distention, resistance, and tenderness had increased. The left side gave a tympanitic note as before, changing to a dull one in the angle between the ribs, and on the right side extending below the ribs for two inches. On deep palpation a swelling could be felt in the epigastrium like an india-rubber bag. The pulse was by this time distinctly weaker, the pain was evidently severe, the patient looked anxious, and was very restless. Considering the obscurity of his symptoms I advised a second opinion with a view to sending him to a hospital for exploratory operation. Mr. Morgan, of West Green, saw him with me one and a half hours afterwards. He quite concurred in the advisability of getting him away, but doubted if he would stand the journey. The patient's condition by now was very bad, the extremities were getting cold, and the pulse was almost imperceptible. The abdominal signs were unaltered. While a cab was being ordered to take him to St. Bartholomew's Hospital I left the house for a short time. In that interval he walked down stairs. After a hypodermic injection of morphia he was carried out to the cab. The journey was well borne till towards the end when he collapsed a good deal. Dr. Briggs, the senior house surgeon, saw him at the hospital. The patient was promptly taken in. The abdominal dulness had disappeared and was replaced by a high note suggesting a huge dilated stomach. He died at 10 40 P.M.

Necropsy.—I am indebted to the courtesy of Mr. James Berry, surgical registrar, for the following full notes of the post-mortem examination performed on Oct. 22nd. The external appearance was rather thin. There was much post-mortem decomposition. The abdomen was much distended. There was emphysema about the scrotum, head, and neck. The skull, brain, tongue, larynx, and thyroid were all normal. The chest, heart, and pericardium were normal and not obviously displaced. The pleuræ were normal except as below. There was a good deal of recent congestion in the right lung. The left lung was much shrunken, and occupying only the upper part of the left pleura. There were no adhesions and no disease. Bulging into the left side of the chest and covered by normal pleura was a large, nearly globular sac measuring between 4 in. and 5 in. in diameter. It had a broad pedicle at the inner and lower part and was clearly a diaphragmatic hernia. The peritoneal cavity contained free gas. The lesser peritoneal cavity was greatly distended and filled with a thin, nearly black fluid looking like altered blood. This sac formed a huge globular mass occupying most of the left upper quadrant of the abdomen. The transverse colon ran across the lower front part. The intestines, large and small, were quite healthy everywhere. The stomach was remarkably abnormal both in shape and position. About one-half of it, the cardiac end, was greatly distended, forming a rounded sac some 6 in. in diameter. This portion bulged into the lesser peritoneal sac above mentioned. At the lower border was a small perforation through which blackish fluid was oozing into the peritoneal cavity mixed with small particles of food. A fairly well-marked and evidently old constriction separated this half of the stomach from the pyloric half which was in the hernial sac above mentioned. Nothing else but stomach was in this sac and there was no inflammation, congestion, or other sign of strangulation. When drawn out of the sac the whole stomach was seen to be enormously dilated, and the lesser omentum was greatly widened, being seven inches across at its widest part. A constriction at the pylorus marked the lower limit of the part that had been in the sac. The cardiac portion of the stomach was considerably decomposed and it was difficult to say whether the perforation was ante- or post-mortem. It seemed probable, however, that it occurred a few hours before death on account of the large quantity of fluid distending the lesser peritoneal sac. The opening in the diaphragm through which the hernia occurred was oval (or nearly round) and measured about two inches in diameter. It was situated just to the left of the œsophageal opening, the herniated portion of the stomach passing in front of the œsophagus end before entering the hernial sac. The hernial opening appeared to have been congenital and the stomach had evidently been in the habit of passing freely into the hernial sac for a long time; it was very easily reduced by pulling and had probably often been spontaneously reduced. There was no sign of any old injury to the ribs, liver, diaphragm, or any other part. The gall-bladder was much shrunken and contained nothing but two calculi each as

large as a cherry-stone. They were tightly grasped by the walls of the gall-bladder. Around the gall-bladder were a few old adhesions, evidently the result of old inflammation. There was no disease of any other abdominal viscus.

Remarks.—This case appears to present unusual features in a good many respects. The symptoms were obscure, but towards the latter part of the second day pointed to some grave mischief in the upper abdomen. At first it presented all the appearances of a dilated stomach with subacute gastritis. There was no dyspnoea or sign suggesting pneumothorax. The alteration in the physical signs by the time the patient arrived at the hospital suggest that the gastric perforation was ante-mortem. If it occurred post mortem it is a little difficult to understand what determined the sudden fatal collapse. From his history he had had many attacks beginning as this one did. I have to thank Mr. James Berry and Dr. J. A. O. Briggs for their kindness in giving me all the information at their command.

Wightman-road, N.

PULMONARY ABSCESS; OPERATION; RECOVERY.

BY ARNOLD EDWARDS, M.D., CH.B. VICT.,

HONORARY SURGEON TO THE CHORLTON-UPON-MEDLOCK DISPENSARY,
MANCHESTER.

A WOMAN, aged twenty-one years, was first seen by my friend, Mr. H. Dumville Harthan of Salford, on Jan. 8th, 1897, when she complained of acute pain in the right half of the chest, troublesome cough, and a very abundant foetid expectoration. Previously to this she appeared to have been ill for some five or six weeks with symptoms of pleuropneumonia on the right side. The patient's father died from phthisis and there was also a tuberculous family history on the maternal side. On Jan. 23rd I was asked by Mr. Harthan to see the case with him. The patient was then very thin, flushed, and short of breath, with a weak, husky, whispering voice, breathing at the rate of 33 per minute, with a paroxysmal distressing cough resulting in the daily expectoration of a pint or more of highly offensive thin watery pus and mucus. The tongue was dry and thickly-coated with a brownish fur. Pain, slight but occasionally stabbing in character, was complained of at the back of the right side of the chest. The temperature was 102° F. and the pulse was 128. The apex beat could be felt in its normal position. The whole chest moved badly, the right side hardly moving at all. On percussion there was dullness over the lower half of the right side of the chest posteriorly and laterally. On auscultation numerous moist sounds were to be heard over both lungs, but these sounds were much coarser, in fact gurgling in character and accompanied with bronchial breathing, just below the angle of the right scapula. Vocal fremitus and vocal resonance were slightly diminished throughout the dull area. Guided by the greatest intensity of the physical signs, I introduced a sterilised exploring needle into the eighth intercostal space immediately below the angle of the right scapula. Nothing resulted until the point of the instrument had travelled from two and a half to three inches directly forwards, then the barrel of the syringe filled with pus of rather thin consistency and free from flocculi, slightly stained with blood, and of a most penetrating foul odour. Examination of this fluid and also of the sputum for tubercle bacilli proved entirely negative. In spite of the patient's low condition, operation was decided upon as offering the best chance of recovery.

An operation was performed on Jan. 24th. The patient was placed in an almost completely prone position, chloroform was administered by Mr. Harthan and my brother, Dr. Fox Edwards, assisted me. Introduction of the exploring needle under antiseptic precautions into the sixth intercostal space along the mid-axillary line resulted in the immediate withdrawal of pure serum entirely free from the slightest turbidity or odour. The instrument was now passed for a second time to a depth of about three inches in the situation of the first puncture, and again drew off stinking pus. An incision about two and a half inches long was then made down to the periosteum along the ninth rib immediately below the angle of the right scapula. The

periosteum was divided along the course of the rib and reflected with a raspator and a good inch of rib was removed with bone forceps. A fine trocar and cannula was employed as a guide to the pus, and the track was opened up by sinus forceps and a large cavity was reached in the lung from which about ten or more ounces of foetid pus and gas escaped. The aperture made by the forceps was further enlarged by passing the finger through about an inch or so of condensed tissue which bled rather profusely at first but the hæmorrhage soon ceased. The abscess cavity appeared to be irregular and was lined with much broken-down and softened material, but its complete exploration was impossible the finger not being long enough to map out its limits with any precision. A wide rubber drainage-tube about six inches long was introduced, no attempt being made to irrigate the abscess cavity. The wound was dressed with a pad of wood-wool freely covered with iodoform. Morphia ($\frac{1}{4}$ grain) combined with atropine ($\frac{1}{160}$ th grain) was given hypodermically. By the next day the patient had rallied wonderfully well, the temperature had come down to 99° and the pulse had dropped to 96. The sputum showed marked decrease and was almost odourless. The dressing was saturated with horribly offensive pus, the edges of the wound were covered with a very adherent dirty-grey material and there was some cellulitis in the immediate neighbourhood. On Jan. 27th the temperature again rose to 101° and the pulse reached 114. There was considerable cyanosis with marked laboured breathing and much rambling and the whole body was bathed in perspiration. Fine crepitations and bronchial breathing were to be heard over the greater part of the right lung but there was no appreciable increase in the dulness. A mixture of ammonium carbonate, digitalis, nux vomica, and senega was freely given together with considerable quantities of brandy. The patient's condition for the next few days was very critical but a marked improvement took place on Feb. 3rd. An evening temperature of only 99.2° was then registered, the circulation had improved, the bronchial breathing had disappeared, and the fine crepitations had given way to moist râles. By this time also she had begun to sleep well, the rambling had ceased, and the sweating had markedly diminished. In addition the wound had cleaned, the discharge had become odourless and the sputum quite sweet, and the quantity daily expectorated did not amount to more than an ounce. Three days later the temperature being normal the tube was shortened half an inch. On Feb. 13th she was allowed to sit up for a short time. The tongue had quite cleaned and the appetite was good, there was practically no expectoration and as the discharge through the wound was now slight the tube was shortened to three inches. The after history was uneventful. On Feb. 24th the tube having slipped out it was not replaced and on March 7th, six weeks after the operation, the wound closed. She rapidly gained in weight and strength and is now (December) in perfect health. There is not the slightest sign of cough or trace of expectoration. No retraction or bulging of one side of the chest can be made out, the measurement from the spinous process to mid-sternum at the level of the scar being 15 in. on either side; in fact there is now nothing to show except a cicatrix with some deficiency of resonance and weak breath sounds in its neighbourhood.

Remarks.—This case presents several points of interest. There is, firstly, its successful issue, a sufficient rarity of itself to be worth recording. Another feature was the discovery of a simple serous pleuritic effusion in the vicinity of the pulmonary abscess. Had the aspirating needle hit upon this at the first puncture the correct diagnosis would probably not have been then arrived at and the patient would consequently have lost her life. Again, the rapid obliteration of the large abscess cavity and the few physical signs now remaining to indicate the previous serious condition are also noteworthy.

Manchester.

CORPORATION HOMES AT DARTMOUTH.—At the meeting of the Dartmouth Town Council held on Dec. 10th it was stated that Mr. Richard Burford Searle, L.R.C.P. Lond., M.R.C.S. Eng., had offered £2000 at 3 per cent. interest to the council for carrying out their scheme of corporation homes provided a particular site named by him is available and chosen. He also proposes that on his and his wife's death the property should revert entirely to the corporation.

CASES OF ACUTE ATAXY OF ONE LIMB.

By H. CAMPBELL THOMSON, M.D., M.R.C.P. LOND.,
MEDICAL REGISTRAR TO THE MIDDLESEX HOSPITAL.

THE two cases I have recorded below are interesting examples of an acute onset of ataxy in one limb. They appear to be widely different in origin, for while the first was accompanied by definite symptoms of organic disease the second was apparently functional in character and seemed in some way to be connected with over use of the muscles. Ataxy of acute onset limited to one arm or leg is a rare condition, and when resulting from organic disease of the cord is probably in most cases due to a focal lesion situated somewhere in the posterior columns so that the muscular sense impressions are interrupted. Sir William Gowers¹ mentions a group of cases (to which he has given the name of acute myelitic ataxy) which were characterised by an acute onset of ataxy in one arm accompanied by complete muscular anæsthesia so that all power of estimating weights was lost although the cutaneous sensibility might be perfect. The condition usually reached its height in a few hours, remained complete for some weeks, and then slowly disappeared, and it probably depended upon some organic lesion of an inflammatory character. In the first case given below, although the ataxy was limited to the left arm the other symptoms were widely distributed over the cord and the right arm was the only limb which was not affected in some way or other.

CASE 1.—The patient was a man, aged forty-eight years, who was admitted to the Middlesex Hospital on June 4th, 1896, under the care of Dr. Sidney Coupland, to whose kindness I am indebted for permission to publish the notes. There was nothing of importance in the family history and previously to this illness the patient had never been laid up. He was a man of moderate habits and there was no history of specific disease. On May 29th in the middle of the morning as the patient was walking home he felt giddy and noticed that his left leg seemed heavy, and he also found that he was unable to pass his urine. On reaching home he sat down and did not try to walk again for the rest of the day. Towards the evening he felt some numbness in his left hand, and control over the movements of that limb was lost so much that if he tried to touch his face with his hand, the movements were so erratic that he hurt himself. On the next day (May 30th) there was some weakness of the right leg; it could be moved but the patient was not able to stand. There was no weakness of the right arm. He was admitted into hospital on June 4th complaining of loss of power in the legs and the left arm. On examination it was found that there was some slight weakness of the left arm accompanied by marked incoördination, so that the patient was quite unable to perform simple movements with any degree of accuracy, and he stated that this symptom had been much worse, and was now less marked than it had been. The power of distinguishing weights was not lost and there was no anæsthesia. There was considerable loss of power in the left leg. The limb was extended and turned on its inner side and although some movements could be performed at the knee- and ankle-joints the leg as a whole could not be raised. The right leg was also weak but much less so than the left and it could be raised off the bed. There also seemed to be some loss of movement of the lower intercostal muscles. There was alteration of sensation over the trunk and lower limbs commencing at a line about one inch below the nipple. If the point of a pin was drawn down the chest the pain ceased to be felt at the level of that line and became changed into a dull sensation of touch. Heat and cold could not be recognised with any certainty below the same level. Sensation to touch was considerably diminished and the loss was more marked in the left than in the right leg. There was no anæsthesia of the left arm. There was neither girdle pain nor zone of hyperæsthesia. All control over the sphincters was completely lost and the urine had to be drawn off. The abdominal, plantar, and epigastric reflexes were all absent and so also were the knee-jerks and the deep reflexes of the left arm. There were no bedsores.