and assistants prepare themselves and put on sterilised overalls. The patient is then rolled into the outer room, and all coverings having been removed, a light sterilised flannel wrapper is put on, and she is then rolled into the operation room or inner compartment and placed upon the table. The anaesthetist takes his seat at the head of the table, the chief assistant sits at the side opposite to the screen, and the operator sits between the patient's thighs. The sister who threads the needles and hands the instruments, etc., stands behind with a nurse still further in the rear to fetch water, fill and empty basins, and make herself generally useful. Lastly, the door in the glass screen is shut, and whilst the patient's abdomen is being cleansed for the last time, the spectators are admitted.

At the risk of being somewhat discursive, I would here state my opinion that the preparations for an operation and the care of the instruments are most safely entrusted to an intelligent nurse under the supervision of the operator or his male assistants; and she will perform these duties as well as threading needles and handing instruments better than any house-surgeon or resident pupil, however conscientious or well disposed he may be. It is her chief duty in life, and she applies to it all her energies; and, if a well-paid and permanent official, she acquires in the course of years an amount of skill and experience which would be impossible in anyone holding a temporary position. I have never seen so good an assistant in these respects as Frau Horn, Dr. Martin's head nurse in Berlin, and very little inferior to her have been the three nurses who assisted me in the Rotunda. Besides those whom I have already mentioned, one other individual was generally present at my operations; this was the Lady Superintendent, whose sole duty was to see that all went right, and immediately to call attention to anything that went wrong.

ADVANTAGES OF THE GLASS SCREEN.

In concluding these remarks upon the Rotunda Hospital theatre I may sum up what I think are the advantages of its most distinctive feature—the glass screen.

1. It divides the room into two distinct parts, in the first of which are placed the basins, sinks, instrument case, sterilisers, and platform for spectators, all of which are indispensable, but would be difficult to clean with sufficient ease and rapidity, especially where several operations have to be performed in succession. Their absence from the inner compartment enables its furniture to be so simple that it can be thoroughly hosed out in a few minutes.

2. A pure atmosphere, free from draughts and dust and uncontaminated by spectators, is obtained by its complete isolation, its simplicity of construction, and the cleanliness and dampness of its walls. Whilst the high temperature of the inner compartment enables us to dispense with blankets, maintains the patient's vitality, lessens shock, and dissipates mist, the outer compartment is so cool that the spectators, though dressed in their ordinary clothing, suffer no inconvenience.

3. Lastly, it enables the spectators to approach close to the operation without any risk of disturbing the operator or meddling with his arrangements.

PRACTICAL RESULTS.

As to practical results, I may add that, excepting the months of March and April last year, every case operated upon in this theatre, from November, 1895, to the present time, has run a perfectly aseptic course. The design was the work of Mr. Albert E. Murray, architect, and much of the success in carrying out the details was due to Miss Hampson, the Lady Superintendent.

FRENCH UROLOGICAL ASSOCIATION.—The French Urological Association will hold its second meeting in Paris on October 21st and two following days under the presidency of Professor Guyon. The questions proposed for discussion are (1) the operations performed on the testicle and its adnexa for the relief of prostatic hypertrophy (to be introduced by MM. Albarran and Carlier); (2) non-gonococcal urethritis (to be introduced by MM. Eraud and Noguès). The General Secretary is M. Desnos, 31, Rue de Rome, Paris, to whom all communications should be addressed.

MORPHINE HABIT OF LONG STANDING CURED BY BROMIDE POISONING.

By NEIL MACLEOD, M.D. EDIN.,
Shanghai.

ERLENMEYER, in his work on the morphine habit, recommends quick deprivation as the best and most rational method of treatment. He says that there is not the slightest chance of success of treatment in the patient's own home or family; better is a hydropathic establishment or one for nervous diseases, an asylum, or, best of all, one restricted to treatment for this particular ailment. He says, also, that it is entirely wrong to try to lessen the suffering of the period of deprivation by substituting for morphine another drug, for fear of establishing another drug habit.

That it is possible by means of acute bromidism to quickly and permanently obliterate the desire for morphine without the usual subsequent suffering and without creating another drug habit in cases where that drug has been taken for several years in larger than medicinal doses, I leave the following cases to determine.

In 1889 a married lady, then aged 25, suffered from neuralgia, for which she received hypodermic injections of morphine, the habit being continued without break until May, 1896, in spite of several attempts to withdraw the drug slowly. I saw her first in 1892, when I refused to deal with the habit because she would not submit to my conditions of treatment. I saw her occasionally afterwards suffering from diarrhoea, indigestion, sleeplessness, or neuralgia, when treatment was unsatisfactory in consequence of the morphine habit. Early in May, 1896, having been away from Shanghai for some time, she returned suffering from migraine and in a highly irritable nervous state, having reduced the morphine to 10 minims of Magendie's solution (which for her was a very small dose) every four hours. The solution was prepared by her husband, who himself was not free from the habit, and who also prescribed and made up a chloral draught for his wife's sleeplessness. On May 17th I ordered her a 12 ounce bottle containing 12 drachms of sodium bromide, a half ounce to be taken every four hours. On May 18th she was drowsy, and on May 19th I found her so soundly asleep that I could not wake her. The pupils were not contracted, the pulse was 90; temperature, respiration, and skin were normal. The whole bottle and half of a second one had been given. All drugs were then forbidden, and next day she was removed to hospital. I believed the condition to be bromidism, which, however, I had not seen before, and I naturally did not feel satisfied with her surroundings at home, notwithstanding that I had fully warned the husband of his responsibility. Morphine was injected for four days after admission, amounting to 1½ gr. per day, and on May 24th, 25th, and 26th, four 30 gr. doses of sodium bromide, and on May 28th, 30 gr. of chloralamide were given, after which no more drugs were administered. For four days no intellectual, emotional, or volitional effort was observed, and only a little milk was swallowed daily. The patient could not stand or sit, muttered in answer to questions, passed urine and stools in bed. Then followed a period of restlessness, and intellectual and emotional confusion, during which time she asked for nothing and muttered incoherently. Speech at first, like other movements, greatly enfeebled and not co-ordinated, gradually became stronger and more distinct; delusion and illusions of sight at first numerous, lessened, and were not noticed after June 7th; memory past and present, at first all adrift, gradually cleared, being normal two or three days before she left the hospital. The highest pulse was 94, and the temperature once rose to 100°. During the first week in hospital she vomited 5 or 6 times, and did not feel herself till the last week of her stay there. She could not stand without assistance till June 8th, when she began to walk about. She left the hospital on June 17th, feeling quite well, conscious of a blank in her memory, and that she had had delusions. To her own astonishment and that of the sisters (she had been in their charge previously) she had no desire for morphine from the time that she entered the hospital, and I am glad to say it has not yet returned.

This case was, so to speak, cured by mistake, and is all the more interesting that the patient had no desire to be

cured, as she had informed me on several occasions. Naturally desirous of being certain how far the bromidism contributed to the result, I determined to test the question by excluding other conditions.

My second case was that of a pilot, aged 36, who had morphine injected hypodermically for urethral troubles in 1893, and later in that year for kidney mischief, after which he continued the habit without a day's interval until he came under my care. In the summer of 1896 he injected 40, 50, and 60 grains a day. Attempts had been made to withdraw the drug slowly, the last occasion being just before he came into my hands on February 26th, 1897, when he was injecting 5 or 6 syringefuls a day, each containing a grain. At that date he was greatly depressed, trembling in lips and limbs, irritable, unable to sleep without the injections, his upper and lower limbs literally covered with scars, nodules, and boils in every stage of development wherever he had been able to introduce the needle. He was admitted to hospital on March 1st, gave up syringes and supplies, and with some reluctance consented to the deprivation of the morphine on my own terms. A good deal of trouble at first arose from the boils on the arms, the movements of which were very painful and much restricted. The urine was normal. On March 6th he went out of hospital, unaccompanied for the first time, and on his return he at once gave up, when asked, a syringe and morphine solution which he had obtained at a Chinese drug store, informing me that the European drug store had refused to serve him. From March 2nd he had three injections of morphine daily, totalling on each day consecutively in grains $\frac{1}{2}$, $1\frac{1}{2}$, 1, 1, $1\frac{1}{2}$, $1\frac{1}{2}$, 1, $\frac{3}{4}$, $\frac{3}{4}$, $\frac{3}{4}$, $\frac{3}{4}$, and $\frac{3}{4}$ (15th.) He was ordered 30 grains sodium bromide every six hours on March 2nd, changed to every four hours on March 4th. On March 6th it was discovered that the *pharmacien* had made a mistake of 20 for 30 grains in his draught, and this was then rectified and given every six hours, and increased on March 8th to every four hours. No evident effect having been produced, except bromide rash on the forehead, on March 13th the dose was given every three hours, and on March 15th (the last day of the morphine) was doubled (60 grains). Next day he was stupid but able to walk about, very shaky, and on March 17th very drowsy in bed. The dose was reduced to 30 gr. next day, and on March 19th he got out of bed repeatedly, when the dose was increased again to 60 gr. every three hours. He had not asked for morphine since March 15th. On March 20th he was very stupid, answering incoherently, and from this day no drug of any kind was given. He practically slept till March 23rd, taking only milk from a spoon, about half a glass every two hours, muttering incoherently occasionally, unable to sit or stand, passing urine and stools in bed. He began to take solids on March 27th, but was still unable to stand on March 29th, and still drowsy. On April 1st he was talkative, only giving expression to nonsense, unable to walk even with assistance. On April 3rd, speech was still indistinct, but improving with the power of locomotion. He fed himself for the first time on April 10th and dressed, taking a long time over it, putting his shirt on over his vest. On April 12th he wished to go to Harrogate, not remembering where he was. On April 14th he drove out, recognised that he had delusions, and laughed over them. On April 17th he left hospital, and on April 27th left Shanghai for his work, feeling, he said, quite well and rejoicing over his deliverance.

An interesting feature in this case was that when, as he described it, his head was muddled with liquor so that he could not tackle work, an injection of morphine enabled him to resume work with a clear head at once. The desire for liquor was lost with that for morphine. Pulse, temperature, and respiration were never disturbed during treatment to any extent requiring notice.

No doubt in both these cases the mental and somatic symptoms were to some extent attributable to the morphine deprivation as pointed out by Erlenmeyer and others, but this could be to a slight extent only, from the rapidity of onset, and especially from the degree and nature of interference with the nervous function. It may be asked if it is justifiable to produce such a condition of the nervous system. It seems to me that the end justifies the means.

The following advantages over other methods of treatment can be claimed for the method pursued in these cases :

1. It did away with the suffering entailed by stopping the drug.
2. The patient could not bribe the attendants when the drug was withdrawn, he could not deceive his doctor, nor could he escape vigilance—he was powerless.
3. It acted equally well, whether the patient wished to be cured or not.
4. No special attendants or establishment was needed, only nurses who took ordinary care.
5. No violence or excitement is likely to result from, nor a taste to arise for, bromide given in this way.

In my next case I intend to, and I would suggest that anyone trying the method should, reduce the morphine by halving the dose each day, not giving it if not asked for, pushing the bromide more rapidly than I did in those cases, not, however, beyond the stage of marked torpor, stopping it altogether before that stage if the patient has ceased to ask for morphine. It may not be necessary to produce so marked a degree of bromidism as was present in these cases.

A CASE OF PERFORATING WOUND OF THE ABDOMEN

IN WHICH THE SUPERIOR MESENTERIC VEIN WAS WOUNDED :
LIGATURE OF VEIN : LAVAGE OF ABDOMEN :
TRANSFUSION : RECOVERY.

By A. W. MAYO ROBSON, F.R.C.S.,

Senior Surgeon to the General Infirmary at Leeds : Professor of Surgery in the Yorkshire College of the Victoria University.

THE following case, which has been reported for me by my house surgeon, Mr. Levi, presents several points of interest which seem to make it worthy of separate notice.

On January 27th of this year, there was admitted into the Leeds General Infirmary, a young mechanic, aged 20, in a collapsed condition, with all the signs of internal hæmorrhage, pulse feeble, 190, temperature subnormal, skin pale and covered with a cold, clammy, perspiration. He was said to have vomited blood directly after the accident. He was found to be suffering from a penetrating wound of the abdomen, caused by the sharp end of a file without a handle, which having caught in a revolving wheel of a lathe was pushed through his clothes and abdomen. There was a small punctured wound a little above the umbilicus and almost in the middle line. The abdomen was nearly flat, with dullness in both flanks. Liver dullness was present and there was resonance over the front of the abdomen.

OPERATION.

The patient was immediately taken to the theatre and ether administered, the surface of the abdomen having been rapidly cleansed and carbolised. An incision about $4\frac{1}{2}$ inches in length was made above the umbilicus including in its line the site of the puncture. When the abdomen was opened, there was no escape of gas from stomach or intestines, but the abdomen and pelvis were found to be filled with dark liquid blood, which after a careful search, and after turning the intestines over to the left, was found to be escaping from the trunk of the superior mesenteric vein which had been wounded by the file. The superior mesenteric artery could be felt pulsating close by. The divided ends of the vein were ligatured with catgut. The small intestines were black, owing to effusion of blood beneath the peritoneal coat. The spleen, liver, and other solid organs were then examined, but no injury was found in any. The blood was washed out of the abdomen by free lavage of the peritoneum with warm boracic lotion. Cyanide gauze was packed gently over the ligatured ends of the vessel, the end of the gauze being drawn lightly through a rubber drainage tube out of the abdominal incision. The peritoneum was then closed with a continuous catgut suture, as was also the fascia over it. The skin was united with silk-worm gut sutures. The wound was dressed and the patient sent back to the ward.

TRANSFUSION.

On reaching his bed he was in such a state of collapse that transfusion was performed by Mr. Seaton, the resident surgical officer. Three pints of normal saline solution were in-