the past two years, he occasionally suffered from attacks of "jerking" (*i.e.*, tremor) of the legs, "so that the whole bed shook". For twelve months before admission, an external squint of the right eye was observed; he was deaf for some months. For the past five years, he has complained of difficulty in passing urine, and constipation; also of dimness in vision, with, at times, diplopia, numbness of the legs, and the sensation of a cord tied round his waist. This patient was found, like the last, to be markedly anæsthetic, especially as regards painful impressions, and that all over the body, with the exception of the portion of the abdomen corresponding to the "girdle-sensation" round the waist. This was about an inch wide, and passed round the body an inch below the umbilicus. In this area alone was injury to the skin complained of as painful. The impairment of tactile sensibility was not at all so noticeable. Muscular sense, when tested in the usual way, was found very much impaired, both in the upper and the lower extremities; it was utterly impossible for him to stand with his eyes shut and his feet together without falling. His gait was not ataxic; indeed, when walking cautiously, it was difficult to detect anything unusual; but when he was off his guard, it suggested rather the cerebellar gait. He got in and out of bed quietly without any jerking; whilst with his hands he could perform complicated actions with ease, nor was there any "volitional tremor". The muscular power of the arms and legs was good. The pupils were contracted—"pin-holes"; and the discs presented the usual appearance of grey degeneration of the optic nerves, as seen in cases of *tabes dorsalis*. There was no ocular paralysis. Smell and taste were considerably impaired. There was complete absence of the *patellar tendon-reflex*, whilst the cutaneous reflex (soles of the feet) was certainly increased. Shooting lancinating pains were often complained of.

The third and fourth of the cases can shortly be disposed of; the subjects of them are both women.

CASE III.—M. H., aged 57, married, with five children, had complained of pains shooting down her legs and between her shoulders for the past five years. For two years, her legs had been numb, and they had felt as if "they were bound". She felt a "cord" tied round the waist; had frequently had difficulty in passing urine. Her friends had noticed that she staggered when she walked. This patient was utterly unable to stand in the "ataxic position"; nor was she able to tell the position of her legs when lying down with her eyes shut. The muscular sense of the upper extremities was perfect. The legs were both insensitive to painful impressions; pins could be inserted without any complaint. Tactile sensibility was also impaired. Special senses were normal. The ophthalmoscope revealed nothing abnormal. Her gait also suggested cerebellar disease—*i.e.*, she walked as though she were slightly intoxicated. The *patellar tendon-reflex* was found to be completely absent. There was no ataxy; she co-ordinated perfectly.

CASE IV.—I. S., aged 44, married, no family, was admitted into the Newcastle Infirmary on May 13th, 1880. She was almost carried in, being unable to walk without considerable assistance. Her illness dated nine years back, and manifested itself at first by pains shooting down the legs; afterwards she observed a tightness round the waist, more especially in the left side. This sensation was never painful, but more of a "numbness", "as if something was tucking her in". For the past eight years she was unable to walk by herself. Very early in her illness, she noticed that she could not stand whilst washing her face. In the last three years, she had become much weaker and thinner. Formerly, she was unable to tell the position of her legs in bed; but the muscular sense had recently improved, so that at present she could place her legs in any position with her eyes shut, describing accurately their position. The legs were wasted and analgesic; a prick with a pin being called a touch. The impairment of sensation extended up to the umbilicus. The gait was that of a prostrated old person; the left leg was slowly placed in advance, and the right made to follow it as gently. She could stand by herself with her feet widely apart, but not with the eyes shut. There was nothing ataxic about her movements; and, though the legs were wasted, yet she still retained a considerable amount of muscular power. Her arms were normal. There was a complete absence of the *patellar tendon-reflex*; whilst the superficial (plantar) reflex was slightly increased. In this case, there was no evidence of grey degeneration of any of the cranial nerves. The lancinating pains in the legs were sorely complained of. Whilst she was awake, the bladder was normal; but at times, during sleep, the urine passed away.

The cases I have briefly recounted present many other points of clinical interest; but I think sufficient has been stated to serve my purpose. It would be absurd to describe them as examples of "locomotor ataxy"; for the simple reason that the one symptom which furnishes the disease with a name is absent—*viz.*, inco-ordination in locomotive movements; whilst nearly every symptom which goes to make

up the symptom-picture of "*tabes dorsalis*", excepting the ataxy, is present in a marked degree.

In a further communication, I hope to refer to the early association of changes in the band and in the spinal cord in cases of *tabes dorsalis*; so I shall not allude at present to this feature existing in at least two of the cases cited above. In two other cases, at present under my care, of undoubted posterior sclerosis, the gait approaches, to a very slight degree only, the characteristic ataxic manner of walking; whilst, when the patients are lying in bed, movements of the legs can be performed quietly so long as the eyes are observing the limbs. Such cases, whilst easily recognised by an experienced observer, must puzzle sadly even senior students, inasmuch as the characteristic gait, on which the teaching of the schools has laid great emphasis, is not present. Undoubtedly the gait in posterior sclerosis varies within very wide limits; consequently, I apprehend, caution should be exercised in the degree of importance attached to it. For the lesion may easily be recognised by the striking gait of some patients, as, for example, in the case of the patient who was being investigated by a student undergoing his clinical examination. After the physical examination of the lungs and heart had been carefully made, without yielding any important information, the patient remarked, "Hadn't I better get up and walk, sir?" the result being an immediate diagnosis. Yet, in many cases, the information gained from the gait is meagre indeed. It has appeared to me that the degree of anæsthesia—using the term in its fullest sense—bears no direct proportion to the amount of inco-ordination; in fact, rather the reverse. The cases to which I have alluded may be compared with one very marked case of locomotor ataxy at present under observation, in which the gait is truly characteristic; in the latter, the prick of a pin invariably excites the sense of pain, though in a modified manner; whilst, as already stated, analgesia was complete in the cases recorded. Considering that little is known concerning the co-ordination of movements in the spinal cord, it would be futile to speculate, in the absence of *post mortem* investigation, as to the why and wherefore of the want of ataxy. It is difficult to accept, in the light of these cases, the theory advanced by Dr. Gowers, in his truly excellent work, *Diseases of the Spinal Cord*, *viz.*, ataxy may depend solely upon the impairment of the so-called "deep reflexes"; *i.e.*, *patellar tendon-reflex*, etc. On the other hand, by adopting the view of Lockhart Clarke, as elaborated by Debove and Boudet, *tabes dorsalis* without locomotor ataxy may be accounted for by supposing that the loss of muscular tone is diffused and general. I notice that Dr. Buzzard recognises the existence of "locomotor ataxy" without any ataxy (BRITISH MEDICAL JOURNAL, March 5th, 1881, p. 331).

CASE OF TETANUS AFTER OVARIOTOMY.

By E. MALINS, M.D.,

Obstetric Officer to the General Hospital, Birmingham.

I PUT the following case on record: firstly, on account of its rarity as a sequence of the operation of ovariectomy; and secondly, because there have been, to my knowledge, three other instances of the same kind after a similar operation in this locality within the past three months; circumstances which seem to point to some occult influences, possibly of an epidemic kind, which act at particular periods in the production of this disease.

Miss B., aged 60, was placed under my care for operation by my friend Mr. Walker. She was of a good constitution, singularly calm temperament, free from any mental anxiety, and hopefully confident of her own recovery. The tumour was a large multilocular one, and had been steadily progressing in size for about eighteen months. The urine was free from albumen, and there was no organic disease of any kind present.

On March 1st, ether being given by Dr. Simon, the operation was commenced under carbolic spray, but, the lamp going out suddenly in the middle of the operation, it was finished without. There were no adhesions; and a broad pedicle was tied in three divisions with fine strong silk and returned. The wound was dressed with carbolic gauze, and covered with salicylic wool and a flannel bandage. The subsequent progress for a time was all that could be desired. On the second and third days, the temperature was 100°, and the pulse 96; but the temperature afterwards fell to 99, and the pulse to 84; while the wound healed kindly and entirely, the stitches being removed on the sixth day.

On the evening of the eighth day, the nurse, in trying to adjust some artificial teeth which the patient had previously worn, noticed that she could not open her mouth. Some hours afterwards, she complained of stiffness in the jaws, pain in moving the head, and inability to protrude the tongue, the jaws being firmly locked. Twenty grains of chloral,

with one-third of a grain of morphia, were given. The following day the patient seemed to be much exhausted, the eyes fixed, and the corners of the mouth retracted; attempts at deglutition excited spasm in the throat, with a sense of impending suffocation, and occasional pain with much distress in the præcordial region. The chloral and morphia was repeated, but little sleep obtained; there were profuse perspiration and much thirst, and any attempt to relieve them aggravated the spasm and restlessness. On the evening of the tenth day, an effort to take some beef-tea brought on a violent convulsion, which, though mitigated by the immediate administration of chloroform, caused death in about half an hour from its onset. The temperature rose to 100° on the evening of the ninth day, but fell in a few hours to 99°, and was not again elevated; while the pulse on the morning of the ninth day went to 100, and on the tenth to 120. No *post mortem* examination was allowed.

NERVE-STRETCHING.

By W. A. BERRIDGE, M.R.C.S., etc.

THE cases of successful nerve-stretching recently reported in the BRITISH MEDICAL JOURNAL encouraged me to have resort to this proceeding in the following case, which was so severe that the patient herself hailed with delight any operation which afforded some prospect of even partial relief from her distressing symptoms; and it is with great regret that I am compelled to record a total failure of any benefit from the operation. There was no reason to suspect syphilis. Nevertheless, the patient had previously been treated with mercury to very slight salivation, and also at another period with iodide of potassium until the well-known spots appeared, without the slightest benefit; so that the nerve-stretching was only attempted as a last resort, and after the failure of other means besides those mentioned.

The patient was a female, aged 36. When an infant, she had had eyes until she was two years old; then they quite recovered. She had scarlet fever when fourteen. She first menstruated at fifteen, and was always regular, never having much pain. She had "low fever" when twenty-one. At the age of twenty-seven, she had a pain all round her back and stomach, and felt a tight feeling like an iron band. She used to sleep against an outside wall, and the wall was damp; to this she attributed the commencement of her present illness. The pain in her back preceded the pain in her legs. The legs felt so heavy, and there was such a feeling of numbness, that she could not get about. She quite recovered for a time. The following winter she became worse, but again recovered slightly in the summer, although she could not walk without assistance. She had at this time no pain—only a feeling of weariness. Each succeeding winter the symptom increased; and in 1876 she saw Dr. Hughlings Jackson, and was in London for some time.

The patient first came under my care in July 1879. She could then walk with great difficulty, and the pain in her back and legs was so severe that she could not sleep at night. On attempting to walk, she had great tremor. There was no incontinence of urine; no albumen or sugar in the urine. The temperature was normal. On examination with the ophthalmoscope, "the discs were pale, the edges clearly defined". The muscular rigidity of the lower extremity had been gradually increasing, and she had been quite unable to walk since Christmas 1879.

On March 8th, 1881, I grasped the left great sciatic nerve with my forefinger and thumb, and stretched it as hard as I possibly could. The spray was used, and all the usual antiseptic precautions. At 7 P.M., she had no pain in the left leg, only when it "drew". It "drew" with any movement. The right leg was very painful at night. She had passed urine; there was no incontinence. Pulse 72; respirations 16; temperature 98°. The left leg was strongly drawn back upon the thigh, and the thigh drawn up towards the abdomen. It could be pulled down by considerable force, but soon went up again. Sensation was fairly good all over it. There was a difference in the temperature of the two legs of only one degree (right 98°, left 97°). There was a good deal of pain in the leg. The right leg was much contracted, and was very painful. On March 9th, sensation was impaired over the back of the left leg. There was not so much pain. Temperature of the right leg, 98°; of the left, 98°. From March 10th to 14th, sensation was still slightly impaired in the left leg; but it moved better. It did not require so much force to pull it down; but it soon drew up again. The temperature of both legs was still 98°. She had had less pain and better nights. On March 20th, the legs were both quite as much contracted, and as painful as they were before the nerve-stretching. The wound healed by first intention.

ON THE USE AND ABUSE OF SALICYLIC ACID.

By GEORGE KEMP, M.D. CANTAB.

DR. T. D. ACLAND, in a communication on the Uræmic Results of Salicylic Acid, published in the BRITISH MEDICAL JOURNAL for March 5th ultimo, states that, in the JOURNAL for January 29th, there are reports of six cases of acute rheumatism treated with salicylic acid, and accompanied by delirium. The results of his inquiry into the subject are not, however, altogether satisfactory, as he operated by means of salicylate of soda, not salicylic acid; and we are far from justified in assuming that the therapeutical effects of salicylic acid and salicylate of soda are identical.

In physical characters, they differ essentially, the one being very soluble in distilled water at 60° Fahr., the other only reasonably soluble in water at a far higher temperature; but a more important consideration is that, whilst the soda-salt can be administered in comparatively large doses with impunity, salicylic acid, even in small doses, produces great irritation in the mucous membrane of the mouth, fauces, and stomach; indeed, to such an extent, that its administration in the usual form is at all times difficult, and in some cases prohibitory, especially when we have respect to the absurdly dangerous doses of eighteen or twenty grains, as we find reported.

I am convinced, from careful and anxious observation, that the maximum dose should not exceed eight grains, repeated as frequently as the exigencies of the case may require; and this may be done without the slightest inconvenience to the patient, and, in fact, without his knowledge, by giving it in beef-tea, or, when highly albuminous diet is prohibited, by solution in weak "osmazome" tea, which is always ready at hand in the form of the so-called "meat-extracts"; the only recognition of the presence of the drug being, "You have put too much seasoning into my soup". A little celery-seed boiled with the liquid and strained off makes it more palatable, and assists in the disguise.

There are other modes in which this valuable remedy may be used with advantage, which, so far as my reading informs me, have not as yet received due attention. One of these is, its application as a counter-irritant in superficial rheumatism; and, of course, in this case, a very large additional dose may be employed. Thirty grains of salicylic acid, intimately mixed with an ounce of any suitable unguent, has been found to alleviate local pain in a remarkable degree. Whether this be due to its properties as a counter-irritant *per se*, or the absorption of the remedy conjointly, can only be decided by a large collation of cases; but its advantage is greatly enhanced by the addition of iodide of potassium in an equal quantity.

Another use of this remedy is in the form of enema. A case of severe and long-continued dyspepsia, implicating both stomach and duodenum, with bacterial fermentation to a most distressing extent, only relieved by constant resort to emetics; complicated, moreover, by great sluggishness of the lower bowel, with occasionally severe colicky pains from accumulated fæces, the patient at the same time suffering from rheumatism on the slightest exposure to moisture and cold, was treated by enema, with thirty grains of salicylic acid and half an ounce of tartrate of potash dissolved in a pint and a half of lukewarm water. Of course, the addition of two fluid-drachms of tincture of hyoscyamus, or its analogues, would have been a great improvement, but the object was to keep the conditions of the case as simple as possible. The result was quite remarkable; the colon was not only relieved of its scybala, but its tonicity was greatly restored, suitable general treatment being resorted to consentaneously. Should this case be confirmed by the experience of others, the record will not be useless.

THE first number of a new French periodical, entitled the *Journal d'Encephale*, under the direction of Professors Ball and J. Luys, appeared on the 25th March.

ILLEGAL PRACTITIONERS.—We hear, from a Bristol correspondent, that some American charlatans, named Mayfield Lilly and Eugénie Lilly, were summoned, on the information of Superintendent Harris, of that city, "for that they, on the 14th March, not being registered under the Medical Act, nor possessed of any diplomas or certificates of having taken any English, foreign, or colonial degree, not having taken such degree, and not having practised as doctors of medicine or physicians before the 1st day of October 1858, unlawfully, wilfully, and falsely did pretend to be doctors of medicine and general practitioners in medicine, and recognised as such by law, contrary to Section 40 of the Medical Act". The defendants, it is said, have decamped, leaving their surgery, stock of worms, etc.; and warrants have been issued for their apprehension.