sac, but as soon as the apparatus is re-applied a few coughs again expand the lung. As the lung expands the parietal and visceral pleuræ become adherent and obliterate the cavity. In acute cases the expansion may be complete in two or three days; in more chronic cases it may take ten days or more. I have seen a lung expand after it had been collapsed for eight months. The method is suitable for all cases except those in which a communication with a bronchus exists. It is rather difficult to know when complete expansion and adhesion have taken place. This can usually be determined by introducing a probe and feeling the lung. I append short notes of three cases which show the results attainable by this method.

CASE 1.—The patient was a woman aged thirty-eight years. She had an empyema which was treated in the ordinary way and apparently healed. Three months later it was found again discharging and there was a cavity which would contain about four ounces of pus. Great relief followed the application of the valve tube, especially by easing the breathing. Expansion occurred in five days; there was no recurrence.

CASE 2.—The patient was a man, aged twenty-two years, suffering from phthisis and empyema. This was opened and drained in the usual way for about twelve days. Then there was no sign of closure of the cavity and the valve tube was tried. The day after the tube was applied the patient was tested as regards his breathing by a spirometer. Three days later he was again tested and had now increased his breathing capacity by ten cubic inches. The discharge had also ceased and the lung was found expanded and adherent all over except for about one inch below the wound. This I expected to close and removed the tube. Just before the valve tube was used the pulse averaged 110 and the respiration 24 per minute. The temperature was 100° F. at night. On the second day after the pulse was 96, the respiration 18, and the temperature 99°. In this case I took out the tube a little prematurely, as some small re-accumulation occurred. The small cavity soon healed and three months after the patient had gained 21 lb. in weight.

CASE 3.—The notes of this case were kindly sent to me by Dr. Simpson of Golspie. The patient, a young man, aged twenty-three years, tall, phthisical, came in January, 1895, with a history of pleurisy two years previously, for which he was tapped in the Edinburgh Royal Infirmary, and also received injections of tuberculin. His left chest was filled with fluid, the apex beat being nearly under the right nipple. Aspiration was done several times and about ninety ounces of pus removed. As re-accumulation rapidly took place Dr. Simpson opened into the pleural sac through the sixth interspace and inserted the valve tube on April 1st. On April 5th the discharge had entirely ceased, the tube was removed, and the wound healed in a few days. The patient made an uninterrupted recovery, and in July was able to assist in haymaking and did most of the harvest work on his father's croft. By Oct. 14th he had gained nearly 2 st. in weight and could climb a steep hill without inconvenience to his breathing.

Space forbids further examples, but I think these will show what results may be gained by this method of treatment. I believe that by it we can gain a more rapid and more complete return to the normal in acute cases; in chronic we can get the lung to expand and be useful instead of the patient being worn out by long-continued suppuration, ending often in death or requiring the subsequent performance of Estlander's operation, which, if it stops the suppuration, deprives the patient of the use of the lung. This becomes a mass of tissue of low vitality, and, I believe, forms a fit nidus for the tubercle bacillus. The tube or valve may get blocked, but I have never had any trouble from this. If it should occur the apparatus is easily cleaned. The apparatus is to be had from Messrs. Walters and Co., 69, Lambeth Palace-road, London; or Messrs. Young and Son, Forrest-road, Edinburgh.

Edinburgh.

CLEVEDON CONVALESCENT HOME.—From the annual report of this institution, just issued, it appears that the past year has been a record one, 335 patients having been admitted. The total number of admissions since November, 1881, is stated to be 4168. The receipts for the past year were £801 and the expenditure £790. The reserve fund account shows a balance in hand of £65.

Clinical Notes:

MEDICAL, SURGICAL, OBSTETRICAL, AND THERAPEUTICAL.

NOTE ON A CASE OF RESECTION OF THE RADIUS FOR SARCOMA.

BY E. H. DOUTY, M.B., B.C. CAMB.,

ASSISTANT SURGEON TO ADDENBROOKE'S HOSPITAL, CAMBRIDGE.

THERE is so little deformity in this case and the hand is so useful that I have thought it worth while to draw attention to it, as it may guide others to choose resection of the bone rather than amputation in cases of slow-growing endosteal sarcoma. The woman has fair grasping power and finds her hand useful to her in her household duties. The illustrations show (A) the state of the limb before the

Fig. A. shows the appearance of the hand and wrist before, and Fig. B. after, the operation.

operation and (B) at the present time. The tumour pulsated in places and there was a history of eighteen months' growth. It proved to be a myeloid sarcoma. The patient was a widow, aged forty-eight years, and her personal and family history are without significance. I made a long incision over the outer aspect of the bone and extending to the middle of the metacarpus. I found the cartilages of the

radio-scaphoid joint discoloured, and I therefore removed the scaphoid bone as well. The growth was strictly confined to the radius and to its lower end, not extending more than two inches up the shaft. It is now four months since the operation.

Cambridge.

AN AFFECTION OF THE FIRST PHALANGEAL JOINT OF THE HAND.

BY E. DONALDSON, B.A. T.C.D., L.R.C.S. IREL.

It sometimes happens when the hand is closed and an attempt is made to open it that one of the fingers remains in a state of fixed flexion with the tip almost touching the palm. The fault lies in the first phalangeal joint. The patient has to use the other hand to raise the finger into the straight position. A slight snap in the joint mentioned may be felt at the time of extension. The finger after reduction can be flexed and extended freely. The trouble is apt to return. The joint does not swell and, with the exception of this liability to get "stuck," presents no apparent abnormality. This little ailment is somewhat annoying to the patient, though it is not painful. It appears to be rare. I have seen only one case. Mr. Jonathan Hutchinson has described three others.¹ I do not know if any one else has written on the subject. So far, the affection has been found either in the ring or middle finger, and it may be found on one side or on both. It may be recovered from. Up to this it has not been found in anyone under fifty years of age. In the case observed by myself, which is published in Mr. Hutchinson's "Archives of Surgery" (vol. vii.), the flexed and fixed condition of the ring finger was most likely to occur when a firm grasp of anything was taken. The patient could close and open the hand without any difficulty if she did not attempt to grasp anything firmly. This, although a trivial ailment, is a very interesting one. The joint affected is the first phalangeal, which has most to do with flexion of the finger. I think a subluxation of this joint occurs when the finger becomes fixed and flexed. The histories of the patients suggest that senile or rheumatic changes act as predisposing causes.

Londonderry.

A CASE OF WOOL-SORTERS' DISEASE.

BY ALBERT E. TUNSTALL, L.R.C.P., L.R.C.S. EDIN.

THE following case of wool-sorters' disease occurred recently at Denholme. The patient was a man, aged forty-two years, who had been engaged for several weeks sorting mohair at a factory where two men had died from wool-sorters' disease about eight months previously. He left his work at noon on Saturday, Jan. 2nd, 1897, apparently in his usual health. Upon rising from bed about 9 A.M. on the Sunday morning, having slept well through the night, he complained of headache, localising it in the centre of the forehead. This pain became worse, so that about 11 A.M. he went back to bed and remained there until 4 P.M., when he again rose and had a cup of tea, but could not eat. He returned to bed about 7 P.M., the pain being not less severe. He had a restless night, being quite unable to sleep. During Monday the headache eased a little, but he commenced to feel a difficulty in breathing and had a slight cough. He then vomited what appeared to be a large clot of blood very dark in colour. That night he again had no sleep. During the early part of Tuesday he seemed to be easier. I saw the patient for the first and only time about 5 P.M. on this day (Jan. 5th). He then complained of headache, but said it was not severe. He had had no sleep since Saturday night, and also had taken no food since then. The patient's chief complaint, however, was that he had difficulty in getting his breath, saying, "There is something here," at the same time striking his hand upon the front of the chest over the upper part of the sternum. He had a slight cough, with expectoration of clear, rather frothy phlegm. His breathing was not laboured. His face had a dusky hue, and a somewhat careworn expression. The patient anxiously inquired what his illness was, and whether I thought it was

owing to his work. The temperature was then 100.4° F. and his pulse was 86 per minute. The heart sounds were normal, and examination of the lungs only revealed signs of slight congestion. He could converse freely and his case did not appear to be near its end. However, the difficulty of breathing increased and he expired rather suddenly and very quietly five minutes before midnight. The patient had been quite conscious and able to talk to his friends up to within five minutes of his death. I saw the body thirteen hours after death; the face, neck, chest, and arms were then of a black-red colour, the legs retaining their natural white colour. The face was also swollen. The body still felt warm and post-mortem rigidity had not set in. By the next day the colour had slightly faded in the face.

I am sorry that no post-mortem examination was made, as the friends of the deceased could not be prevailed on to give their consent and the coroner did not order one. The insidious onset of the illness and the absence of grave symptoms all through were most noticeable. The friends did not feel alarmed until the patient vomited on the Monday night, and then, owing to my living at a distance of three miles, they decided to wait until the next morning before sending for me.

Thornton, Yorks.

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.

SEAMEN'S HOSPITAL, GREENWICH.

A CASE OF TETANUS TREATED WITH TIZZONI'S ANTITOXIN;
RECOVERY.

(Under the care of Mr. G. R. TURNER.)

WE publish this week the notes of another case of tetanus treated with antitoxin, and our readers will recognise in it a type of the successful treatment of which more than one has recently been published—a young patient, a prolonged period of incubation, and slow development of symptoms. The case was by no means acute. The only example of the successful treatment of tetanus by the antitoxin serum which we were able to bring before our readers last year in the *Mirror of Hospital Practice* was a somewhat similar one.¹ It was the case of a boy, aged seventeen years, who had shot himself in the left hand. Stiffness of the jaw supervened on the twelfth day. Two days later antitoxin was given and the boy was convalescent in three weeks. The opinion of those watching this case as to the relative value of the serum and chloral hydrate is very striking. For the notes of this case we are indebted to Mr. E. Darbyshire, house surgeon.

On Aug. 31st, 1896, a boy, aged thirteen years, was admitted to the Seamen's Hospital, Greenwich, suffering from tetanus. The source of the infection was a wound inflicted by a rusty nail which the lad had trodden on about three weeks previously. At the time of admission there was a scar on the sole of the left foot with quite a healthy appearance, there being a scab over part of it, but no discharge. The patient first noticed his mouth feeling stiff and experienced some difficulty in opening it on the 26th, or about fourteen days after the injury. When the patient was brought to the hospital risus sardonicus was well marked and the teeth could not be separated more than a quarter of an inch. There was also slight stiffness of the neck. The parents had not noticed any "spasms." On the day after admission the back was stiff and the stiffness of the neck had increased. No convulsive movements of the limbs occurred. The boy was given ten grains of bromide of potassium and five grains of chloral hydrate every eight hours. On Sept. 2nd spasms of the arms were noticed, but these were not severe. At 9 P.M. on this date twenty grains of Tizzoni's serum were injected into the abdominal wall. No

¹ Archives of Surgery, vol. vi., p. 392, and vol. vii., pp. 54 and 380.

¹ THE LANCET, Oct. 10th, 1896, p. 1012.