ART. VIII.—*Bromide of Potash in Acute and Chronic Affections of the Testis.* By BEDFORD BROWN, M. D., Washington, D. C.

THE action of bromine as a therapeutic agent appears to partake both of a general and local, or rather of a specific character. The known general influence which it exercises over certain organic operations of the system is mainly due to a peculiar power of sustaining the process of general nutrition in a healthy state, and of correcting many abnormal deviations from that process.

In addition to these more general alterative properties, bromine possesses remarkable sedative powers over the nervous system, without many of those serious effects resulting from more powerful narcotics. This gives it additional value in the treatment of the diseases of organs having such varied and extensive nervous communications as the testis.

An experience in its use of nearly ten years convinces us that, in addition to these properties, it has a very decided specific effect in diseases of the entire genito-urinary system. Furthermore, this local *specific* power partakes both of an alterative and sedative character. It is designed here to convey the impression that this sedative power is not confined simply to the nervous structures of this system, but is applicable to the special functions of the organs themselves, particularly the generative.

That unavoidable stimulus arising from the specific function of an organ, even when not actively exercised, the peculiar erethism given to the circulation and innervation of the parts in disease, must ever constitute a serious difficulty in the way of treatment. The exercise of the function of vision in affections of the eye, and of digestion in diseases of the stomach, afford difficulties familiar to all. So in affections of the female uterus and the male testis, the generative functions, and peculiar erethism associated with them, present serious obstacles. Hence the presence and exercise of specific function must always constitute an important element in the causation and perpetuation of the diseases of the particular organ to which they belong.

To be able to quiet the injurious excitement peculiar to the generative organs by agents which leave no permanent impression, until morbid action passes away, is a matter of no insignificant moment. Indeed the influence exerted by the excitement of peculiar function may be said to give much of that complicated character and intractability to the diseases of the generative system. Bromine appears to possess this peculiar property in an eminent degree.

The action of bromine in ovarian affections displays these triple properties (alterative, sedative, and local specific powers) in a striking degree. In a case of singular form of hysteria, in a young female of exuberant health otherwise, and in the early periods of puberty, which was clearly attributable to engorgement and subacute inflammation of the ovary, the

bromide of potash given freely not only relieved the local ovarian and uterine symptoms, but gave permanent relief to the annoying hysteria.

In affections of the testis, indeed of the generative organs generally, there is established a remarkable but distressing association of nervous sympathy, not only between themselves and their varied relationships, but with the entire spinal marrow and brain. The prompt action of bromine on the two great nervous centres, the brain and the spinal marrow, accounts in some measure for the sedative influence exerted by the agent on these distressing sympathetic symptoms arising during disease of the generative organs. Hence the influence of bromine as a sedative is not confined to the testis, ovary, or uterus, but appears to diffuse itself over a considerable range of kindred organs of the pelvis which are supplied by nervous and vascular elements from a common source. Here may be observed a striking instance of its action on a class of organs having strong and close nervous sympathies, though differing materially in function. Affections of the spinal cord, and of the genito-urinary organs, have long been known to occupy peculiarly intimate relationships, and as having strong *reactive* influences in disease. The conjoint influence exerted by bromine on the important system of genito-urinary organs, and their peculiar sympathies alluded to, includes its power over the male and female bladder, the prostate gland, the urethra in a state of functional or organic disease, so that in all of such affections it becomes a valuable remedy. In urethral strictures attended with undue irritation, inflammation of the bladder and its neck, enlargement of the prostate gland, these peculiar properties are manifest; and when success is not complete, much relief is afforded. Much of this specific influence is attributable to its sedative action on the lower portions of the spinal cord. All practical physicians appreciate that extensive chain of nervous sympathies and associated phenomena pervading this class of organs, in both male and female, when one or more of their kindred are diseased. Now, under these circumstances, bromine exerts a prompt influence, through the medium of the spinal cord, on all these sympathetic phenomena.

These preliminary remarks are necessary to a proper appreciation of those which are to follow on the treatment of affections of the testicle by means of bromine and its preparations.

The sedative action of bromine is rather of a *harmonizing* character, never exciting inordinately one organ, or set of organs, while depressing the tone of others, or correcting the functional delinquencies of one at the expense of another; maintaining rather a universal system of organic co-operation essential to healthy action.

Some years since, after a favourable experience with the use of bromine in some kindred affections, we determined to test the powers of the remedy in organic affections of the testis. It was very fairly tested in the three principal forms of organic disease of these organs, viz., acute inflammation, chronic enlargement, and that class presenting scirrhus characters. The

following cases comprise a succinct statement of the treatment and results of these three forms of affection.

CASE 1.—A man, aged fifty, originally of robust health, but more recently presenting symptoms of functional affection of the kidneys. After a rather severe acute inflammation of both testicles, of two weeks' duration, purulent matter accumulated extensively in the vaginal sac of one side, and finally made its escape by ulceration. Subsequent to this, the case assumed a very serious form, presenting positive indications of scirrhus degeneration of both testicles. Both organs, while considerably increased in volume, were disproportionately increased in weight. They were so thoroughly nodulated and indurated as to impart the sensation to the touch of stony hardness. The epididymis of each testicle participating in the morbid process, imparted the sensation, through the scrotum, of distinct, bony formations. The pain experienced was not constant, but of a lancinating character, and, when present, of a distressing nature. The general health indicated a decided tendency to sympathize, and assume a cachectic type. Hitherto the case had been uncontrolled by all methods of treatment.

The patient now commenced the use of the bromide of potassium in doses of x grs. three times daily, subsequently increased to $\mathfrak{X}$ j, as an experiment under desperate circumstances, from which something favourable might be hoped. After the tenth day there were encouraging indications to persevere. At the fourth week of administration the signs of improvement were positive. From this time, during the four months which the patient continued to use the bromine, the improvement was progressive, until every vestige of disease had disappeared. There was a gradual reduction of volume and weight, diminution of pain, and absorption of indurated exudation.

CASE 2.—A man, aged forty years, had been suffering for more than twelve months with enormously enlarged testis, attended with much distressing pain in the organ, spermatic cord, and lumbar region. Patient commenced the use of the bromide of potassium in $\mathfrak{D}$ doses, three times a day, and continued the remedy for five months. During the treatment the diseased organ lost more than two-thirds of its volume, but did not entirely regain its original size; but the pain and inconvenience having so far subsided, the patient concluded to discontinue the treatment. The patient informed me also that, during this time, upon any accidental suspension of the remedy, a return of the pain and uneasiness was sure to enforce a resumption.

CASE 3.—A young man had a violent attack of orchitis, following gonorrhœa of two weeks' standing, from which he had suffered much pain and annoyance, depriving him of rest both day and night. After the operation of a brisk cathartic, he took $\mathfrak{Z}$ ss of bromide of potash three times daily, in connection with hot water applications to the diseased organ, applied profusely and repeatedly. The earliest effect of the remedy observed was the positive diminution of pain, and much relief to those annoying sympathetic phenomena attending. This peculiar feature of the action of bromine in the most of cases has attracted my attention so positively as to cause me to distinguish it by the term *brominism*. This is the saturation of the system with the agent to a point when the pain of inflammation is relieved, and nervous irritation and restlessness quieted. The patient continued the treatment for a period of two weeks, when he was completely relieved.

I wish to refer here to the influence of bromine on those distressing sensations of *weight* and *dragging* of spermatic cord, pain and uneasiness in the lumbar and sacral regions, associated with enlarged testicle. These peculiar symptoms, separate from mere mechanical causes or influences, must be very much due to the reflex functions of the cord. Both the afferent and efferent nerves of these organs must have a common point or centre for *insertion* and *origin*.

The prompt action of bromine on the spinal cord, and on the various nerves arising from the lower portion of the cord, and abundantly distributed to the genito-urinary organs, accounts for much of its value in the treatment of the diseases of that associated system, apart from any mere alterative powers. There is much reason for believing that the influence exerted over the peculiar nervous phenomena of these organs is due to a primary action of the agent on the great nervous centres alone, particularly on that of the spinal cord. The action of bromine, indeed, on these latter structures, and its reflection thence on the functions of important organs, furnishes suggestions of peculiar interest.

ART IX. *Remarks on the Operation of J. Marion Sims for Dysmenorrhœa, depending on Antelexion of Uterus.* By J. C. NOTT, M. D., Baltimore.

BUT a few years ago the words Dysmenorrhœa, Amenorrhœa, Leucorrhœa, Polypi, Ulceration of Os Uteri, et id omne genus, called up in my tortured brain a hideous uterine hydra, that I had been fighting unsuccessfully, with all the odds against me, and so unsatisfactory were my efforts that I actually turned away with disgust from this class of maladies, and threw them off upon professional colleagues. The physiology of the uterus was little known, its pathology less, and least of all did we understand the diagnosis of its endless maladies.

But, thanks to the teachings of Dr. Simpson, of Edinburgh, and our countryman Dr. J. Marion Sims, a better day is dawning; an immense stride has been made in positive knowledge, and although we have yet much to learn in this department, it must be confessed, that it really begins to assume the aspect of a science instead of blind empiricism; many of these diseases, before obscure, are now easily diagnosed and treated; on fixed rational principles. The uterine sound, bi-mannual palpation, Sims' speculum, sponge tents, improved position of the patient, &c., now enable us to diagnose with accuracy many important diseases that previously were merely guessed at and treated by the most vague empiricism.

As already remarked, we have yet much to learn in uterine surgery and therapeutics. All reformers, whether in politics, religion, or medicine, are prone to run into extremes, and while on the one hand they often fail to follow truth onwards in a direct line, they on the other leave behind