carefully placed in a comfortable position in bed, and fixed the head and neck in proper situation by means of pillows and sand-bags, and enjoined him on no account to move or be moved unless under my supervision, and directed that he should have only liquid nourishment, administered through a funnel, so that he should not have to move his head in partaking of it. I saw him every day for a week, during which time he went on well, partook freely of liquids, and slept well. He complained of occasional transient pains about the neck and face. There was no rise of temperature nor other sign of inflammatory action about the meninges. the first week I visited him every alternate day, and his progress was without interruption till the evening of the twenty-third day. On that day I had seen him in the afternoon third day. On that day I had seen him in the afternoon and found him going on as before. In the evening he begged his wife to give him some solid food, and she gave him some bread-and-butter, which he ate without difficulty, but soon after eating it he was seized with severe griping pain in the stomach and bowels, whereupon he started up in bed, despite the efforts of his friends to restrain him, and almost immediately dropped down and expired. I saw him again before he was disturbed from the position in which he had fallen, and there was the same position of the head as when I first visited him, and the same prominence of the cervical spines, only now, there being no rigidity of the muscles, the head was very movable.

Necropsy.—On exposing the cervical spine there was apparent a considerable separation between the spinous process of the axis and the arch of the atlas, the atlas and head being carried forwards and the cord tightly stretched and pulled against the anterior surface of the canal. I removed then the other portion of the cord, and on neither side was there any structural injury save a small indentation on the anterior surface, which corresponded to the jagged edge of the body of the axis, where the odontoid process had been broken off from it. There was no effusion of blood. The odontoid process, with a portion of the body of the axis, had been broken off, and remained in its situation against the anterior arch of the atlas, the transverse ligament being intact. There were a few minute blood-clots on the surface of the fractured bone, but no blood seemed to have made its way into the canal and none of the larger bloodvessels were injured. So nearly complete was the dislocation that very little of the articular surface of the axis and atlas remained in contact, and in the dislocated position the cord was rather pulled across the fractured surface of the axis body, which accounted for the indentation on its surface before mentioned.

Remarks.—I think this case worthy of notice: firstly, as being an instance of an injury usually immediately fatal, in which a fatal result did not immediately follow; secondly, because the period over which the patient survived the accident was longer than in any recorded case with which I am acquainted; and thirdly, as raising the questions, "What result might be hoped for in similar cases should proper treatment be carried out, and not interfered with by any action of the patient or his friends?" and "What is proper treatment in such a case? is an attempt at reduction wise, or is it not attended with great risk?" It had been my intention to have kept the patient in the recumbent position for two or three months, and then have fitted on him a mechanical support, after the fashion of those used to support the head in spinal disease; but now, having examined the injuries. I question if such repair could ever have taken place as to permit him to go about without re-dislocation being likely to occur at any time, without, and perhaps even with, artificial support; and it is certainly unlikely that the odontoid process could ever have united with the rest of the bone from which it had been severed.

Kidderminster.

The Antwerp Medical Congress.—This Congress terminated its labours on the 30th ult., by a visit to the Hospital of the Stivenberg. In the full sittings it was resolved that "in the present state of relations between the peoples of Central Europe, land quarantines and sanitary cordons are useless and even dangerous measures; the fumigation of letters is useless." The majority of the Congress declared itself for the maintenance of maritime quarantines in seaports and at the mouths of rivers. Such quarantines were also pronounced to be feasible and efficacious in Belgium.

## SANTONIN IN AMENORRHŒA.

BY WALTER WHITEHEAD, F.R.C.S. ENG., F.R.S. EDIN., SURGEON TO THE MANCHESTER ROYAL INFIRMARY.

At the risk of being regarded premature, I wish to attract early attention to the therapeutic value of santonin in the treatment of some forms of amenorrhoea, especially when associated with chloro-anæmia.

Some years ago, during my attendance upon a young lady of seventeen, suffering from an obstinate ingrowth of a toenail, it was incidentally mentioned that the patient had symptoms suggestive of worms. I prescribed ten-grain doses of santonin to be taken for two consecutive nights, and to be followed each morning by a seidlitz powder. No worms, however, made their appearance, but a few days afterwards I was casually told that menstruation, which had been in abeyance for several months, had again taken place, and in a much more healthy manner than formerly. The coincidence did not improve that the time formerly. The coincidence did not impress me at the time, and I never for a moment supposed that the reappearance of the catamenia had the most remote connexion with the two doses of santonin. The subject did not cross with the two doses of santonin. The subject did not cross my mind again till upwards of twelve months afterwards, when one day, whilst prescribing for a young girl suffering from ozena, I was forcibly struck with her chloro-appearance. Influenced by some impulse—"the association of ideas" I suppose. I ordered cantonin in the came manner. of ideas" I suppose—I ordered santonin in the same manner and in the same doses as in the previous case, and, much to my surprise I must confess, with the same results. I have frequently since administered santonin in amenorrhœa with almost universal success, and in many cases after the ordinary remedies, including the permanganate of potash, have been tried in vain. I must admit that I have not had an opportunity in any of my cases to investigate the concurrent uterine pathological condition. I have simply given the drug empirically to all potients who have considered. the drug empirically to all patients who have come under my notice suffering from amenorrhea, with expectant un-My immediate object is to submit my brief excertainty. perience to the profession in the hope that the experience of others may shortly test the potent or valueless influence of the drug in this particular derangement.

One of my cases is, perhaps, worth brief mention, as illustrating in a marked degree the class of cases so frequently brought under professional observation, and one that has received remarkable benefit from the drug. The patient was a young lady sixteen years of age. She was the daughter of an elderly drunken father, and she had a rheumatic mother. I saw her first when suffering from symptoms which, at the time, were attributed to ulceration of the stomach, fixed pain, anorexia, rejection of food, general physical prostration, and lassitude. She had alarming attacks of prolonged faintness, shortness of breath upon the slightest exertion, and obstinate constipation. Her expression was characteristically that of chloro-anæmia, and she was emaciated to the last degree. Confinement to bed, and nutritive enemata, exclusively used for alimentation for two months, restored the digestive organs to the tolerance of simple food; santonin promptly corrected the menstrual functions, and at the same time appeared like magic to restore the patient to robust health. Ever since any omission of the period has been immediately rectified by a single dose of santonin.

In cases of chloro-anæmia, subordinate to amenorrhea, the drug appears to be of the most signal value, as I have invariably noticed that with the return of menstruation, or a discharge of blood from the vagina equivalent in effect, every symptom has rapidly subsided. The mere discharge of blood immediately following the administration of the drug will not, I suppose, be accepted by some as normal menstruation, but as a fictitious substitute; it must, however, be admitted that the practical value is established, when the discharge, be it vicarious or otherwise, is followed by the amelioration of the chloro-anæmia, which in reality constitutes the pressing ailment we have to contend with, rather than the mere absence of menstruation.

Whether santonin, or any other drug, is in a true sense a genuine emmenagogue is very doubtful, for if we regard menstruation as coincident with ovulation, and ovulation the periodic rupture of a Graafian follicle, we cannot expect the ovaries to assume this complex physiological process of definite periodic rotation at will; nevertheless, if a single

dose of santonin will immediately reduce the apparently normal performance of the function, together with other consensual phenomena, when they have been dormant for several months, it is entitled to some further distinction in our Pharmacopæia than that of being simply a vermifuge. It would be necessary to accept a theory that ovulation could at a certain stage be temporarily suspended, and capable of being immediately accelerated under the influence of certain induced conditions, before we could acknowledge the action of santonin as a true emmenagogue.

Manchester.

## CASE OF A CRYPTORCHID.

BY WILLIAM STEER, M.R.C.S.,

RESIDENT ASSISTANT MEDICAL OFFICER, ST. OLAVE'S INFIRMARY.

THE connexion between the organs of generation and those of the voice, and the association existent in point of time with their mature development has been always recognised; but how intimate this connexion is, together with the reason why, is not so fully made out. A case therefore where both these sets of organs are rudimentary must contain points of some interest, and a short account of such a one will give matter for reflection (apart from the curiosity that attaches to a condition so rare), and possibly prove of some practical value.

The patient, J. McC——, aged thirty-nine, was admitted into St. Olave's Infirmary in October, 1884, suffering from occasional neuralgic pains in different parts of the thorax, a dry cough, shortness of breath, frequent throbbing at the root of the neck, and pain on swallowing. Aneurism of the arch of the aorta just where it gives off the innominate artery was diagnosed. The man was kept quietly in bed; moderate doses of iodide of potassium were prescribed, and a non-stimulating diet given. The condition of the patient after a couple of months was greatly improved. About this time he complained of pain across his loins, and of having to pass urine as frequently as fifteen or twenty times during the twenty-four hours, hot tea in his case acting as a singularly smart diuretic. Attention being thus drawn to the urinary tract, the following curiously undeveloped condition of those

parts was accidentally discovered.

The penis is about an inch in length and a third of an inch in diameter close to the pubes. The prepuce can be easily drawn back, exposing a normally shaped glans. The scrotum resembles in shape and appearance that of an infant, smooth and slightly pink in colour, though differing but little from the rest of the skin, which is singularly white, soft, and clear, there being an entire absence of hair on the trunk and limbs, save a few straggling filaments close around the penis. Passing over the crest of the pubis on either side can be felt a solid cord, about half the thickness of an ordinary cedar pencil, which ends at the upper part of the scrotum in a somewhat flattened fibrous termination, this being the only apology for testes that can be found. Moderate pressure between the finger and thumb gives some pain, but occasions nothing approaching the sensation caused by a like proceeding in a healthy mature testis. With the finger in the rectum no vesiculæ seminales can be felt, nor prostate, neither are any of the ordinary sensations experienced when pressure is made in the region of these organs. The frequency of passing urine points to want of development of the bladder, as the necessity to micturate frequently has existed as long as he can remember, and without other symptoms. On turning towards the larynx and examining through the skin, the trachea is found to be about the average size perhaps, if anything, slightly smaller; but the cricoid cartilage is apparently quite natural as to size, prominence, and firmness. The thyroid cartilage, however, presents many marked signs of ill development, it being impossible to distinguish any prominence corresponding to a pomum Adami, nor any notch at the upper border of the cartilage. The larynx appears to be of the proper length and breadth, but gives one the impression of being flattened from before backwards. It is very movable, and the thyroid cartilage is softer than natural. The voice has never broken; it has the ordinary treble quality of a lad's previous to the age of puberty. The mammæ are probably a little larger than usual, with the nipple flat, on a level with the surrounding skin, and of a pinkish colour; as also is the areola. The

patient is otherwise well made; is a fairly intelligent man; height 5 ft. 4 in., chest girth 38 in., and exceptionally large around the hips. His hair is weak and thin, and he has commencing cataract in the right eye. He is single, and has apparently never experienced sexual desires.

Rotherhithe, S.E.

## A CASE OF DAMAGE TO THE SPINAL ACCESSORY NERVE.

BY JOSEPH L. HEWER, F.R.C.S., B.S., M.B.

-, aged sixty-nine, came to me in March, 1885, complaining of a tumour which had been growing out of her back for the last four months. Even beneath her dress a distinct swelling could be seen near the situation of the right scapula, and on uncovering the back it was at once evident that the tumour complained of was the right scapula, which was placed lower than its fellow and stuck out in a most remarkable manner. The right trapezius muscle was extremely atrophied, so that on asking the patient to shrug her shoulders only the left trapezius could be got to act at all, and it appeared that the displacement of the bone was entirely due to the wasting of the muscle on that side. On further examination the right sterno-mastoid was seen to be so wasted that it appeared beneath the skin as a narrow fibrous band, the difference between it and its fellow being most marked. All the other muscles appeared normal. As the patient was muscular, but very thin, she was a good subject for examination. On being questioned, she pointed out a small scar just in front of the right ear at the apex of the anterior triangle, which she said was where a doctor opened an abscess which was deep down in the neck four months ago. Until the formation of this abscess she was quite well, but a few days after it was opened the lump began to form in her tew days after it was opened the lump began to form in her back, which gradually got larger; for the last few weeks, however, it had remained stationary; the right arm also got so weak that she could hardly dress herself. I had several opportunities of examining her, but towards the middle of April quite lost sight of her. However, on Aug. 6th, 1885, I again saw her, and was much surprised to find that the right trapezius and sterno-mastaid muscles had find that the right trapezius and sterno-mastoid muscles had apparently recovered their normal bulk, the right scapula being only very slightly more prominent than its fellow; and that she was able to use the right arm as well as she

I think there can be little doubt that the spinal accessory nerve was in some way or other damaged in this patient; it seems almost impossible that it could have been divided in opening the abscess; but it appears more probable that it had become implicated in the products of inflammation, and that thus for a time its function was abolished. What astonished me most was the complete recovery of the patient in so short a time, and that without electricity or treatment of any kind at all. I had told her that she would not get worse, but would certainly get no better, forming this prognosis on the rapid and extreme wasting of the affected muscles and their stationary condition for about a month. The case would appear to me to be a caution against early operation in some cases of supposed division of nerves.

Highbury New Park.

## ON A CASE OF NEUROPATHIC PLICA.<sup>1</sup> By DINSHA BAMANJI PESTONJI, L.M. & S. (MASTER.)

In October, 1883, a female patient (D. M——), aged about twenty, came to the Dispensary with a peculiar matting of the hair of the head. She said that two days ago, after the cessation of the usual menses, she took a bath and washed her head with soda and warm water. The substance that she applied to the head was supposed to be soda, but she could not say with certainty whether it was soda or anything else. About two hours after the application of the substance to the head, she said that the hair on the back part

<sup>1</sup> Read before the Grant College Medical Society of Bombay.