4. That the ejaculatory ducts may become obstructed, and the seminal vesicles consequently hyper-distended.

5. That termination by suppuration is exceptional.

6. That when suppuration occurs it should be dealt with by incision from the perineum rather than from the rectum.

7. That gonorrhœa is by far their most common originator.

8. That they are frequently concomitant with gonorrhœal epididymitis.

9. That they are usually diagnosed as inflammation of the prostate or neck of the bladder.

10. That while certain subjective phenomena are suggestive of these disorders, their diagnosis can only be made by objective examination from the rectum and bladder.

Since my attention has been particularly directed to this class of diseases, I have been struck by the frequency of their occurrence, and although my paper falls short of what I could have wished, and will not contribute much to our stock of knowledge, I venture to hope that it may direct the attention of practitioners to a class of disorders which have hitherto received too little attention.

ANGULAR CURVATURE; PARAPLEGIA; RESECTION OF LAMINÆ; RECOVERY.

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A BRIEF description of the following case of paraplegia due to angular curvature, in which the laminæ of several vertebræ were removed, may be of some interest, both on account of the comparative rarity of this mode of treatment at the present time, and also because of the success which followed operative interference. I am indebted to my dresser, Mr. F. G. Swayne, for the report of the case.

H. S., aged 7½, was admitted into Job Ward under my care on February 4th, 1889. His father suffers from cough and hæmoptysis. He has lost three children with chest complaints. There is also a phthisical history in the mother's family. The boy had bronchitis every winter since birth. He had scarlatina when 4 years old, from which he recovered perfectly. Eight months afterwards he became weak in his legs, but nothing abnormal was observed in his back. This weakness gradually disappeared, and he was able to run about and attend school.

In January, 1888—thirteen months ago—his parents observed that his back was prominent between the shoulder-blades. He complained of no pain, either when the lump was pressed upon or on his moving about. By the advice of a medical man he was kept on his back. In March the parents observed that he was unable to move his legs; and in April, when his legs were extended they became suddenly and spasmodically fixed in that position, the feet being forcibly pointed. He was able to control his motions more or less perfectly, and he was conscious of a desire to micturate; it was, however, necessary to attend at once to his wants, otherwise he passed his water into the bed. He never complained at any time of pain, either in the trunk or lower extremities.

On admission, a very abrupt and prominent curve was observed to occupy the dorsal region immediately above its centre, the spinous process of the fifth vertebra apparently forming the angle. There was no pain on pressure, nor on causing the boy to flex or extend his column. The deformity did not occupy a median position, but lay slightly to the right. Consequent upon this asymmetry and upon the existence of this curve, the pelvis had undergone a marked rotation around an antero-posterior, and to a less degree around a vertical, axis, so that the vertical axis of the sacrum, if prolonged, passed through the lower angle of the right scapula, and the crest of the right ilium was an inch below the horizontal level of the left. He is unable to make any voluntary movement of his legs, but alters their position with his hand. They feel cold to the touch, and, though well covered in blankets the whole of the lower portion of his body seems of an abnormally low temperature. His legs can be flexed, and when in that position they can be moved through a considerable angle without any very marked resistance being offered to the movement. On gradually extending them, at a certain degree of extension the muscles of the whole leg become suddenly violently contracted, and the leg and foot are

retained in a condition of extreme overtension. While this spasm is taking place, the patient experiences no discomfort, and the abdominal and intercostal muscles below the level of the deformity display no spasmodic movement. The abdominal and intercostal muscles act normally in respiration. I may say that the father states that the spasmodic contraction of the muscles of the leg while in the extended position is not so violent as it was two months ago. It is not possible to obtain any plantar reflex. The knee-reflex is exaggerated. There is no ankle-clonus. Though the patient can distinguish the point touched, it is apparent that he feels much less distinctly than normal, and that the sense of pain is diminished in the same proportion as that of touch. It is also apparent that this diminution of sensation is more marked in the feet than it is in the thighs and lower part of the trunk. Some resistance is offered to abduction as well as to adduction of the legs. The patient does not appear to experience any pain or discomfort while the legs are being moved, or while they are in a position of rigid extension.

The child coughs frequently. He does not fill the apices of his lungs during respiration, which is feeble, and there are a few *râles* to be heard in both bases. He is in the habit of wetting the bed; but whether this resulted from want of attention or not it was difficult to determine. The urine was acid, sp. gr. 1025, no deposit, no albumen, and no blood. The boy was kept quiet in bed for several days, and his temperature, which ran up for several days for a couple of degrees in the evening, varied but very slightly subsequently. His parents were very poor, and there appeared to be no sign of any improvement in the condition of his lower extremities, but, on the contrary, their state was becoming progressively worse. His family history was extremely bad; besides that, he was physically very feeble indeed. Considering these circumstances, I concluded that the only hope of preserving the boy's life was by putting him on his legs and placing him under more favourable circumstances, both as regarded hygiene and diet, than it was possible to do while he was in this helpless condition. I therefore determined to expose the child to an operation which, though comparatively trifling to a more vigorous subject, would be accompanied by some risk to one in his very enfeebled condition. The parents willingly accepted the risk.

Consequently, on February 15th, the operation was performed, every care being taken that the child was kept warm during it. The soft parts were rapidly removed from the spinous processes, laminæ, and inner portions of the transverse processes, and the spinous processes and laminæ of the fourth, fifth, and sixth dorsal vertebræ were removed with bone forceps. The spinal canal being opened, the dura mater was exposed, there being no granulation or cicatricial tissue obvious, nor was there any of the fat which normally exists in this position. The dura-matral sheath when first exposed was flaccid, and the cord felt thin and soft; at first it did not pulsate, but after a time the pulsations, though slight, were obvious. The body of the fifth dorsal vertebra appeared to be abnormally near the laminæ of the adjoining vertebræ, and it appeared to me that the cord had been forcibly compressed between these bony points. As there was nothing else to be felt there was no indication to proceed further. The wound was then closed, a small drainage-tube being fastened into the lower end of the wound, and a dressing of alembroth wool applied. The dressing was changed on the following day, when the drainage-tube was removed. The wound did not require another change of dressing.

On the evening of the 15th his temperature rose to 101.2°, and his pulse was 130, but on the following morning the temperature was normal. To prevent the dressings being wetted his urine was drawn off at intervals during the day. He knows when his bladder is full, but he cannot void it as he did before the operation. On February 18th he acquired control over his bladder, and it became no longer necessary to continue the use of the soft rubber catheter, which he objected to very much. On the second day after the operation the spasmodic contraction of the muscles of the leg in the extended posture had disappeared. Besides that, they felt warmer to the touch, as did the whole of his trunk.

On February 19th, four days after the operation, he was able to move his legs slightly in response to slight stimuli. He does not seem to be aware of the extent to which he moves. It is also obvious that he feels very much more distinctly than he did before the operation. For instance, it was possible to tickle the soles of his feet very vigorously without causing him the slightest discomfort, though he was conscious of the fact, but now tickling

causes him to remove his feet and also produces discomfort. The daily improvement in power in his legs was gradual, and he soon ceased to wet his bed. He lost his cough completely and gained flesh rapidly.

On March 19th—when this paper was sent for publication—the child could move his legs freely, and we are only waiting till the cicatrix is sufficiently consolidated to apply a poroplastic jacket and to get him up.

THERAPEUTIC MEMORANDA.

COUNTER-IRRITATION IN WHOOPING-COUGH.

DURING the current year, whooping-cough has been prevalent all over the island of Malta, and, in some localities, it has occurred in a very severe type. At Zabbar, a village in which the last cholera epidemic made ravages, the above-mentioned complaint has attacked almost every family. As district medical officer, I had under my treatment a good many cases in which the patients whooped so frequently that their parents neglected to count the fits. To combat such a distressing disease I have tried the administration of several medicines, namely, bromide of potassium, assafœtida, valerian, morphine, belladonna, etc., and I have very closely watched their effects, but none of them proved of much use. Having observed, however, that during the late cholera epidemic some of the patients admitted into the hospital under my medical charge slept well, had their anxiety improved, and some of them ultimately recovered after the application of a strong counter-irritation of the pneumogastric nerves in the neck, namely, between the mastoid process and the angle of the lower jaw, I tried the same treatment on whooping patients, and I have no hesitation in stating that the result was very satisfactory. I may quote one single case of the many I have had under treatment.

G. C., a boy, aged 12 years, of weak constitution, was suffering from frequent and intense attacks of whooping-cough. At a time the fits were so vehement that blood came out of his eyes and mouth. The case was a severe one, and I thought it would very likely end fatally. I prescribed several medicines, and even subcutaneous injections of morphine, but without any avail. I then tried for the first time the counter-irritation on both sides of the neck, and this means acted like magic. In four or five days the patient recovered, and was able to go to school. Since that time I have been applying the same treatment, either on the right side only or on both, with the greatest benefit.

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THE TREATMENT OF DIPHTHERIA BY SALICYLIC ACID.

YOUR Swiss correspondent in the JOURNAL of April 6th reports Dr. A. d'Espine's paper on the treatment of diphtheria by the local use of salicylic acid. For the last ten years I have used salicylate gargles in diphtheria, scarlatinal sore throat, and so-called "ulcerated sore throat," with very good results. I first used salicylic acid dissolved in liq. ammon. acet., but now use salicylate of soda (3 iss, aq. 3 viij). In almost all cases the condition of the throat rapidly improves if the gargle is used frequently; the diphtheritic deposits clear off, and the fetor of the breath is lessened or entirely removed. There is, I think, an additional advantage in the probable disinfection of the throat, as even a dilute solution of salicylic acid (1 in 2,000) is shown by the researches of Drs. d'Espine and E. de Marsignac to destroy Loeffler's microbe. It was, in fact, to lessen the infection of diphtheria that I first employed salicylic acid in 1878.

Peterborough. LEONARD CANE, M.D. Lond., B.S., etc.

IS APOMORPHINE A SAFE EMETIC?

THE recent discussion on apomorphine in the JOURNAL is my inducement in venturing to send some notes on the subject of its suitability as an emetic. I regard it as a drug which is little less than wonderful in its action, and I should be very sorry to see its use discontinued through any belief in its being a dangerous remedy. Your readers will see that in the cases in which I have employed it, its use has been attended with the happiest results, and that it has acted well and efficiently when deep states of unconsciousness were present which would have prevented the administration of any other remedy for provoking sickness. I can only say that I have never seen any untoward symptoms follow its exhibition.

Poisoning by Alcohol and Petroleum.—J. B., a young man, was seized, when at his mother's house, with epileptiform convulsions. As his breath had an odour of drink about it, I injected one-twelfth of a grain of apomorphine. In a very short time he vomited freely, bringing up a quantity of queer-smelling fluid which I afterwards ascertained to have been beer, which had been adulterated with petroleum, as a practical joke. After free vomiting, he regained consciousness, and the fits ceased.

Belladonna Poisoning.—At 5 P.M., called to see a young, single, woman who had drank one ounce of belladonna liniment at 3 P.M. Found her supported by friends, in a sitting position, and talking nonsense; pallid countenance, dilated pupils. At once injected one-tenth of a grain of apomorphine: in about six minutes this produced violent vomiting, and about half a cupful of a greenish liquid, smelling strongly of camphor, was brought up. Then she became drowsy, and I stayed with her, keeping her from falling asleep by tickling and slapping her. I had great difficulty in keeping her awake. By dint of continued interference of this sort, she at last roused up and tried to strike and to kick me. There was marked incoherence of speech. At 10 P.M. I found the pupils of the eyes beginning again to contract. She was very gay in manner, saying all sorts of absurd things, and crying out that people and animals were in the room. Next day she was quite well.

Post-partum Eclampsia.—I was called at 8 A.M., on August 25th last, to see Mrs. B., a young primipara, who had been delivered of a healthy child on the 24th, at 1.35 p.m. At 3 P.M. of that day she became suddenly convulsed, and these convulsions recurred about every fifteen minutes afterwards up to the time of my visit, next day. At once administered one-tenth of a grain of apomorphine by hypodermic injection, and as no vomiting ensued, I repeated the dose in a quarter-of-an-hour. She was then unconscious, lying with dilated pupils and insensitive conjunctive; her pulse was full. Temperature, 102° in the axilla. The lochia were sour smelling; the linen about her was dirty and soiled. Used a large enema (tube passed about 6 inches) of castor oil and soap-suds; this soon acted, and continued to act for some hours, bringing away a quantity of feces. The apomorphine also acted freely. Then gave pot. bromid., fifteen grains; chloral hydrat. ten grains, every third hour. Convulsions continued throughout that day, at intervals, up to 8 P.M., then ceased altogether. She regained partial consciousness on the morning of the 26th, and complete consciousness on the 29th. From that time she made a perfect recovery.

Epilepsy (Status Epilepticus).—R. M., locomotive driver, a middle-aged man, was seized with convulsions on March 30th. He was removed home and I was sent for. When I saw him he was in the epileptic state—fit after fit occurring with scarcely any intermission. The convulsive movements were general and were most violent in character. On inquiry of his landlady, I found that, although not drunk, he had certainly taken more beer than was good for him on the preceding night; so I administered a hypodermic injection of one-tenth of a grain of apomorphine. In about six minutes' time he vomited freely, and brought up an incredible quantity of undigested food, amongst which a number of very large masses of undigested beef were noticeable, some of them were 4 inches by 2 inches in size. From the time of this vomiting the convulsions entirely ceased, and he regained consciousness in about five hours. He had been in convulsions for over three hours.

Now I think these cases are interesting as showing in what profound conditions of unconsciousness the drug apomorphine will act as an emetic. I regard it as one of the most valuable remedies that we have in the list of materia medica.

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LARYNGOLOGICAL MEMORANDA.

A CASE OF INTUBATION.

F. K., aged 5. Five days after rash of measles had disappeared, the patient was seized with a difficulty of breathing. The mother thought it was a cold, and applied the usual remedies, without, however, affording any relief. At 9 in the morning I received an urgent summons. Upon my arrival, I found the child sitting upright in bed gasping for breath, and with lips and nails cyanosed, respirations 66, indrawing of intercostal spaces, and ex-