

also invented by Dr. Morton, so arranged that, while the sponge extremity is on the body, the spark can be made to pass between two balls capable of being brought close together or separated as may be necessary. In applying it to the glans penis the dry sponge disk is brought into close contact with the organ, and the brass balls being separated a half inch or more, a powerful effect is produced. In several cases I have succeeded, by means of this apparatus and statical electricity, on restoring sensibility to the glans and adjacent tissues when galvanism and faradism had failed.

On the whole I am quite satisfied that in the several forms of electricity which I have mentioned, the physician has the most important of all means for the treatment of enfeebled conditions of the generative system. There are other useful adjuncts to be presently mentioned, but they can none of them, or all of them combined, take the place of electricity.

A word more in regard to what not to use. All belts, disks, and other contrivances to be permanently worn are worse than useless. Many of these affairs furnish no electricity at all, being faultily constructed, while others only pass a current around the body, no portion of which enters at any point, and others, again, though making the body a part of the circuit, generate so feeble and irregular a current that it cannot be of the slightest service.

Among other agents of external application may be mentioned *massage*, *percussion*, *urtication*, and *flagellation*.

I have no personal experience with any one of them. The two latter were in use before electricity was brought into notice as a remedy, and though probably of some service then, are scarcely worthy of notice now. Flagellation, at one time, was resorted to as a temporary stimulus to an exhausted generative system, but I do not know that it is employed now. It was applied to the buttocks, and there is evidence to show that it was occasionally officacious in causing erection and even of reducing the orgasm, but its influence was never anything more than of the most transient character. Rousseau * speaks of its effects upon him in his childhood. Meibomius † wrote a treatise directed in great part to an account of its virtues in this direction, and the Abbe Boileau ‡ adduces many examples of its efficacy. *Urtication* was flagellation performed with nettles, and exerted a similar though perhaps for the time being a stronger influence than when ordinary lashes were used.

Mondat § devised an *exhausting apparatus* into which the penis is put, and then the rim being pressed strongly against the pubes the air is sucked out by a pump and an approach to a vacuum thus

* "Confessions," civ. i.

† "De flagiorum usu in re medica et venerea et lumborum renumque." London, 1765.

‡ "The History of the Flagellants, otherwise of Religious Flagellations among different Nations, and especially among Christians," etc. London, 1783.

§ Op. cit. p. 155.

created. As a consequence the penis at once becomes filled with blood and a mechanical erection is the result. I have tried this arrangement in several cases, but have never known it to do any good, not even for the purpose of obtaining a single act of intercourse. As soon as the air is readmitted and the instrument is removed the blood leaves the penis, and flaccidity is the immediate result. Upon one patient who employed it every application was attended with an emission and orgasm, but without the least feeling of pleasure. In careless hands it is very evident that it might cause rupture of the vessels or even of the tissue of the penis.

Sinapisms have been recommended by Roubaud* as being of decided efficacy in some cases. He makes a cataplasm composed of linseed meal and ground mustard, used in varying proportions according to the effect desired, and in which the penis is then enveloped. It is kept in this situation for from ten minutes to a quarter of an hour. Relative to its action he says:

“The application to the penis of a sinapism, even when the effect is lessened by linseed, is not always unattended with pain, and copulation practised under the excitation it causes is rather a punishment than a pleasure. To calm the pain, which sometimes is slight and transitory, I prescribe lotions of cold water to the penis, and this simple means permits of intercourse without suffering.

“The sinapism is an energetic means of treatment,

* Op. cit. p. 155.

and requires prudence and circumspection in its use. If it be applied blindly, the penis will be exposed to inflammation and perhaps even gangrene may result. In general it is necessary to remove the cataplasm as soon as the patient begins to feel the burning. Almost always a sufficient effect will then have been produced. A new application ought not to be made before the next day, or perhaps several days afterward. The total number of these applications cannot be predetermined. It depends upon the effect obtained and the state of irritation produced in the penis.”

Internal remedies.—It would be very easy to extend this division of the subject to a great limit by calling attention to all the medicines for impotence which have been recommended by writers on the subject. There is scarcely a remedy of the materia medica which has not at some time or other enjoyed a reputation for the cure of the affection in question. This is due to the fact that, as we have seen, some forms of loss of sexual power are entirely mental, and are cured by whatever obtains the confidence of the patient. It is not astonishing, therefore, to find that substances with the most opposite therapeutical properties have been found equally beneficial in giving the ability for sexual intercourse. Bread pills are fully as efficacious in these varieties of impotence as the most powerful agent, provided the patient receives them with confidence in their influence.

But while, as I have said, there are no special aphro-

disiacs, there are certainly medicines which improve the tone of the generative organs by their influence upon the nervous system as a whole. Among these, *phosphorus* is entitled to a good deal of consideration.

Probably the most advantageous manner of giving phosphorus is in the form of the phosphide of zinc, a tenth of a grain of which may be administered three times a day in pill form, or it may be given in solution, in oil, or in a pure form, as pills in doses of the sixtieth of a grain three times a day. It requires to be given for several weeks in order to the production of any permanent effect, though in a few cases I have known great benefit to be derived from its use after two or three days.

Ointments containing phosphorus have been applied to the penis and scrotum, but they are of no more value than such as may be due to the absorption into the system of a minute portion of phosphorus. They would be just as efficacious if applied to the head.

The *dilute hypophosphorus acid* is also an eligible form in which to administer phosphorus. It undergoes very speedy decomposition in the stomach, and the odor is perceived in the eructations from the stomach. The dose is from ten to thirty drops, in a sufficiency of water, three times a day, preferably at meal-times. The taste is pleasant, and on that account it is preferred by patients to any other form of phosphorus.

The *dilute phosphoric acid*, though probably not so powerful a remedy as those just mentioned, is never-

theless a useful medicine in the treatment of impotence. It is doubtful, however, if its effect is exactly that of phosphorus, which is certainly a tonic and stimulant to the whole nervous system. Phosphoric acid is probably no more influential in curing the affection under consideration than would be nitric, hydrochloric, or any other mineral acid. It is a general tonic and nothing more. The doses, from ten to fifty drops properly diluted with water, are taken preferably at meal-time so as to mix with the food. It makes a pleasant drink.

Nux vomica and one of its active principles, *strychnia*, are also medicines of great value in the treatment of impotence coming from excess. The former may be given in doses of the third of a grain of the extract in pills, or preferably combined with the phosphide of zinc. A pill which I use largely in the affection in question is thus composed:

℞ Zinci phosphidi.....gr. x.
Nucis vomicæ ext.....gr. xxxiii.
M. ft. in pill No. C.
Dose, one three times a day after meals.

There are few, if any, internal remedies so generally efficacious in the alleviation or cure of impotence arising from sexual excesses as this combination.

Strychnia may be given in pill or in solution, in water, in doses varying from the sixty-fourth to the twenty-fourth of a grain, or more, of the sulphate, three times a day. It is preferably given in gradually increasing

doses, starting with the quantity first named and carrying them slowly up to the last designated amount.

Instead of using water as a solvent it is much better to employ either the dilute hypophosphorus acid or the dilute phosphoric acid. The combination of the former which I am in the habit of prescribing is as follows:

℞ Strychniæ sulphatis.....gr. iii.
Acidi hypophosphori diluti.....oz. iv.

M. ft. sol. Dose, ten drops in water three times a day, the doses to be increased a drop every day up to twenty-five drops.

In this way a regular increase of the dose is effected until, at the end of fifteen days, the patient is taking twenty-five drops, a little more than the twenty-fifth of a grain three times daily. The dose may then be kept at this point for ten days, and then again increased up to forty or even fifty drops. If the patient is then markedly better, the further administration should be stopped for a fortnight, and then the medicine may be resumed in doses of ten drops three times a day, as before, with a slight increase. So long as benefit is derived this course may be continued. I have persevered in this way with it for over a year with the most happy results.

If after carrying the doses up to fifty drops there is no alleviation whatever, it is scarcely worth while to repeat the procedure.

The phosphoric acid may be given in like manner, and in those cases which are occasionally met with in

which the hypophosphorus acid is not well borne by the stomach it is to be preferred. In the use of both medicines the quantity of water used as a diluent should be increased as the dose is augmented, until, when forty or fifty drops are given, the amount should be a tumblerful. In some cases in which the system is greatly reduced iron is of benefit, and it may be added to the mixture first given in the form of phosphate, or it may be given separately in any other combination of a tonic character, or singly.

Cod-liver oil is, I think, a very valuable adjunct, and I rarely treat a case of impotence of the kind under notice without giving it in some form or other: an emulsion with the hypophosphites is a very eligible preparation.

With the exception of one agent of reputed aphrodisiac properties there are no others of any special value in the treatment of impotence. Derangements of other organs, however, require to be met, such as dyspepsia, when pepsin may be given; diarrhœa, which is to be treated as in ordinary cases, and so on with other non-essential conditions. The substance to which reference is made is *cantharides*, and a few words in regard to it are necessary, if only to point out the dangers attendant on its administration.

Cantharides act on the generative system as a violent irritant, but this effect is altogether secondary to its influence in causing inflammation of the bladder. In large doses they produce this effect very speedily, and, with it, often cause a state of satyriasis characterized by in-

tense, long-continued priapism with irresistible impulses to sexual intercourse or masturbation, which frequent repetition does not mitigate. Many instances of their poisonous effects are cited by authors, and not a few deaths have been the consequence of their improper administration.

But occasionally in some cases of impotence of recent occurrence benefit may be derived from the cautious administration of cantharides. The only admissible form is the tincture, and this I usually give in doses of fifteen drops three times a day, increasing the doses a drop for those of each day till slight strangury is produced. If there is going to be any beneficial effect it will be experienced at or about this time; if not, it is scarcely worth while to persevere with the remedy in this manner.

For the impotence which results from disease existing in the brain or spinal cord no special treatment is necessary or proper, as the therapeutical measures should be directed against the affection of which the impotence is only a secondary condition. To do otherwise would often be extremely prejudicial to the patient affected with organic disease. For instance, loss of sexual power is often a state present in locomotor ataxia. Phosphorus and strychnia are contraindicated in locomotor ataxia, and if administered will quite certainly increase the spinal trouble and at the same time render the impotence more profound.

And in general in all cases of symptomatic impotence

of the form under notice the treatment is to be directed against the original disease which is the cause. When that is remedied the sexual weakness will probably also disappear, but if not, then the remedial measures mentioned can be brought to bear against it.

I have said nothing of cauterization of the urethra after the manner recommended by Lallemand and followed by very many surgeons of the present time, for the reason that I think it is a most pernicious practice, and one that can scarcely ever fail to do harm without doing any good commensurate with the pain and danger attendant on its employment. There is nothing that can be done by cauterization that cannot be better and more safely effected by electricity in any of the ways mentioned. I have cauterized many patients in my time, before I knew better, and I have caused a great deal of suffering thereby and conferred a very small modicum of good, and I therefore cauterize no longer. I have seen violent inflammation of the urethra, stricture, orchitis, epididymitis, and cystitis produced by it. Some of these accidents have occurred in my own practice, and others in the experience of other surgeons. To be sure, in the great majority of cases the operation does nothing more than cause a great deal of pain and a more or less severe inflammation of the urethra, but these events are quite unnecessary, as they never follow the proper use of electricity, and the latter is far more beneficial than is cauterization in giving tone to the parts and arresting involuntary seminal discharges.