsations are recognized. Similar symptoms render it extremely probable that the fundus and the posterior wall of the bladder have, in consequence of their intimate connection with the uterus, undergone a displacement backward and downward, in such a manner that a part of the bladder is found enclosed in the pocket formed in front of the vulva by the anterior wall of the vagina, an accident which is commonly designated by the name of vaginal cystocele. In such cases micturition is often painful, and sometimes even it is not possible, except when the patient has with the fingers pushed back into the pelvis, and retained in this position, the tumor situated in front of the vulva. Little by little the portion of the wall of the bladder directly behind the neck of this organ undergoes a depression; it thus forms a furrow, in which, by reason of its dependent position, the urine is collected and decomposes: this irritates the mucous membrane, and often gives rise to a catarrh, or even to a croup-like inflammation, which extends over all the surface of the mucous membrane of the bladder and the urethra. This displacement of the bladder is recognized with certainty by introducing a male catheter considerably bent: in fact, when we wish to introduce it with the concavity upward, an obstacle is generally met with, while the catheter enters very easily when its concavity is turned downward and backward. The

point of the instrument can then be perceived upon some spot on the anterior part of the tumor situated in front of the vulva.

“When the prolapse of the vagina is very considerable, it often drags the anterior wall of the rectum considerably forward, and thus gives rise to a dilatation of the part of this intestine situated in front of the sphincter ani: this dilatation is easily recognized by introducing a finger in the rectum. Sometimes even when the vaginal touch demonstrates the presence of this dilatation, when, after having previously caused the evacuation of the feces, we still find in the lower part of the rectum, hardened, globular fecal matters pushing forward the posterior wall of the vagina. Sometimes a prolapsus of the rectum accompanies prolapsus of the womb, especially in aged women, with whom the usual disappearance of the fat filling the cavity of the pelvis, the relaxation of the aponeuroses, and particularly of the sphincter ani, form the descent of the rectum.

“The tumor situated in front of the vulva is ordinarily rose-colored or livid: when the malady has lasted for some time, and when the tumor has been long exposed to the influence of the air, it is quite dry, and the thin mucous membrane resembles parchment. The inferior part of the tumor is formed by the neck of the uterus, the internal surface of which is often turned outward, as we have above indicated, in such a manner that we find around the orifice of the uterus a circle, whose diameter sometimes attains to one or two inches, and is noticeable by a coloration of a lively red, and by a humid and viscous surface.

“If the uterus remains long out of the vulva, it is exposed to injurious influence from the atmospheric air, from the friction of the thighs and clothing, and especially from the flow of urine, which continually moistens the tumor. Hence, we frequently find over the whole surface of the tumor, and particularly upon the inverted mucous membrane of the neck, ulcerations and a croupy inflammation, which, if the proper treatment of it is neglected, may lead to mortification of some

portions of the vagina and uterus. We have observed a case in which a gangrenous ulcer of the size of a half-dollar, situated at the anterior part of the prolapsus of the vagina, perforated the bladder enclosed in the tumor, and was thus the cause of an incurable vesico-vaginal fistula. In prolapsus of the uterus, the mucous membrane of this organ is almost always the seat of a considerable hypersecretion, which is recognizable by a discharge which is mucous, puriform, and sometimes fetid and corrosive. Ordinarily, prolapsus is the cause of various troubles of menstruation: when the walls of the uterus are engorged, the menstruation is generally defective in quantity, or there is even complete amenorrhœa, while, when the tissue and mucous membrane of the uterus are softened and relaxed, and the circulation is restrained in the vessels of the pelvis, the menstruation is very abundant, more frequent than ordinary; indeed, we sometimes meet with undoubted menorrhagia.

“In consequence of the alterations of tissue, the chronic catarrh of the mucous membrane of the uterus, which often extends to that of the Fallopian tubes, the displacement of these latter organs and of the ovaries, which often accompany the falling of the womb, a great number of the women affected with this disorder are unable to conceive. On the other side, experience has demonstrated that, in the absence of these anomalies of the uterus and its appendages, the lower position of the womb, and the extraordinary dilatation of the cavity of the neck, favor the introduction of the seminal fluid, and thereby render conception more probable.

“When the prolapsus has suddenly taken place, — as sometimes occurs in lifting a heavy burden, in a violent fit of coughing, in violently straining at stool, &c., — the sudden displacement of the womb is ordinarily accompanied by an intense pain about the sacrum and the two inguinal regions, and more or less marked nervous symptoms, as, for example, syncope, violent vomitings, intense cardialgic pains, etc. It sometimes happens, indeed, that the sudden tension of the folds of the peritoneum, which attach the uterus to the walls of the

pelvis, gives rise to peritonitis, which, by the violent fever and considerable exudation which sometimes accompany it, may jeopardize the life of the patient."

In the treatment of prolapsus uteri, physicians have experimented the rounds of the materia medica, with scarcely any benefit to the local difficulty, and with great damage and often utter ruin to the constitution of the patient; while surgeons have expended a world of ingenuity in contriving pessaries, supporters, caustics, and operations, the results of which, on the whole, have been vastly more mischievous than useful.

The idea of restoring the displaced organ to its normal position and condition by any mechanical contrivance is an absurdity. The essential morbid conditions to be altered are congestion, and perhaps hypertrophy in the uterus, and relaxation and debility in the vaginal walls and uterine appendages. A pessary or supporter may, indeed, sustain the uterus in position; but it is done by restraining the action of the abdominal muscles, and pressing outwardly against the vaginal parietes, so that the temporary advantage is obtained at the expense of aggravating the real causes of all the difficulty. The consequences of this instrumental treatment, according to the standard authors, have been most horrible. Dr. Leake speaks of pessaries as both "painful and indelicate, and, instead of strengthening a weak point, they lay additional stress upon it." He also mentions the following objections: "1. That, if too small, the pessary will not rest in the passage, but will be forced out. 2. If too large, it will occasion profuse leucorrhœa and great pain. 3. That it has been known to make its way into the rectum."

Dr. Annan, of Baltimore, says of pessaries: "Irritation is the inevitable consequence of the constant pressure of a foreign body upon the delicate membrane lining the vagina, and in many instances it becomes insupportable. Ulceration has been produced in many cases, and a communication has been established between the rectum and vagina, and the pessary has passed into the bowel! Another objection to the pessary is,

that it dilates the vagina; and when removed, the uterus has a better opportunity for descending than it previously had."

Professor Dieffenbach, of Berlin, says: "I have frequently seen pessaries produce putrid discharges from the vagina; in other cases, dilatation to a most inconvenient extent; in others, contractions of the same organ;* and finally, in other females, the still more dangerous accidents of cancerous or fungous productions from the vaginal mucous membrane. Sometimes I was able to extract the foreign body with my fingers, but in many cases it was necessary to break it up with strong forceps, before the fragments of a fetid, incrustrated substance, whose composition could not easily be determined, were removed. Several patients labored under excessive irritation of the bladder; and when the foreign body was large, many suffered for years under obstinate constipation."

Notwithstanding the acknowledged ill success and positive dangers of the pessary practice, I find it in vogue all over the country. I rarely see any cases of prolapsus uteri of long standing, in which the patient has not either worn a pessary, or had one recommended by the "family physician." Many practitioners have, however, recently resorted to various substitutes, the most prominent of which are, burning out patches of the vaginal mucous membrane with a hot iron or with strong acids, or cutting them out with a knife or ligature, or destroying them with pincers so applied as to interrupt the circulation and cause mortification and sloughing, and powerful astringents to corrugate and condense the relaxed tissues. Each of these measures will produce some degree of temporary relief, but all are injurious, and some extremely dangerous. And here, as everywhere, the hygienic plan of medication manifests its incomparable superiority.

The general system should be invigorated in all possible ways; for unless we can exalt very greatly the contractility of the entire muscular system, we shall produce but little tone in the part most enfeebled. And the good effects of all the re-

* This contraction is the result of ulceration and cicatrization. T.

sources of our art on the local debility may be very accurately estimated by the increased tone and energy evinced by the constitutional condition.

The local tonics as well as sedatives are chiefly hip-baths and vaginal injections, as cool as the patient can well bear, and repeated several times a day. The application of pieces of ice, as recommended for vaginal prolapse, is highly useful in many cases, and in some indispensable.

Abdominal manipulations — rubbing, kneading, “movement cure,” &c. — should never be neglected in a bad case; for it often happens that weakness and torpidity of the muscles constituting the walls of the abdomen are the chief causes of obstinate and prolonged constipation, while the constipation is the immediate and efficient obstacle in the way of the patient's recovery.

Whenever the congestion and the inflammatory tenderness of the parts is overcome, attempts at reposition should be made daily, or two or three times a week. The uterus should be pushed upward with the finger as far as practicable — the patient meanwhile lying on the back — and retained there for half an hour to an hour by the patient's keeping the horizontal position. In this way it may be gently and gradually worked up to its normal position, while the measures already indicated are preparing the structures to sustain themselves.

A temporary support may be supplied in a piece of very soft sponge, or something similar, in order to enable the patient the better to bear the abdominal manipulations, or to take exercise, if need be, immediately after the organ has been replaced; but it should be soon after removed.

ANTEVERSION OF THE UTERUS. — In *anteversion* of the uterus, the fundus or body of the organ inclines forward toward the bladder, and the neck or cervix projects backward toward the rectum. It may lie transversely, or nearly so, across the pelvis, the fundus forward and the os uteri backward, or the fundus and neck may be flexed on each other at an acute angle, constituting the condition termed *anteflexion*.

The pathological conditions which chiefly predispose to the

bending forward of the uterus are congestion of the fundus, rendering the upper part of the organ heavier than it is normally, a weakened and relaxed state of the abdominal muscles, and a constipated state of the bowels. While distention of the bladder — which is a frequent cause of *retroversion* — tends to prevent anteversion, at least for the time being, it is obvious that accumulated feces in the rectum may be an efficient means of pressing the uterus forward, and inducing anteversion more or less complete. The presence of tumors is also sometimes a predisposing cause. Exciting causes are all kinds of violent exertions, falls, blows, severe diarrhœa, purgative medicines, &c.

The symptoms are generally obscure, especially in the early stages. The patient complains of an unusual weight in the pelvis, with pain in the lower part of the abdomen and perineum, and a sense of dragging or bearing-down from the loins, all of which are increased by walking or standing. Leucorrhœa is usually present, and there is more or less menstrual disturbance. Generally there is a frequent desire to urinate, occasioned by the pressure of the uterus on the neck of the bladder, and sometimes the fecal evacuations are obstructed by the pressure of the cervix on the lower bowel.

A vaginal examination will readily disclose the nature of the malposition. The passage will be filled with the dense roundish body of the uterus, the os uteri being directed posteriorly and the fundus anteriorly. In anteflexion, the os uteri and fundus will be in close proximity in the centre of the pelvic cavity, while the finger will at once detect a sharp concavity or acute depression between them. The uterine sound will not pass in the usual direction, but requires to have its point directed much more forward; and if a catheter be introduced, it will infringe upon the displaced fundus, and perhaps give rise to a suspicion of stone in the bladder.

The management of anteversion, so far as hygienic considerations are concerned, is the same as for prolapsus. In order to effect the reposition of the organ, the cervix should be brought down with the forefinger of one hand, whilst the fundus is gently pushed up with the other. The process may

have to be many times repeated before the parts will acquire the requisite self-sustaining tone, and the patient should remain quietly in bed for several hours after the organ is replaced.

RETROVERSION OF THE UTERUS. — This form of displacement is the reverse of the preceding. The fundus of the uterus tilts backward against the rectum, and the os uteri projects forward toward the bladder. An extreme case is termed *retroflexion*, which is exactly the opposite of ante flexion.

The predisposing and exciting causes of retroversion do not differ from those of anteversion, with this exception. Accumulations in the rectum which tend to produce anteversion may, temporarily at least, operate to prevent retroversion, while an over-distended bladder, which tends to prevent anteversion, operates powerfully to induce retroversion. When the retroversion has once taken place, fecal accumulations always tend greatly to aggravate it.

When this malady is not produced by some act of violence, the early symptoms are exceedingly insidious and obscure, so much so that patients frequently suffer for years without themselves or their medical advisers suspecting the cause of the difficulty. I have had a score of patients whose poor backs were sadly marred and scarred with blisters, issues, moxa burnings, pustulations, and scarifications, for a supposed "spinal disease" which existed only in the doctor's imagination, and whose sole trouble consisted in a slight displacement of the uterus.

Churchill thus describes the order of symptoms: "In some cases no appreciable symptoms are produced, except, perhaps, a greater flow of the menses, and a greater tendency to abortion in the married female. It is often very difficult to trace the origin of the affection; it comes on so gradually, that it is only when permanent, and after some time, that it excites any influence, local or general. In other cases the patients appear to have a sensation of depression or falling down of the womb, either suddenly or gradually supervening, with nausea, vomiting, and sometimes syncope, pain, or dragging down in the groin or sacrum.

“The retroflexion becoming permanent or increasing, produces occasionally some pain and difficulty or frequency in micturition, though never retention of urine. The patients complain likewise of a dull, aching, constant pain in the back, probably from the pressure of the fundus uteri on the sacral nerves. The pain extends down the thighs, and there is a sense of weight in the rectum, with some difficulty in defecation.

“There is generally profuse leucorrhœa when the disease has existed for some time, and menstruation may be profuse or painful, or both; but whether as cause or effect is not always easy to decide.

“The general health at the same time suffers more or less; the stomach becomes disordered, the bowels constipated, the spirits depressed, and hysterical symptoms often occur. The distress is greatly increased by standing, walking, or any great effort, and the patient is oppressed with languor and weakness.

“On making a vaginal examination, the finger infringes upon a solid body, blocking up the passage. The cervix uteri may either be found nearly in its natural situation, or more anteriorly; and if we trace back we shall find, by the continuity of structure, that the posterior tumor is the fundus uteri. This tumor may present various degrees of depression, and its junction with the cervix uteri an angle more or less obtuse. I need not say that the tumor formed by the fundus uteri is between the posterior wall of the vagina and rectum. An examination *per rectum* will add further confirmation. But the demonstrative proof is furnished by the uterine sound: when it is passed into the cervix in the usual way, *i. e.* with the concavity of the curve looking forward, it is immediately stopped; nor can it be passed further until its position is reversed and its point directed backwards, when it immediately passes into the tumor felt in the pelvis, proving it to be the fundus uteri. Moreover, by turning the instrument gently and gradually round, so as to bring the point upward and forward, at the same time assisting the elevation of the fundus with the forefinger of the left hand, we shall find that the tumor disappears, the uterus hav-

ing resumed its natural situation. This use of the uterine sound generally occasions no pain if care be used; but if handled roughly, much pain and mischief may be the result."

Sterility is one of the almost invariable consequences of retroflexion, the uterine canal being so obstructed as effectually to prevent the passage of the seminal fluid to the ovum. In some cases adhesions take place between the fundus and the vaginal parietes, the result of inflammation, rendering all the ordinary efforts at reposition unavailing.

I have had several cases to treat in which the fundus of the uterus, pressing hard upon the bowel, had been mistaken for, and pronounced by the family physician to be, a *tumor* in the rectum; and as long ago as 1850, I treated a case of retroversion in which the enlarged fundus pressed so hard upon the rectum as to occasion great difficulty in passing the feces; and this case had been treated for ten years, by an "old and experienced" regular physician, for stricture of the bowels. These "tumors" and "strictures" always disappear suddenly on elevating the body of the uterus to its natural position.

The manner of repositing the retroverted uterus is similar to that mentioned for anteversion, pushing up the fundus and pulling down the os uteri, recollecting that in the present case the fundus is backward and the os forward. It is, however, in a general sense, a much more difficult process than in the former case. When the fundus has long rested, as it were, down on the perineum, its vessels generally become very much congested, its muscular fibres relaxed, and the whole body of the organ enlarged, while the adjacent parts are tender and inflamed, and perhaps superficially ulcerated, in consequence of the prolonged compression. In these cases it is very difficult and often impossible to replace the organ, and of no advantage when it can be done; for the heavy and softened uterus soon returns to its accustomed malposition. Hence the first thing to be attended to is the general and local health. The irritation, congestion, and inflammation must first of all be removed by the hygienic measures already indicated, while the whole muscular system must be invigorated and rendered contractile

and elastic. After these things are accomplished, the organ may be repositied and retained in its proper situation by the natural supports.

The machinery which has been invented for the malady under consideration is immense and extensive in quantity and variety, and quite as pernicious, on the whole, as that which has been applied or misapplied to prolapsus. One of the most plausible of these mechanical contrivances is the metallic or ivory stem pessary invented by Professor Simpson, of Edinburgh. The stem is introduced into the uterus, and, being also attached to a support below, retains the organ in the upright position. But nothing is accomplished in this way toward a cure, for on withdrawing the instrument the enfeebled uterus tumbles down again. Great pain and inconvenience, too, often result from its use. In many cases it causes great suffering: some females cannot endure it for a moment, while dangerous and even fatal consequences have been recorded.

Churchill relies mainly on local blood-letting, astringent injections, prolonged rest in a horizontal position, lying on the face, leeches, scarifications, with attention to the general health. Verily, if the attention to the general health is to be after the fashion of the attention recommended for the local health, common sense would seem to say, the less of it the better.

INVERSION OF THE UTERUS.—Inversion of the uterus means the organ being turned inside out. Inversion is distinguished into *partial* and *complete*. In *partial inversion* the fundus of the uterus is depressed into the cavity of the organ to a greater or less extent, while in *complete inversion* the fundus descends through the os uteri. In this case the inverted organ forms a tumor not only filling the vagina, but protruding beyond it, resembling in its form that of the uterus after recent delivery, only that its mouth is turned toward the abdomen. The os uteri may be felt at the superior part of the tumor, forming a kind of circular thickening at its apex, and the uterus will be found wholly wanting in the hypogastric region.

Inversion of the uterus most frequently occurs immediately

after delivery, though it is possible where pregnancy has not existed. The predisposing condition is a weak and flabby state of the muscular fibres of the uterus, and also of the whole muscular system, more especially of the muscles of the abdominal parietes. The exciting causes are adhesion of the placenta to the fundus uteri, pulling at the umbilical cord when the placenta is attached to the fundus, the attachment of a polypus to the fundus, and very rapid labors, especially if the patient be of the hemorrhagic diathesis. The employment of ergot and other parturifacient drugs to hasten delivery, by inducing atony in some of the muscular fibres of the uterus, and spasmodic contraction in others, thus making the uterine contractions irregular and disorderly, is sometimes the occasion of inversion.

When complete inversion of the uterus occurs suddenly, the symptoms are always alarming. There is an appearance of sudden exhaustion or sinking, the countenance becomes deadly pale, the voice weak, the pulse rapid, small, and fluttering; nausea and vomiting occur; dangerous hemorrhage also frequently occurs, and, in a large proportion of cases, fainting supervenes, followed by speedy dissolution.

When the inversion is incomplete, the uterus may be felt above the brim of the pelvis, with a cup-like depression superiorly. A vaginal examination will detect a tumor, either in the cavity of the pelvis or hanging through the vulva, of a globular form, sensible, elastic, with a rough and bleeding surface, wider below than above, where it is tightly encircled by the cervix uteri.

In cases of complete inversion, when the result is not immediately fatal, the organ may be strangulated and separated by sloughing: even this termination is not always fatal, and the inverted uterus has been removed by excision and by ligature without fatal consequences.

Whenever the accident is discovered, no time should be lost in restoring the uterus, if possible, to its normal position. The lower portion (fundus) of the tumor should be grasped in the hand and pushed to its most central and projecting portion

in the direction of the axis of the uterus, so as gradually to undo the inversion and reinvert the protruded womb. The efforts at reduction must always be made when the muscular fibres of the organ are in a state of relaxation, in obstetrical parlance, "between the pains;" otherwise the efforts would be worse than useless. When the placenta is still attached to the inverted uterus, it should be promptly removed before the attempt at reduction is made, provided it is not so firmly attached as to cause delay in the operation, in which case the organ should first be reinverted and the placenta removed afterward.