

taken, is preferable to this quantity at one dose. When made into pills, care should be taken not to combine any vegetable or animal ingredient.

Permanganate of potassium is contra-indicated whenever an acute congestion of a general condition of sthenic reaction exists. It is obvious that a power which can stimulate the sexual apparatus, must when exerted in other directions, prove equally effective. From its irritating effect it must not be given in acute gastritis, but will be found of great value in chronic gastric and gastro-intestinal catarrh, accompanied by fermentative changes in the food. Eructation of gas and vomiting of yeast-like material are promptly relieved by the administration of this salt. The permanganate checks fermentation of food elements prone to this process. It promotes oxidation in the tissue undergoing metamorphosis. According to clinic investigation, uric acid in the urine is converted into urea. Physiologic deduction has shown that it is of great value in lithemia; the hepatic form of glycosuria.

Dr. Bartholow states that there is no remedy more effective for obesity and digestive disorders than this salt. I have myself, (some years ago, when in general practice) used it in functional amenorrhea with brilliant success. I have also found it excellent in catarrh of the bladder to wash out that viscus. For the qualitative analysis of drinking water we found it an excellent companion when on the march in the East Indies; by adding a few crystals of this salt to the suspected fluid, it confirmed the information when the drinking water contained organic matter, by turning it of a reddish dirty color. As a bath in skin disease, it is found to act with great benefit, 1 gram to one bucket of water. It is of great value as an antidote in phosphorous poisoning. It acts by coming in contact with the phosphorus in the stomach and converting it into ortho-phosphoric acid (Bokar). As an antiseptic it is more desirable than corrosive sublimate, because it is non-toxic and has great oxidizing power and is a true disinfectant.

Recently, Dr. Moor, of New York, in the *Medical Record* of Feb. 17, 1894, publishes his clinical experiments. According to his views, morphin is rapidly oxidized by the permanganate even in the presence of peptones and albumen. He pronounces permanganate of potash a reliable antidote for morphin. He gives .60 to .90 dissolved in half a pint of water, repeated at intervals of thirty minutes. Cases are reported in the same journal from different parts of the country in which permanganate of potash is employed hypodermically. In the *Medical News* of May 5, 1894, a physician from Pittsburg, Pa., reports a case where a patient had taken two ounces and a half of laudanum, of unknown strength, three hours before admission to the hospital. In addition to the usual treatment including coffee, hypodermic injection of atropin, artificial respiration and so on, and when the case seemed hopeless, repeated injections of a half saturated solution, in doses of 8 grams were administered at intervals of half an hour; after the fifth injection the patient recovered. No doubt if such a powerful oxidizing agent as potash permanganate is brought in contact with morphin a mutual destructive reaction would take place, but the question arises does it follow into the blood after the morphin is absorbed? Can it have a physiologic as well as a chemic action?

Since writing my paper, I read an editorial in the

JOURNAL OF THE AMERICAN MEDICAL ASSOCIATION for May 19, commenting on Dr. Moor's article. It states that "it is possible that when hypodermically administered although decomposed in the tissues, the nerve centers may be influenced by some of its products, but even so, it would not be permanganate *per se*, but something else that does the work."

"VIBURNUM PRUNIFOLIUM."

Read in the Section on Materia Medica and Pharmacy, at the Forty-fifth Annual Meeting of the American Medical Association, held at San Francisco, June 5-8, 1894.

BY H. R. HOLMES, M.D.

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It has been said that drug medication is a popular delusion of the nineteenth century. In these days of polypharmacy, the value of a single drug can not be always satisfactorily decided. The commerce of drugs, too, suggests so rapid an introduction of new remedies that even the names of many are quickly forgotten.

It is rare that a remedy is discovered which will occupy an entirely new place in therapeutics. The reliable effects of remedies now being introduced and those, the actions of which are yet to be studied, will be proven, and yet seldom may it not be said that these can, at best, but substitute those whose offices have been faithfully fulfilled for long periods of time. Since we have so many drugs credited with such similarity of action surely choice will ramble, hence the reason that the true value of some of our most valuable remedies is at times not strongly emphasized.

Cerna considers viburnum prunifolium briefly among the new remedies and it may appropriately appear here, for Bartholow in his "Materia Medica and Therapeutics," published in 1886, neglects its mention, and H. C. Wood in his exhaustive treatise on "Materia Medica and Therapeutics," published as late as 1889, leaves it out entirely.

Although Dr. Edward Jenks in 1876, published his observations on "The Influence of Viburnum Prunifolium in Diseases of Women," and although before he had written of it, it had really only a reputation in preventing abortion, he invited the attention of the profession to its great value in all uterine disorders characterized by the loss of blood.

It is not my purpose to consider viburnum prunifolium or black haw botanically, more than to say that it is a beautiful shrub growing about as large as the common osage orange, and is said to flourish in the Southern States, east of the Mississippi, but it does not grow sporadically on the Northwest Pacific slope. Like the cinchona tree, the bark is the part which yields the medicinal virtues. It has a specific action on the female reproductive organs and is anti-menorrhagic and anti-metrorrhagic. Infusions and decoctions may be used, but in these days of refined chemistry there is a fluid extract which requires no further recommendation than its simple mention. Parke, Davis & Co's. fluid extract is the preparation which I have mainly relied upon, but their compressed pills and tablets of the solid extract have also attracted my notice, and I shall proceed to prescribe them, providing they prove particularly pleasant to the palates of patients.

The liquor sedans containing black haw, golden seal and Jamaica dogwood combined with aromatics, is

an excellent preparation, to which in certain cases, ergot may be profitably added.

My practice, all things being equal, is to prescribe black haw to prevent abortion; to control menorrhagia and metrorrhagia from uterine fibroid or edometrial fungosities; as a sedative in ovarian congestion and its ordinary consequences, etc., and too, in almost all kinds of pelvic irritation, congestion and inflammation. May I just here inject the remark that had Hodge, a quarter of a century ago, known the value of our remedy, he would have been gratified by its influence in the treatment of what he termed "irritable uterus." Not willing to suggest to what class this remedy more properly belongs, I desire to consider it from a purely clinical point of view and will proceed at once with the narration of a few illustrative cases:

Case 1.—Mrs. M., age 30; married eight years; called me in January, 1892; had within last six years aborted four times at fourth month; general appearance healthy; about four months advanced in pregnancy; within last two hours had a smart uterine hemorrhage as was usual about this period in her gestations. Ordered patient to bed, and prescribed a drachm of fluid extract viburnum every hour until three doses were given. Within three hours all hemorrhage had ceased; a week later the patient was walking about, taking a dose of her medicine three times a day, which she continued about a week longer. Two months later patient had another similar attack with similar result on same treatment. The forward march of her gestation was without remarkable event, and in June following she was delivered of a healthy male child.

Case 2.—Mrs. S., age 29; married one year; called March, 1893; had metrorrhagia for three years to the extent of keeping her in bed half the time. Thorough examination resulted in diagnosis of submucous fibroid of uterus, size of hen egg. Squibb's fluid extract of ergot was given $\mathfrak{z}\mathfrak{j}$, *ter in die* for two months, while patient was kept in bed with very little perceptible effect on quantity of flow. A drachm of fluid extract of ergot with the same amount of liquor sedans being prescribed daily the patient who had been bed-ridden for half the time for nearly three years, within a fortnight was able to be up and about and is now enjoying what she calls good health. At menstrual times the flow lasts four days and is about right in quantity. Sometimes when undergoing unusual fatigue about menstrual time, the flow increases although the remedy has excepting then been discontinued. She has learned on such occasions to rely on her tonic as she terms it and so far it has checked any undue freedom of flow. So much for viburnum prunifolium so far in this case. To be sure this patient may in time to come need Apostoli's electrical treatment; she may require oöphorectomy, or Martin's operation of ligation of the uterine arteries, or hysterectomy, but these propositions are at least deferred.

Case 3.—Mrs. B., age 22; consulted me August, 1892; began menstruating while racing for a prize at college six years ago and eight months following a severe spell of scarlet fever. Soon after, though her memory is not precise on this point, she found herself irregular in her turns and has been so ever since, but for the last three years has flowed very freely about every three, four or five weeks; the period lasting usually as long as eight or ten days. Examination shows a retro-displaced uterus, a granular erosion about the os uteri, a conoidal cervix and pruritis ani. Patient was advised to take ether and allow the conoidal cervix to be treated surgically as well as the endometrium to be curetted, for chronic endometritis had been diagnosed and dilatation of the sphincter ani was also proposed. However, as the extremely nervous state of the woman made her regard any mention of operative procedures with intense dread, she was put on the following prescription:

R.	Ext. ergot fld	$\mathfrak{z}\mathfrak{v}\mathfrak{j}$	24	
	Ext. vibur. prun. fld	$\mathfrak{z}\mathfrak{j}\mathfrak{j}$	64	
	Tr. nucis, vom	$\mathfrak{z}\mathfrak{j}\mathfrak{j}$	8	M.

Dose: A teaspoonful three times daily. Within three months a steady improvement had announced her relief from anemia; menstrual flow was not excessive or painful; the rectal congestion and pruritis ani had subsided. Early in 1893, Mrs. B. became pregnant and in November was delivered of a healthy male child. The sphincter ani and

recto-vaginal septum for an inch and a half above it were torn. These have, by surgical interference, been repaired and the patient appears to be in good health.

Other cases could be cited, but the variety brought forth, it is hoped, will serve sufficiently to illustrate the therapy of this valuable remedy.

SOME OF THE USES OF CHLORALAMID.

Read in the Section on Materia Medica and Pharmacy, at the Forty-fifth Annual Meeting of the American Medical Association, held at San Francisco, June 5-8, 1894.

BY CHARLES C. BROWNING, M.D.

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So many excellent and exhaustive articles have been written regarding the use of chloralamid since its introduction, that I will confine myself to a brief mention of observations in regard to a few conditions in which it has been reported of value to others and proven as such to myself. In one condition I go more into detail, because I have not seen a report of its having been used in this condition by others. Its utility is favorably reported in several conditions not herein mentioned.

I began the use of chloralamid in 1890 while a member of the medical staff of the New York City Asylum for the Insane, and have used it with satisfaction in the following conditions, viz., neurasthenia, hysteria, pleuritis, phthisis, typhoid fever, melancholia, mania, dysmenorrhea, epilepsy and disorders due to organic diseases which were not accompanied by an extreme degree of nervous excitement or pain, especially in diseases of the digestive and genito-urinary systems. I have also used it with good result in irritable condition of the nervous system due to cigarette smoking.

I have frequently had it happen, that in cases of neurasthenia several nights' sleep would follow the administration of a single dose.

In typhoid fever I have found it especially advantageous on account of the absence of any depressing influence on the circulation, and it was suggested by Dr. Clevenger, of Chicago, in a paper published in the JOURNAL OF THE AMERICAN MEDICAL ASSOCIATION, March 10, 1894, that we have "an almost wholly nutrient hypnotic in the compounding of chloralamid,"—that is, one which supplies material which has been exhausted in the nerve centers. This quality materially adds to its usefulness in a disease accompanied by such great exhaustion. I have seen convalescence established after a few hours' rest procured by a single dose, when other drugs had failed in doses which were regarded safe. The delirium which had previously existed would be absent on awakening, the temperature reduced, the pulse approaching the normal and sleep would again come without the aid of hypnotics.

In melancholia accompanied with hallucinations which produce only a mild degree of excitement, and in the mild forms of mania, chloralamid has proved useful in my hands.

In these cases, which had frequently required some hypnotic every night for a long time, or get no sleep during the night, I have been able after using chloralamid for several successive nights, frequently to suspend its use for several nights and the patient still sleep well. In most cases I have at least been able to gradually reduce the dose. In cases where I have used it for several months continuously, I have noticed no ill effects on its withdrawal. This class of cases usually require from 30 to 40 grain doses. In