every second day. This medication, well supported, was followed up for a week. Breathing appeared already easier, expectoration was less copious, and Mrs. B— was able to walk a little in her bedroom. After a fortnight of the same treatment she persevered with three half-glasses and the half-bath of the Pavilion alternated with a spinal douche of six minutes. From this time oppression diminished greatly, strength returned, and Mrs. B— felt well enough to go downstairs without help, and to be discharged. After a course of treatment of twenty-eight days she was able to walk a long time in the Park; dyspnoea had ceased; expectoration disappeared.

I think both these cases show the great importance of the aspiration of the mineral vapours, and of the use of the spinal douche in bronchial asthma.

ON A CASE OF THYROIDECTOMY.

By THOMAS H. MORSE, F.R.C.S.,

ASSISTANT-SURGEON TO THE NORFOLK AND NORWICH EYE INFIRMARY,
AND TO THE NORWICH JENNY LIND INFIRMARY FOR
SICK CHILDREN.

THE subject of removal of the thyroid body having been lately under discussion, the following case which occurred in my practice may prove of interest.

The patient, a young woman aged twenty-two, six years ago first noticed a small swelling on the left side of the larynx, which gradually increased in spite of numerous remedies. From the time of its first appearance she suffered occasionally from attacks of dyspnoea. In 1881 she was in the Norfolk and Norwich Hospital, where, she says, the tumour was tapped, but no fluid came out; it was afterwards injected with iodine on several occasions. In the following year she was under the care of Mr. Hutchinson in the London Hospital. During all this time the tumour was gradually enlarging. In February, 1883, I first saw her, and from then till the date of operation it continued to enlarge, and the symptoms became more aggravated. In March, 1884, I sent her to London to consult Mr. Symonds of Guy's Hospital as to the advisability of removing the tumour; he recommended her to submit to the operation. The tumour at this time formed a considerable prominence below the chin, and extended from the level of the hyoid bone down into the chest behind the sternum; it occupied the whole of the centre and left side of the neck, displacing the various structures to either side; its surface was covered with a plexus of veins, and the omo-hyoid muscle from the left side was stretched obliquely across it. It was also partly covered by the lower attachments of both sterno-mastoid muscles, and the larynx was pushed over to the right side of the neck, so that the pomum Adami was situated close below the angle of the jaw. The left carotid artery could be felt pulsating quite superficially along the posterior border of the sterno-mastoid muscle. This displacement will be best understood if I mention that the distance between the thyroid cartilage and the left carotid artery, measured horizontally, was four inches. The upper part of the tumour was quite movable laterally, but its lower end was more tightly fixed in the upper aperture of the thorax. She could only walk slowly and had to keep stopping to get breath, as the least exertion brought on difficulty of breathing. On several occasions she suffered from attacks of dyspnoea lasting about an hour, during which time the face was livid, and she herself, as well as those around her, thought that death from suffocation was impending. Inspiration was prolonged even when sitting still. She also suffered from a constant dry laryngeal cough. The function of the oesophagus was not interfered with. Her general health was otherwise good, except that since I have known her she has been gradually getting thinner, her weight at the time of the operation being six stone and a half.

On April 4th, 1884, having made arrangements for the operation, I had the assistance of the following gentlemen: Dr. Firth, Mr. Donald Day, Dr. Doyle, and Mr. Pollard. Using the steam carbolic spray and other antiseptic precautions, an incision in the skin, five inches in length, was made from the hyoid bone to the sternum, over the most prominent part of the tumour. A plexus of veins covered the anterior surface of the tumour; these were divided one by one between two ligatures, notwithstanding which there

was considerable loss of blood, and besides ligatures, six pairs of Sir Spencer Wells' artery forceps were in constant use. This part of the proceeding was somewhat tedious, as it seemed almost impossible to control the hæmorrhage. The tumour was enclosed in a more or less distinct capsule, which was not very easily separated in front, and appeared part and parcel of the tumour, doubtless owing to the iodine injections. The sides of the tumour were less firmly adherent and more easily separated with the finger. During all this time there was a general oozing of blood both from the capsule and from the surface of the tumour. Having first separated the upper end of the tumour, I was enabled by drawing it down, to tear it off from the pharynx and oesophagus, which formed the posterior boundary, the capsule being hardly distinguishable here. The lower end of the tumour extended down behind the sternum into the chest, and after its removal, the bottom of the cavity left was bounded on one side by the whole length of the innominate artery, on the other by the left common carotid artery from its origin upwards; these could be distinctly felt pulsating and apparently naked at the bottom of the wound. The left inferior thyroid artery was torn across, and severe hæmorrhage occurred from it. No distinct isthmus was seen, although from the situation of the tumour and the way in which the various structures were displaced I believe that the part removed represented the enlarged left lobe of the gland, in which case the right lobe was in all probability left *in situ*, not being abnormal in size. She had by this time lost a large quantity of blood, and was very faint. I therefore administered a subcutaneous injection of ether, after which the pulse improved. As many as twenty-four ligatures were used. The operation took an hour and a half. The parts returned easily to their natural positions; the wound was united with silver wire sutures, a drainage-tube having been inserted at the lower angle. The dressing consisted of green protective, iodoform gauze, Gamgee's absorbent tissue, a sponge compress, the whole being kept in position by a bandage. The tumour measured six inches in length, three and a half in breadth, and weighed fourteen ounces. It felt very firm, and was solid throughout except at one point, where was a small cyst containing about half an ounce of bloody serum. Mr. Symonds has kindly made a section of it for me, which shows the structure very beautifully. It consists of a stroma of fibrous tissue, containing large vesicles, lined with a single row of epithelium and containing in their interior a gelatinous so-called colloid material; some of these vesicles are larger than others. There are also to be seen a large number of small spheroidal cells of different sizes, which seem to be in a state of rapid proliferation; these, together with numerous bloodvessels, which can also be seen, would indicate a steady increase in size of the whole tumour, which corresponds with the clinical history.

The patient was much exhausted by the operation; her face and hands appeared perfectly bloodless, the pulse rapid and feeble; however, she slept at intervals during the night, and took a considerable quantity of liquid nourishment. For the first few days after the operation there was a large quantity of discharge, consisting chiefly of bloody serum. Twenty-four hours after the operation she complained of considerable pain when swallowing, and down behind the sternum, also in the back behind the shoulder-blades. At this time also the temperature rose steadily to 103°; the pulse was 120 per minute; she was extremely weak, and I began to fear suppuration in the mediastinum. During the following night an ice-bag was applied to the neighbourhood of the wound, and one of Leiter's leaden coils to the head; through this latter a stream of iced water was kept constantly running. She experienced the greatest relief from this treatment; the pain in swallowing diminished, and by the next morning the temperature had fallen to normal, and a severe throbbing pain in the head much lessened. By the third day her pain in swallowing had greatly diminished, and from this time her convalescence was uninterrupted. I never knew a patient to take such enormous quantities of liquid food, so much so that by the tenth day after the operation her diet had reached the following amount in twenty-four hours:—Twelve eggs, twelve pints of milk, three pints of beef-tea, half a bottle of port wine, two ounces of brandy, three oysters, and a small tin of Brand's essence. On the twentieth day after the operation she had so far recovered that I was able to move her into the country to complete her convalescence, as she was much worried by the constant noises in the town. The upper four

inches of the wound healed by primary union, but the remainder was not soundly healed until the end of seven weeks, as a deep sinus continued to discharge pus apparently from behind the trachea. By degrees the superficial veins began to appear and the colour returned to her face, and in two months from the time of operation she had gained in weight two stone, which she has maintained ever since, and is, I suppose, her normal weight when not interfered with by the presence of the tumour.

There is one very interesting point at the present time occupying the attention of surgeons, which is the probability of the occurrence of symptoms resembling myxedema following the complete excision of the thyroid gland. Sir William Mac Cormac, in his address on Surgery, delivered at Belfast in 1884, has given a very complete summary of our state of knowledge up to that time on this subject.

The patient was exhibited before the East Anglian Branch of the British Medical Association in October, 1884, and also before the Norwich Medico-Chirurgical Society in March, 1885, up to which time she remained in good health, and showed no signs of any evil effect following the operation.

Norwich.

A CASE OF SO-CALLED CATHETER FEVER.

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THE following case is of interest insomuch as it shows that some at least of these so-called cases of catheter fever are septicæmic in origin, and therefore, to a certain extent, capable of control.

James M—, aged fifty-five, a factory hand, was admitted into the Royal Edinburgh Infirmary for hæmaturia and frequent calls to micturate. His present illness commenced as a severe pain in the left lumbar region ten weeks before admission, for which he can assign no cause. The pain commenced on micturition, but subsided towards the close of the act. The desire was so great that he was forced to pass his urine, on an average, every hour and a half. The urine was clear, there being no blood or thickness noticeable. At times he would have a severe pain shooting down into the left groin and testicle, accompanied with a distinct rigor. This condition continued for fourteen days, when the desire to micturate became so aggravated that he was forced to seek relief every half hour. Eight weeks after his first attack of pain it suddenly left him, and he now, for the first time, noticed that his urine became tinged with blood towards the last few drops, accompanied by a severe scalding pain in the penis, but there was no pain on exercise. The blood now increased in amount until the urine became as black as porter. He had been under treatment for the last two months, but his medical man advised him to seek further advice. The family and personal history is good.

His present condition is as follows: Confined to bed, general development and muscularity fair; height, 5ft. 8½in.; weight, 10st.; temperature 98° to 99°; complains of slight sweats; skin soft and normal in colour; lungs normal for age. Genito-urinary system: Urine, dark, due to admixture of blood; reaction acid; sp. gr., 1009 to 1010; deposit of urates; amount varies from 90 to 100 ounces in the twenty-four hours; albumen present, due to the blood. The microscope reveals a great number of blood-discs and some amorphous urates; no germs or pus cells. Micturition is about every hour, accompanied with slight pain in the left lumbar region, where there is tenderness on pressure. The pain at times radiates to the testicle and end of penis. On rectal examination the prostate is found to be slightly enlarged. Diagnosis: Nephritic calculus probably passed into bladder.

March 8th (two days after admission): The hæmaturia is the same as when admitted. There are no casts nor any renal epithelium or organisms.—18th (twenty days after admission): The patient shows slight improvement, there being less blood. There is a little pus in the urine to-day; he complains of great pain at the end of the penis after micturition, also at the neck of the bladder; he cannot hold his urine longer than half an hour; no organisms.—19th: The patient was seen to-day by a surgeon, who thought perhaps the calculus from the kidney had been passed into the bladder; consequently he submitted the bladder to an exploration with

Teevan's sound; but on attempting to withdraw the urine through the sound it was found that the plug was so fixed that it could not be removed. He therefore passed a red rubber catheter anointed with 1 in 20 of eucalyptus and olive oil. The patient was given immediately afterwards five grains of quinine and thirty grains of bromide of soda. No stone could be discovered.—20th: Temperature this evening went up to 99·4°; no rigor or any sensation of chilliness; pulse 60 (full); amount of urine passed sixty ounces; more pus and less blood than yesterday.—21st: This evening the temperature went up to 103·2°. The patient complains of great thirst; amount of urine passed fifty ounces; pupils normal; no nervous phenomena; pulse 96; micturition less frequent.—22nd: Temperature this morning 102°; at noon 102·8°; at midnight 101°. Urine examined at bedside, immediately passed into a clean vessel, shows as follows: reaction alkaline, smells fetid. By microscope a large amount of pus cells, a few red cells, and many rod-shaped bacteria. Ordered five grains of sulphate of quinine with fifteen grains of benzoate of soda, every four hours. Water removed from bladder by syphon action. Less urine has been passed to-day. Ordered fomentations over loins and bladder.—23rd: Temperature this morning 100°. Says he feels better; not so thirsty; urine not so fetid, and contains less pus. He, however, sweats profusely, but has passed a better night, being in less pain. No action of bowels. Ordered colocynth with hyoscyamus pill (ten grains) at bed-time.—24th: Temperature: morning 99·8°; evening 101·4°. Sweats continue. Urine still contains rod-shaped bacteria. Amount passed 100 ounces. Bowels moved three times.—25th: Temperature 97·4°, showing a marked fall; evening 99·4°. Amount of urine sixty ounces. Less pus; still fetid and contains bacteria. Sweats still present. Bowels moved once.—26th: Temperature 99°. Amount of urine 100 ounces.

April 3rd.—The state of the patient's urine is much improved as regards bacteria, which, however, are still present, the urine continuing to be alkaline in reaction. He still complains of the old pain in the left lumbar region under cataplasma liniment to loins.—4th: The old pain is still complained of this morning. In other respects he is *in statu quo*.

Remarks.—My term of office having expired, I lost sight of the patient, but I believe he left the hospital very much in the same condition as in the last report, the germs still remaining. The presence of the bacteria in the urine I believe to have been due to the employment of Teevan's sound, the interior of the instrument being probably dirty, and consequently loaded with septic germs. I think that this case plainly shows that the proper treatment of these septic bladder conditions is the drainage of the viscus by the syphon action, thus removing the major part of the bacteria, followed by large doses of quinine and benzoate of soda, in the hope of lessening the alkalinity of the urine, and with the hope of thus bringing about the death of the germs. Lastly, that fatal terminations may be looked for in cases without probably much organic change in the kidneys, the cause of death not being uræmia, but septicæmia.

Duchess-street, W.

A Mirror

OF

HOSPITAL PRACTICE, BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

ST. THOMAS'S HOSPITAL.

COMMUNICATION BETWEEN SMALL INTESTINE AND BLADDER;
TUBERCULOSIS; DEATH; NECROPSY; REMARKS.

(Under the care of Mr. CROFT.)

FISTULOUS communication between the bladder and the intestinal tract above the rectum is usually the result of malignant ulceration which has extended from the sigmoid flexure into the bladder. Tubercular ulceration rarely produces such a condition. In this case the local signs were very few and the absence of chest symptoms, although