the quantity passed not much below the natural standard. The bowels were obstinately costive.

The treatment adopted was that calculated to support the animal powers, and to eliminate the fluid from the abdomen. Aperients, consisting principally of the compound powder of jalap, were administered, and the tartrate of iron with juniper freely given, but without any appreciable effect. Tapping was resorted to upon March 10th, in order to relieve the excessive dyspnoea, at the patient's urgent request; but, although performed whilst lying recumbent, and well supported by stimulants, he speedily sank, and died the same night.

Upon making an examination of the body, eighteen hours after death, the internal organs presented the following appearances. The lungs were generally emphysematous; the heart was increased in size from dilatation of the right ventricle, and the mitral valves diseased, with dilated orifice. The liver was pale, greyish, and greasy; but presented no sign of cirrhosis. The kidneys were smaller than natural, granular, and nodulated; the pelvis enlarged; and the cortical portions contained numerous small cysts, some of the size of a pea, but many larger. The ureters were much dilated, their orifices being open; but the bladder was thickened, sacculated, and reticulated, with the middle lobe of the prostate so enlarged, as to obstruct the walls and the neck of the bladder. The arterial system was universally diseased. The aorta and the common and external and internal iliac arteries were all studded with atheroma. Upon the right side, the common iliac artery had been converted into an aneurism of the size of a large pigeon's egg; and this was three parts filled with fibrine undergoing the process of cure. Upon the left side, there was a second aneurism engaging the internal iliac artery, but entirely cured. The sac was contracted to the dimensions of an ovary, and, upon section, found to be equally solid and dense in consistence. The inferior vena cava was adherent to the posterior aspect of the aneurism of the common iliac, and, in addition to this, was filled to a considerable extent with coagulated blood. These conditions and appearances will all be seen in the preparation and drawing.

The brittleness of the abdominal aorta and its branches, and consequent loss of elasticity in this case, had led to the formation of two aneurisms in juxtaposition; and yet, in an individual (than whom it would be difficult to find one more generally the subject of disease), Nature had repaired the mischief altogether in one aneurism, and in the other was in process of cure.

Now what Nature has here done spontaneously, we may successfully imitate; and, by the means of fibrination, cause the blood, in its passage through the aneurismal sac, to leave upon its lining surface such consecutive layers as shall at first diminish the cavity, and ultimately, entirely, or partially, fill it up.

This fibrine is the result of a purely mechanical action. The deposit becomes, it is true, so intimately connected with the sac, as to be regarded by some as an organised product; but it is not so. It has no connection whatever with inflammation, or the exuding of lymph; it is pure and simple fibrine; and we have but to control the distensible action of the heart, and to reduce the forcible flow of blood, which is thinning and destroying the sac, by position, rest, and sedatives, to rob it of its noxious characters, and to convert it into the medium of cure.

The treatment of external aneurism by compression has proved that, in order to cure this disease, it is not necessary to do more than diminish the current of blood, so that it shall not be capable of giving forcible distension to its walls; and by position alone in internal aneurism much may be done to effect this end. In the recumbent position, indeed, does the main point of treatment lie. Placed horizontally for some time, and kept at perfect rest, the heart's action of an aneurismal patient will be reduced thirty beats per minute (as, for instance, from 96 to 66); and, if this diminution be calculated, it will be found that in twenty-four hours the sac of the aneurism, when the patient is recumbent, will have been distended with blood no fewer than 43,200 times less often than when the sufferer was erect.

Consolidation by position is a treatment that may almost universally be adopted. It produces no aggravation of the symptoms, no injury, or risk of life; and many cases, now considered hopeless and given up in despair, may not only be rescued from death, but restored to comparative health.

The case which I have here adduced, was one of spontaneous cure, brought about by position *ex necessitate* maintained; but, in the next instance (one of a series of recoveries), I will briefly illustrate the subject of consolidation as artificially brought about.

The patient, in this instance, was a die-cutter in steel, a man, named Parkes, 54 years of age, who was admitted into the City of Dublin Hospital, under my care, upon September 18th, 1854. He was suffering from thoracic aneurism; the tumour being three inches in diameter, considerably elevated above the surrounding skin, and situated to the right of the sternum, between the second and fifth ribs, occupying the sites of

the third and fourth, which, together with a portion of the sternum, had been absorbed. The fingers, when laid upon the tumour at its most projecting point, pressed against a soft, cushiony, elastic, pulsating surface, gave to the touch the sensation of the integument only intervening between the observer and the blood contained in the sac. The aneurism evidently sprung from the anterior aspect of the right side of the ascending portion of the arch of the aorta; and was rapidly approaching the surface, absorbing all before it in its course.

Treatment was commenced upon September 19th. Upon Oct. 15th, the tumour had become firmer, and flattened in the centre. Towards the middle of November, it was gradually getting dense; and, upon December 13th, Parkes left the hospital for his home, where he promised to remain at perfect rest for a while.

I did not see this patient again until December 1857, after an interval of three years. He now called upon me in reference to an ulcer of the leg. Upon questioning him with respect to the aneurism, he stated "that it never troubled him now"; that he was quite well as regarded it, and working at his trade as a die-cutter in steel. I stripped him and examined the chest. The first point that attracted my attention was the enlargement and tortuous condition of the abdominal and pectoral cutaneous veins; the epigastric, circumflex, and mammary, having assumed the condition of large venous trunks. The aneurismal tumour projected to the right of the sternum, nearly midway between the clavicle and nipple, presenting a bulging prominence of the size of a small saucer, making the right side contrast strongly with the hollow intercostal spaces and masked ribs upon the left. No pulsation was visible in the tumour, even when any testing object (such as a piece of white paper, for instance) was placed upon it. To the hand, it felt dense, and the cardiac impulse from within was unheeded by the patient.

The sound upon percussion was dull over a very large space around the heart; whilst to the ear was given a double sound, intermediate in time to the contractions of the heart. Upon deep inspiration, this portion of the chest did not expand. The general appearance indicated a barrier to the return of blood to the right side of the heart. There was some congestion of the face, which was increased on stooping, with puffiness of the neck to a slight degree. There was no interference by pressure upon the trachea or oesophagus. There was nothing abnormal in the carotid or radial pulses, and the circulation was equal upon both sides of the body. He stated that he lay at night upon the right side to sleep, and could not do so upon the other. He had been regularly working at his trade; and one of his most recent acts had been the cutting of a new seal for the College of Surgeons in Ireland; and it is from his hand that the die has issued which now stamps the diploma of the Dublin College of Surgeons.

CASE OF DISTENDED PERICARDIUM, THREATENING DEATH: RELIEVED BY PARACENTESIS.*

By C. G. WHEELHOUSE, Esq.,
Surgeon to the Infirmary, Leeds.

In the *Medical Times and Gazette* of November 3rd, 1866, my friend and colleague Dr. Clifford Allbutt very briefly placed on record a case of acute rheumatism complicated with distended pericardium, in which immediate death was ward off by the operation of paracentesis.

I should not have ventured to trespass upon the time of this meeting with the details of a solitary case, and especially of a case which has already been published, if I had not thought—1, that the treatment adopted was of more than usual importance; 2, that the result justified me in hoping that, by making it still more fully public, I might possibly furnish the means of hereafter saving an occasional life by surgical interference when the resources of medicine appear to be exhausted; and 3, that the mode of operation adopted needed some further explanation. I need not occupy your time by describing the whole course of the patient's illness, but will simply take up the case at the point at which my help was first sought.

On September 18th, 1866, C. S., a gas-pipe layer, was admitted into the Leeds Infirmary under the care of Dr. Allbutt, suffering from very acute rheumatism, both muscular and arthritic, accompanied by dyspnoea and oppression. On examination, the pericardium was found to be considerably distended with fluid, and there was acute pain in the region of the heart. A large blister over the heart and full alkaline and opiate treatment was ordered for him.

On the 19th, at 11.30 P.M., Dr. Allbutt was urgently summoned to the assistance of this poor man, who was said to be dying. On reaching his bedside, he found that this statement was unfortunately only too

* Read before the Medical Section at the Annual Meeting of the British Medical Association in Oxford, August 1868.

true; and having, in the practice of the late Professor Trousseau, seen three or four instances in which the operation of paracentesis pericardii was resorted to for the relief of similar conditions, he determined to seek surgical aid for his patient.

I reached the patient within half an hour, and found him sitting up in bed, his head resting on his hands, his elbows on his knees, struggling for breath. He was covered from head to foot with a copious cold sweat, and his hair was dripping; his skin was dusky and cold, his eye sunken and glazed, and for two or three hours he had been unable to speak.

The case needed but a few words of explanation from Dr. Allbutt, who, telling me that he believed all medical treatment was exhausted, asked my opinion as to the possibility of saving the man by paracentesis. I believed that there was, so far, no successful case of this operation on record; but, with dissolution staring the man so closely in the face, I felt that, at all events, he could not possibly be placed in a more critical condition by the operation, and therefore determined to give him the chance. I rapidly mapped out the area of pericardiac dulness; and, bearing in mind the normal position of the heart, I assumed what would probably be its *altered* position. My object was to strike the sac at the lowest possible point, and to avoid coming into contact with the thin walls of the distended auricle.

I chose for my purpose a small trochar. This I placed on the upper margin of the fifth rib, half an inch to the left of the sternum; and, inclining it upwards and inwards, thrust it steadily forwards through the intercostal space towards what I believed to be the centre of the ventricle. I pushed it onwards until I could distinctly feel the movements of the heart with the instrument; and then, sheathing the point, I advanced the cannula well up to the heart, until I could feel and see, and demonstrate to those around, the impulse of the heart as communicated to the instrument. The trochar was then withdrawn, and the fluid allowed to escape. This it did at first in a steady stream, which soon subsided into a salutory flow coincident with the heart's contractions. The fluid consisted of a pale pink coagulable serum, and, upon the whole, about three ounces escaped. During the operation the patient gradually obtained relief; and after the cannula was withdrawn, the bed-rest was removed, and he was able to lie down. The breathing was relieved, and was now only 36 per minute; and he was able to whisper to us that he felt unspeakable relief. The pulse had lost its rapid and struggling character, and could easily be counted, its number being about 110. The area of dulness was decidedly diminished. The operation was followed by several threatenings of syncope, which were, however, warded off by large and repeated doses of brandy, all other medicines being omitted.

Next day, the cardiac dulness had not increased; but in the evening the breathing became more laboured, and considerable delirium came on. Another large blister was placed on the region of the heart, and half a drachm of liquor morphiae was given; ten drops were also ordered to be repeated every six hours. From this time the patient steadily improved, and on October 13th was discharged cured. On his discharge, the pericardial dulness was little, if any, beyond the normal extent. There was a loud blowing systolic murmur heard over the apex.

Such is the case, as you will find it briefly recorded by Dr. Allbutt; and my only object in bringing it again before you at the present time is; first, that I may say that the cure has continued perfect, and that the patient is still alive, and able to follow his employment; and secondly, that I may contrast the method by which I performed the operation and attained perfect success, with that adopted by Professor Trousseau in, I believe, every instance with a fatal result.

I used the simplest means I could think of; disturbed the natural relations of the important viscera with which I had to deal as little as possible, and was content with present relief, leaving all after-conditions to chance. I felt that, with a small trochar and cannula, I could do very little harm, unless I had the ill fortune to strike the distended auricle; for I could not doubt that a light hand would so easily recognise the touch of the ventricle that any chance of its penetration was remote; and, having succeeded in withdrawing the fluid, and in obtaining decided relief to the labouring heart, I was content.

In Professor Trousseau's case, on the other hand, a very different plan was adopted. A free incision along the intercostal space was followed by a studied exposure of the bag of the pericardium; the pericardium itself was next laid freely open and evacuated; and finally, in the hope, I presume, of insuring its after adhesion to the walls of the heart, it was washed out with an iodised solution. I feel that had I, in the present instance, adopted this more heroic plan, my patient would undoubtedly have died before I could have completed the operation.

I attribute my success, then, to the simplicity of the means adopted; and I think that the case proves that, when all other means have failed, a distended pericardium may be tapped with safety, and with a fair prospect of rescuing a patient from the jaws of immediate death.

THERAPEUTICAL MEMORANDA.

[Under this head, we shall publish from time to time, as materials accumulate, short records of remarkable cases in practice which are sufficiently rare, interesting, or instructive, to deserve record, but do not call for lengthened statement or comment. Brevity and point should be the valuable characteristics of cases forwarded for this column.]

CASE OF AGUE WITH EXTENSIVE DESQUAMATION OF THE CUTICLE.

By CHARLES H. ROBINSON, L.K.Q.C.P., Dublin.

ON the morning of 29th October, 1864, I saw William Jarvis, aged 31, suffering from diarrhoea, and severe headache. I ordered him an astringent pill and a draught containing quinine. In the evening he had a regular attack of ague; among the other symptoms, he complained of intense pain in the back. He was put to bed, bottles with hot water were applied to the feet, and he was allowed hot tea *ad libitum* to drink. The cold stage did not last very long; and twenty minutes after perspiration began, he took twenty minims of tincture of opium. He was ordered quinine in two-grain doses every third hour. Later in the evening, he had another attack, for which the same treatment was ordered. November 1st.—He had had no attack since; the skin of his hands (palmar surface) was peeling off. He mentioned to me this morning that in two previous attacks the same thing occurred. He took one grain of the sulphate of quinine twice daily. November 2nd.—His appetite, which had been very bad, was improving. He was ordered to continue the quinine five days longer. November 4th.—To-day the skin of both hands and fingers came off exactly like a glove wanting the back. November 10th.—The skin of the soles of the feet came off yesterday. He was using a mixture of grease and tar to harden the exposed surfaces.

I consider this case peculiar, never having heard of the kind before. A little of the cuticle also came off his chest, and about an inch above the wrist.

BROW AGUE, CHANGING INTO AN AGUISH ATTACK UNDER THE ADMINISTRATION OF QUININE.

By STANLEY L. HAYNES, M.D., Medical Superintendent of Laverstock House, near Salisbury.

I BELIEVE the following case will be deemed interesting from the conversion of hemicrania into an anomalous aguish attack.

F. H., aged 32, a somewhat slight, but healthy, attendant here, complained in February last of pain over the right eye and the anterior half of the temporal region, which was puffy to the sight and touch, and tender on pressure. This pain was continuous, but subject to exacerbations, especially at night, and was much increased by stooping, when giddiness and dimness of vision were added; it had been felt on waking a few mornings before, but was not preceded by any irregularity of health, or accompanied by any other change. He gave the following history. After enlisting in 1854 he went with his regiment to India in 1857; in 1861 he was insensible during seven weeks, in consequence of insolation and resultant "slight brain fever." From 1862 to 1864 he suffered seven or eight times from "liver and fever" (by "fever" he meant ague), some attacks lasting a month or so, and one having a duration of five months. He was treated with quinine, which arrested the attacks; they always began between 10 and 11 A.M., and ended between 3 and 4 P.M., occasionally later, then leaving him unaffected for two, sometimes three, days. In 1864, having served his full time of ten years, he claimed his discharge and returned; the voyage caused his thorough convalescence. He continued quite well from that time until he complained to me. Suspecting, in the absence of all other ascertainable causes, and of recognisable symptoms of impaired health, that this headache was a sequence of ague, I prescribed quinine in five-grain doses. The first was taken at 8 P.M. At 2 the following morning he awoke, feeling very ill, as if he were about to have an attack of ague, and with much nausea; he then found he had a distinct, well-marked sweating stage, which lasted from ten to fifteen minutes, leaving him free from brow ague, and feeling well. Notwithstanding this attack (he had not sent for me during it), he took a second dose at 6.30 A.M.; this was not succeeded by any disagreeable effects or apparent action. He is not conscious of having had any hot, dry stage. Since the attack he has been perfectly well in every respect. The transposition of the cold and sweating stages, and their occurrence without the intervention of any dry stage, were remarkable. I have not seen any similar case recorded, and therefore publish this.