supplies the clitoris; whilst the other or superficial perineal nerve is distributed not only to the perineum, but also to the labia, in which its terminal fibrillæ ramify.

In the recognition of the two circumstances just referred to may be found the key to the general treatment of the complaint. On the former point, which I have elsewhere fully discussed, all that I shall here observe is that in vaginismus, as in many other gynecological disorders, the importance of the constitutional or neurotic element in the causation and treatment of the disease is too commonly lost sight of. In all such cases, therefore, the best curative results will probably be obtained by those practitioners who, recognising the general connection of constitutional causes with the topical lesions to which I have now called attention, are alive to the necessity of combining the employment of nerve tonics, and other appropriate remedies, with the no less essential directly applied measures one or other which may be specially required in each case.

The Local Treatment of Vaginismus may, as I can vouch from experience in a large proportion of cases of this kind, be successfully carried out by such forcible dilatation of the vulvo-vaginal passage as to effectually overcome the abnormal contractility of the parts, and also at the same time produce thorough stretching of the affected nerve fibrillæ. For this purpose, in the first place, the patient being duly prepared by the usual syringing and other antiseptic precautions for the vaginal operation, and her rectum and bladder evacuated, is to be etherised and placed on a suitable couch or table in the ordinary left lateral semi-prone position. Secondly, a large-sized bivalve vaginal speculum is to be introduced, and the blades then extended to their fullest extent. Thirdly, a tampon of antiseptic cotton or wood wool, saturated in boracic glycerine, is to be passed in through the speculum, so as to fill its calibre from the vulva to the roof of the vaginal vault. Fourthly, the speculum, still widely expanded, is to be forcibly withdrawn, for the purpose, as I have already said, of overcoming the contractility of the parts, and thoroughly stretching, or even slightly rupturing, the affected nerve fibres. In so doing some little abrasion of the vaginal walls may possibly be occasioned. But any hæmorrhage therefrom will be sufficiently controlled by the tampon, on which counterpressure is to be made during removal of the speculum, so as to leave the included plug behind it in the vagina, where it must be left for at least twenty-four hours, and then at the same intervals replaced by similar antiseptic tampons, which must be employed for the next week to maintain the patency of the passage. Immediately after removal of these tampons on each occasion the vagina should of course be thoroughly washed out with some antiseptic injection. Finally, if at the end of a week after this first dilatation any trace of vaginismus or spasmodic contraction should still remain, then the same procedure may be again repeated, after which it will probably be found that the passage has regained its normal sensibility and capacity. In some exceptional instances that curative result may not be thus obtainable, and in such cases it may become necessary to resort to one or other of those various methods, such as the excision of any specially hyperæsthetic tissues in the vaginal or vulvar area, or else to some of the recent modifications of Sims's or Emmet's operation for vaginismus. These procedures, however, will, as I believe, comparatively seldom be found essential by gynecologists who adopt the simple and, according to my experience, generally effectual plan of treatment which I have now described.

Dr. BOXALL enquired whether Dr. More Madden allowed the patient to come round from the anæsthetic before removing the speculum, being himself of opinion that when the patient was of a hyperæsthetic temperament the pain suffered at that time was in itself an important element in impressing upon her the reality of the cure.

THE French Temperance Society (Association contre l'Abus des Boissons Alcooliques), which was founded in 1872, at its recent general meeting elected Dr. Semelaigne President. Two out of four of the vice-presidents, the general secretary, and the two assistant secretaries, the two secretaries of the meetings, and the keeper of the archives are all members of the medical profession.

TWO CASES OF HYSTERECTOMY FOLLOWED BY INSANITY.

By MACPHERSON LAWRIE, M.D.,
Gynecologist to the Weymouth Sanatorium for Diseases of Women.

A. B., aged 40, consulted me at the beginning of 1893, on account of troublesome persistent pelvic pain, situated principally in the back and right side. Her general health was undermined by more or less constant suffering.

On making an examination under ether, a large tumour was found in Douglas's pouch, continuous with the uterus, and another, much smaller, to the right, apparently an outgrowth of the uterus. The sound passed upwards in front of the posteriors swelling, for 4 inches.

An attempt to relieve the symptoms was made for some time by a course of palliative treatment, but little benefit resulted, and she was advised to submit to the operation.

On September 4th, 1893, the abdomen was opened in the usual way. The uterus was found pushed forwards and upwards by a large tumour attached by a broad base to its posterior surface, and practically occupying the whole of the pelvic cavity. The other swelling was about the size of an orange, and growing from the right side of the fundus. The abdominal wound was enlarged for some distance above the umbilicus, a strong pair of vulsellum forceps was attached to the most prominent part of the pelvic tumour, and after a little manipulation the whole mass was brought to the surface. The wire of the *serre-neud* was passed round the lower part of the cervix so as to include both tumours and the ovaries as well as the uterus. These structures were cut away from the stump, which was transfixed and trimmed and brought down to the lower angle of the wound. The parietal peritoneum was very carefully stitched to the peritoneal covering of the stump all round and the abdominal wound closed.

The wound healed rapidly without any complication, and the patient was practically well in two months, and able to resume her former pursuits. She continued in excellent health until May, 1894, about nine months afterwards, when symptoms of acute mania developed, to which she succumbed in the course of four weeks.

The special interest in this case is the occurrence of mental disturbance following the operation. She was of a highly nervous temperament, but there was no clear history of any hereditary taint so far as I was able to learn.

In connection with this point I published in the *BRITISH MEDICAL JOURNAL*, January 13th, 1894, the case of an old lady, aged 66, on whom I performed total extirpation of the uterus for cancer. She made a rapid recovery from the operation, but some weeks afterwards her mind became deranged. She was transferred to the care of Dr. MacDonald, of the County Asylum, and after an anxious illness of two or three months' duration made an excellent convalescence, and is now in perfect health.

A CASE OF TETANUS TREATED BY ANTITOXIN.

By JOHN MARRIOTT, M.B.LOND.,
Northampton.

THE patient, a butcher, aged 28, was struck on September 24th, 1894, by a missile from a catapult under the chin, about half an inch below the symphysis of the lower jaw. The projectile imbedded itself in the flesh, setting up inflammation and induration round the wound. There was a foul discharge, amongst which portions of the foreign body were expelled, composed of shreds of string cemented with shoemaker's wax. He took no notice of the wound until six days later, when (on September 30th) he found that he could not open his mouth, and had difficulty in swallowing.

I was sent for to see him on October 3rd. There was well-marked trismus, the muscles of the neck and back were stiff and prominent, and he could hardly swallow anything. I incised the wound, but found that the whole of the foreign body had been expelled. The wound was then thoroughly disinfected with carbolic lotion 1 in 20, and dressed with

double cyanide gauze. Chloral was ordered, but hardly any could be swallowed.

On October 4th pain and stiffness had increased. Slight spasmodic twitchings of the muscles of the face and back were observed. There was no pyrexia.

On October 5th the body was rigid with the exception of the arms and hands. There was slight opisthotonos. Dr. Buszard kindly saw the case with me, and by his suggestion a supply of Tizzoni's antitoxin was telegraphed for to Messrs. Allen and Hanburys. In the evening $\frac{1}{10}$ grain of physostigmine was given hypodermically.

On October 6th the symptoms were more pronounced; there were frequent jerky spasms in the muscles of the back; those at the back of the neck were rigidly contracted, throwing the head backwards. At 4 p.m. 2.5 grammes of antitoxin were given in sterilised distilled water by punctures in the abdominal walls. Each puncture caused considerable pain, and was accompanied by a strong opisthotonic spasm. The punctures were covered with a small piece of waterproof plaster. He was fed with nutrient suppositories.

On October 7th antitoxin 1 gramme was injected. There was some improvement in swallowing, teaspoonfuls of milk being given frequently and swallowed after several efforts. There was great trouble in ejecting mucus, which was secreted in considerable quantities, from the throat. Sharp but short spasms in the back and legs were frequent.

On October 8th antitoxin $\frac{1}{2}$ gramme was injected. Swallowing was easier. Speech was unintelligible, but the patient could make himself understood by writing in large jerky scrawls.

On October 9th he swallowed liquid much better. The suppositories were discontinued. He complained of constant thirst, and was able to gratify it. Spasms in the back were still frequent, and sometimes violent, especially when he was moved or tried to expectorate mucus. The jaws were still tightly closed. Antitoxin $\frac{1}{2}$ gramme was injected. Later in the evening stronger opisthotonic spasms came on, with much distress, cyanosis, and difficulty of breathing. One-third of a grain of morphine with one-fiftieth of a grain of physostigmine was given hypodermically, followed by marked relief about two minutes later. In a short time the patient was asleep. He passed a fairly quiet night. There was some difficulty in urination temporarily, but catheterisation not required.

The wound had cicatrised on October 10th, when antitoxin 1 gramme was injected. The spasms were less frequent. The improvement continued on October 11th, when 1 gramme of antitoxin was given. As the bowels had not acted since the beginning of the attack, 5 grains of compound powder of elaterium were given, and on the following day a castor oil enema; a copious evacuation followed. One gramme of antitoxin was administered. He took fluid nourishment well. The jaws were still immovable, but the opisthotonic spasms were much less strong. On October 13th 1 gramme of antitoxin was injected, but on October 14th only 0.2 gramme. Towards evening the muscular twitchings were slightly more numerous, but only very feeble. On October 15th no antitoxin was given. He passed a comfortable day. The jaws were still clenched.

Early on the morning of October 16th, during sound sleep, the jaws opened sufficiently wide for the tongue to be protruded, and the patient waking up, it was caught between the teeth and firmly held. The pain brought on violent spasms all over the body, respiration being much embarrassed and the face cyanosed. Every effort was made by the two nurses to release the tongue, but unsuccessfully. When I arrived, some time after, his condition appeared alarming, violent spasms affecting the whole trunk, succeeding one another with hardly any interval, and the breathing was extremely laboured. The tongue was severely lacerated. Chloroform was given, but immediately caused such aggravation of the spasms and difficulty of breathing that it had to be abandoned, and, although the patient appeared to be dying, $\frac{1}{10}$ grain of physostigmine with $\frac{1}{2}$ grain of morphine was hastily injected. The effect was wonderfully rapid, as in less than a minute the jaw opened sufficiently to allow of the tongue being released, and immediately this was done the breathing became quiet, the lividity passed off, and the violent opisthotonic spasms ceased for a short time, being, however, fol-

lowed by numerous less severe ones later in the day. In fact, the unfortunate accident appeared to give rise to a complete relapse of the symptoms, and it was resolved to again resort to antitoxin, of which 1 gramme was given. An elastic band was fixed round the jaw to prevent its opening during sleep.

On October 17th 1 gramme of antitoxin was given. The patient was more comfortable, but spasms were frequent, though not severe, and the tongue, which could not be seen, was very sore.

On October 18th 1 gramme of antitoxin was given, and repeated on October 19th, when a rather strong spasm was caused by the procedure.

On October 20th half a gramme of antitoxin was given (completing the third bottle used). He took plenty of liquid nourishment through an infant's feeding bottle, the tube of which was passed into the buccal sac outside the teeth. From this date steady improvement took place, the jaws opening, and the stiffness passing away from the back and neck, so that by October 28th he was able to sit out of bed for an hour, and to take soft food, such as bread and butter, eggs, and even fish.

REMARKS.

Antitoxin, with the exception of the three injections of physostigmine and morphine, was the only remedy used in this case, as, though chloral was at first prescribed, only a very small quantity was swallowed. The patient certainly seemed to be much relieved by the treatment, and it is to be remarked that the severe and nearly fatal relapse occurred after the diminution of the dose on October 14th, and its suspension on October 15th.

On the two occasions on which physostigmine and morphine were given together, the effect in quieting the spasms was most marked and speedy, and on both occasions it appeared to me that the patient's life was saved thereby.

The temperature has remained subnormal since the tetanic symptoms have disappeared.

A CASE OF TETANUS NEONATORUM UNSUCCESSFULLY TREATED WITH TETANUS ANTITOXIN.

By J. LACY FIRTH, M.D., M.S.LOND., F.R.C.S.,
House-Surgeon to the General Hospital, Bristol.

I HAVE in the first place to thank Mr. Barclay, Surgeon to the Bristol General Hospital, for permission to publish the above case, the treatment of which was undertaken with his concurrence.

The infant was born on Tuesday, September 18th, 1894, at noon. A midwife was in attendance at the confinement. The navel was dressed, after ligation of the cord, in the usual way, with cotton wool and a clean piece of linen. This dressing was not disturbed until six days had elapsed. It was then replaced by a scorched piece of linen soaked in castor oil. On the eighth day of life the child became fretful and ceased to take the breast satisfactorily. The eighth day of life appears, therefore, to have been the first day upon which signs of the disease appeared. On the fourth day of the disease and the eleventh of life the patient was admitted to the Bristol General Hospital.

On the fifth day of the disease the child was jaundiced. The eyes were tightly closed, and the conjunctivae could not be exposed. The face was wrinkled, but risus sardonius was not present. The masseter muscles were hard and the lower jaw rigidly fixed, but there remained a slight interval between the upper and lower jaws which it was impossible to enlarge with justifiable force. The head was slightly retracted, and the neck and spine were very rigid. The arms and forearms were rigid in the adducted position, with the elbows slightly flexed. The fingers were firmly flexed into the palm, and the thumbs adducted and flexed over them. The lower limbs were rigid in the extended position. The abdominal wall was hard. The tension of the limb muscles could only be overcome by the exertion of considerable force. The child could be held up in the vertical position by holding the legs only. When milk was placed in