Both these insects evacuate such undigested or half-digested blood per rectum during the act of feeding, and the remnants of the previous meal are thus deposited in the immediate vicinity of a fresh puncture. It is not unlikely that, should the alimentary canal of the insect be infected with plague bacilli, spirochaete, or the organism responsible for typhus fever, these may be inoculated by rubbing or scratching. Bugs have not this habit, and in all the cases I have examined their dejections were fully digested, almost free from protein, and consisted mostly of alkaline haematin.

Whether bugs be guilty of these crimes or not, they are the cause of an intense inconvenience and disgust, and should, if possible, be dealt with drastically. At the present time there are rumours that one of our largest camps is infested with these insects, and there seems no doubt that some of the prisoners and refugees to this country have brought their fauna with them, and this fauna is very capable of spreading in concentration camps. The erection of wooden huts, no doubt a pressing necessity, will afford convenient quarters for these pests.

Among the measures which have been most successful in the past has been fumigating houses with hydrocyanic acid gas, but this is a process involving considerable danger, and should only be carried out by competent people under the most rigorous conditions. In all fumigating experiments every crack and cranny of a house should be shut, windows closed, keyholes blocked, and so on. A second method of fumigation is that of burning sulphur. Four ounces of brimstone are placed in a saucer, which in its turn is placed in a larger vessel. This protects the floor of the room from a possible overflow of the burning material. After all apertures have been successfully plugged, four or five hours of the sulphurous fumes are said to be sufficient to kill the bugs, but to ensure success a longer time is needed. This is not only a much less expensive but a much less dangerous operation than using hydrocyanic acid gas. Two pounds of sulphur will suffice for each thousand cubic feet of space, but it is well to leave the building closed for some twenty-four hours after the fumigation. Another more localized method of destroying these pests is the liberal application of benzene, kerosene, or any other petroleum oil. These must be introduced into all crevices or cracks with small brushes or feathers, or injected with syringes. In the same way oil of turpentine or corrosive sublimate has proved effective. Boiling water is also effective when it can be used, and recently in the poorer quarters of London the "flares" which painters use in burning off paint have proved of great use in ridding matchboarding, or wainscoting, or wood for hoarding, of bugs. Passed quickly along, the flame does not burn the wood, but it produces a temperature which is fatal to the bug and to its young, and to its eggs.

THE TREATMENT OF ACUTE GONORRHOEA IN THE MALE.

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As one who studied this subject under Janet in Paris, and under the late Dr. Valentine of New York, nearly twenty years ago, and has been since constantly engaged in the irrigation treatment, may I be allowed to offer a few remarks?

The nature of this disease, and the secrecy with which its treatment is surrounded in this country, accounts in a great measure for the haphazard way in which it is treated, and for the unsatisfactory nature of the teaching on the subject. The article by Dr. Hayes in the *BRITISH MEDICAL JOURNAL* of September 12th, p. 469, and the remarks thereon by Dr. J. C. McWalter in the ensuing number (p. 523), show that opinions are still divided as to whether the active or the expectant treatment is the better in acute gonorrhoea.

The reason is not far to seek. The irrigation treatment, judging by what one sees and hears, is not easy to learn. Faulty technique is probably at the bottom of most failures. The two-way tube or nozzle which is often used is inferior to the one-hole nozzle as recommended by Janet and Valentine. It is essential to flush out the anterior urethra with considerable force if the treatment

is to be effective. A hydrostatic pressure of at least 6 ft. is necessary. The urethra must be ballooned out, and, what is also important, rapidly emptied, so that the fluid spurts out with great force. These essentials are obtained by using a nozzle with a bore equal to 8 or 9 of the French scale, and its partial removal from the meatus or the relaxation of the finger and thumb pressure blocking the meatus around the nozzle ensures a rapid emptying of the canal in the moment following its over-distension.

The process, then, consists of a quick filling and partial emptying of the urethra. This ensures a free circulation of powerful currents right up to the compressor urethrae muscle. The over-distension of the elastic urethra and its recoil facilitate the entry of the fluid into the lacunae and ducts of Littre. With the two-way nozzle the distension of the urethra is a sustained one, with probably no circulation of the fluid in the neighbourhood of the bulb of the urethra. Only in hyperacute cases is it necessary to go a little more gently, and also rarely when the spongy body itself has been allowed to become infiltrated. In these cases, even with a 2 per cent. solution of cocaine, the proceeding may be painful.

In the early stage, where only the first 2 or 3 inches of the urethra are involved, the whole anterior urethra should be irrigated with the usual full pressure. A splice of healthy mucous membrane treated with potassium permanganate irrigations offers an almost insuperable barrier to the inward spread of gonorrhoea. This salt is almost a specific in these circumstances. Irritating solutions such as those of silver nitrate, by lowering the vitality of the healthy membrane, favour rather than retard the spread of the disease in acute cases. The same may be said of all irritating hand injections. Permanganate may be used by means of a hand syringe, but the effect is infinitely inferior to that of irrigation.*

A few of the chief points to be kept in mind may be briefly stated:

A strength of from 1 in 5,000 to 1 in 2,000, or even stronger, is used. The temperature of the solution used is 98° F. to 100° F., and the quantity 5 or 6 pints.

For the first three or four days the irrigation is repeated morning and evening with a solution of medium strength, say 1 in 3,000. Then once daily the irrigation is given with a solution of 1 in 2,000. A solution of 1 in 5,000 strength is to be used in very acute and painful cases; 20 drops of a 2 per cent. solution of cocaine may be injected into the urethra and held in for two or three minutes just before irrigating in all sensitive cases. It is astonishing how quickly a painful condition will become painless under this treatment.

Rapid disappearance of the discharge and recovery is the rule. Should, however, a bead of yellow pus persist, endoscopy will show the lacunae of Morgagni to be greatly swollen and their outlet obstructed. This is evidence that treatment was not begun early enough and that the fluid now cannot penetrate them. In other cases which persist, but with less discharge, the superficial glands of Littre will be found more or less extensively involved. This also is found in cases which have been neglected at the beginning. When these conditions exist, in order to hasten recovery and to prevent the organization of infiltrations, the gentle use of Kollman's dilator is indicated, and I can recommend the irrigating dilator. This instrument may be used once or twice a week and very delicately screwed up until just the faintest pressure is felt. It is a powerful machine and requires care in use. The solution mostly used is mercury oxycyanide 1 in 4,000 or stronger. The intraurethral treatment of these affections requires the surgeon to be an expert urethroscope. An account of the writer's method may be found in the *BRITISH MEDICAL JOURNAL*, September 26th, 1908, p. 878.

I have purposely not touched on the subject of the drug treatment of gonorrhoea, as being beyond the scope of this article, and the subject of vesical irrigations for posterior or membrano-prostatic urethritis may be left for a future occasion.

* An account of the irrigation treatment of early gonorrhoea may be found in the *Clinical Journal*, June 24th, 1908, p. 170, where also my irrigator is fully illustrated.

THE mixed council of the Armenian patriarchate has decided that couples wishing to get married must first present a medical certificate of health to the proper authority.