quiet was obtained. For some weeks, the straining and sharp pain went on, much as if the stone had never been removed; the urine always escaped by the urethra frequently mixed with blood, and not half a pint ever came through the wound, which soon healed. Gradually the state of prostate and bladder improved, and he recovered perfectly.

9. J. C.—, aged seventy, a fat, bloated, intemperate man, admitted November, 1866. Symptoms very acute; urine albuminous, alkaline, and thick with mucus and phosphates. He was anxious for lithotomy, but the stone was too large; prostate hypertrophied. Lateral lithotomy. Could not reach the bladder with the finger; when the forceps entered and grasped the stone, the handles only projected from the wound, so deep was the bladder. Stone elongated oval, weighing ten and a half drachms, and consisting of uric acid covered with phosphates. Patient went on well for a few days, then the pulse began to intermit, he lost appetite, and, although there were no signs of local mischief, he got gradually weaker, and died on the tenth day.

Post-mortem examination.—Bladder contracted and thick, but not unhealthy. Prostate much enlarged, chiefly its left lobe, which contained numerous fibrous tumours. Kidneys fatty. Liver pale, soft, and fatty. No urinary infiltration, considerable extravasation of blood behind the bladder, and along the psoas muscles.

(To be continued.)

ON A CASE OF FATTY DEGENERATION OF THE HEART, SIMULATING AGUE.

By T. HARROLD FENN, Esq., M.R.C.S.

MRS. P—, aged sixty-four, married, but never had any children; of very dark complexion; hair black and unmixed with grey; no arcus senilis; is in comfortable circumstances; has always lived well, but has had a very active life. Up to within three weeks of my being called upon to attend her she had done all the work of a farmhouse, even the family washing, without the assistance of a servant, her house being kept in the utmost perfection of niceness. She has usually had very good health, but formerly lived in a rather aguish district, and some twelve or fourteen years ago had a doubtful attack of ague. Has never had any tendency to hysteria. She was first seen on July 17th, 1866, when she complained of having had two or three attacks of severe palpitation, with profuse sweating, coming on at intervals of about twenty-four hours, and lasting about two hours. The attacks commenced with decided shivering, and when over they left her with all her body- and bed-linen completely drenched in perspiration. When seen during one of these attacks the pulse was found to be very quick and extremely irregular and intermittent, so much so that it could scarcely be counted; but there was no orthopnea or any difficulty in the breathing, and she could lie down in any position without discomfort. The heart's action, although so rapid, seemed to be accompanied by a slightly increased impulse, but no abnormal sounds could be heard, and no increase of dulness could be discovered. She did not complain of any pain, but only of a feeling of suffocation referred to the throat. After the attack had passed off she felt weaker, but otherwise as well as usual. The breathing was perfectly natural, and pulse and heart became quiet and perfectly regular. The appetite was not affected in any way at first, and she took abundantly of food and stimulants. There was some tenderness and fullness over the hepatic region, for which vegetable purgatives were ordered, and these had the effect of bringing away large quantities of excrementitious matter, of dark colour, and loaded with bile, day after day. She passed a very large quantity of pale pump-water-like urine, which did not contain albumen nor any abnormal constituent. She was ordered two grains of quinine three times a day in mixture, but after taking it a few days she complained of headache and singing in the ears, and could not be persuaded to continue it, as she said that each dose brought on an attack, and made her worse. She was then ordered ten grains of bromide of potassium in mixture, and two grains of quinine with extract of hyoscyamus in pill, three times a day. After taking this con-

tinuously for a week without any improvement she was obliged to discontinue it for the same reason as before. She then took no medicine for a few days, but attacks came on just as before. They were not now so regular as at first, and they lasted longer, and often came on at stated periods twice in the twenty-four hours, but were much of the same character as before. After a consultation with Dr. Bree the following was ordered on August 7th:—Extract of belladonna, one-sixth of a grain; quinine, two grains; valerianate of zinc, one grain: to be made into a pill, and taken three times a day. Arsenical solution, four minims; water, one ounce: also three times a day with the pill. This was continued till August 17th, without any improvement, when the following was begun:—Quinine, half a drachm; dilute sulphuric acid, a drachm and a half; chloric ether, two drachms; water, eight ounces: a sixth part three times a day.

On the day after taking this the attack kept off till midnight, and then only lasted one hour; and on the following day it occurred at the same time, but only lasted three-quarters of an hour. But the charm was now over: on the following day two very severe and prolonged attacks occurred; and although the dose of quinine was increased to seven grains and repeated every four hours, it failed to produce the slightest effect. The intermissions were becoming less perfect, and the sweating still more profuse. The breathing too became affected, and she was obliged to be supported in the erect position in bed, from fear of suffocation. The pulse gradually became more regular, but permanently quickened; the hepatic region became very tender, and liver-dulness increased; and she complained of coldness of the feet, which began to be a little cedematous. She took plenty of nourishment and stimulants: but the circulation became daily more and more impeded; the lungs became congested, there being crepitation at both bases; the cedema extended up to the thighs; the feet grew colder; and the fingers and tip of the nose became blue. In spite of diuretics, the quantity of urine secreted became smaller; but still there was no albuminuria. The heart's action gradually grew weaker, and was quick, but not irregular as at first; and she died on September 9th, eight weeks from the commencement of her illness.

Autopsy, thirty-six hours after death.—Body well nourished; no marked obesity. Legs and thighs cedematous. Abdomen rather protuberant. Costal cartilages not ossified. Lungs adherent on both sides, but readily separated; no emphysema. Intense hypostatic congestion of lower lobes on both sides. On the right side the lower lobe was hard, black, non-crepitant, and in a pulmonary apoplectic condition. In the front part of the upper lobe of the right lung was a hard roundish mass of true pulmonary apoplexy, about the size of a large walnut; upper lobes otherwise healthy.—Heart large, weighing about thirteen ounces. No excess of fluid in pericardium. Surface covered with fat. All the cavities filled with blood; right auricle and ventricle with a pale firm clot. All the cavities dilated, especially the left ventricle. Right ventricle large, with a thin wall; muscular tissue almost entirely replaced by fat, there being only a thin streak of pale and soft muscle lining the cavity. Musculi papillares pale, and rather mottled. Tricuspid and pulmonary valves healthy. Left ventricle wall of usual thickness, but cavity much dilated; muscular tissue pale and very friable, although not much encroached upon by fat on the surface. Aortic valves healthy; a few small atheromatous spots on aorta. Mitral valves rather thickened near the edge, but not rough, and apparently quite competent. The whole heart soft and flabby, tearing very easily. Under the microscope the cardiac tissue was found to be brittle, breaking up into very short lengths, not splitting readily into long fibres: in all the fibres striæ were indistinct; in some quite obliterated; in others only a faint trace of the striated character remained.—Liver: A large projecting mass of hepatic substance forced up the diaphragm and encroached on the thorax, proceeding from the back part of the upper surface of the right lobe. Left lobe large, and extended far over on the left side. Liver of a nutmeggy character, with much hepatic venous congestion, but not pale or friable.—Spleen healthy; not larger than usual. Kidneys congested, but otherwise healthy.

The remarkable feature in the above case was the sudden accession of severe symptoms, their intermittent character, the absence of evidence of organic disease of the heart and its faulty innervation, the remote cause of which it was difficult to conjecture, unless a malarious condition could be discovered. The quasi-ague attacks must be regarded as heart-agonies, only differing from angina pectoris in the absence of pain. Some light may now be thrown upon the case by the labours of Casorati, an Italian physician lately deceased, who has written a work "On Intermittent Affections." He states

that they are of two forms: the diathetic and the symptomatic; the former representing the class of ordinary agues dependent on miasmatic poison; the second are intermittent forms of fever dependent on some local irritation. Thus Casorati says that he has seen cancer, metritis, orchitis, tumour of brain, tubercle of lung, &c., all capable of producing regularly intermittent forms of fever; and these cases are generally fatal, and are not benefited by cinchona; and the attacks of this symptomatic variety are usually quotidian. I presume the extensively diseased heart in this case to have been the local irritant, giving rise to the intermittent attacks, which were not benefited by quinine. Such a circumstance would not be singular, as Stokes, in his work "On the Heart," records the case of a man, E. B—, aged sixty-eight, who apparently had had fatty disease of heart for three years, who for some months, when under Stokes's observation, complained of a feeling of chilliness over the body, and who every day got a chill, generally in the afternoon, followed by increased heat of surface—evidently a mild form of intermittent fever. I think putting Casorati and Stokes together we have some light thrown upon the case, which, during life, appeared a most anomalous one; and I think for the future, whenever I meet with a case of intermittent affection of quotidian type which is not benefited by quinine, I should at once suspect some important local mischief, and express my opinion with considerable reserve.

Nayland, Suffolk, April, 1867.

A Mirror

OF THE PRACTICE OF MEDICINE AND SURGERY IN THE HOSPITALS OF LONDON.

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.

GUY'S HOSPITAL.

WIRE SUTURES OF BONE.—COMPLETE DIVISION OF THE METACARPAL BONE OF THE THUMB BY A CHAFF-CUTTING BLADE; THE FRAGMENTS RETAINED IN APPPOSITION BY WIRE SUTURE; COMPLETE BONY UNION; RECOVERY.

(Under the care of Mr. BIRKETT.)

THE employment of iron-wire sutures to maintain fragments of bone in close apposition during their union is not a novelty. In the following case, however, the advantage of this plan was proved in a very remarkable manner; for, in consequence of the carpal division of the metacarpal bone being exceedingly small, it was quite impossible to fix it with any kind of splint. The base of that bone was severed from its body, and, being under the influence of the action of its own extensor tendon, it was continually subject to the contractions of that muscle, and therefore to displacement when detached, as it was, by the accidental division which had taken place. Indeed, the movements of the piece of bone were well seen when the boy voluntarily put the muscle in action before the wound was dressed. The section of the bone was turned up towards the dorsal surface of the hand, and it is within the range of probability that its union with the other division of the metacarpal bone might not have taken place had not their surfaces been retained in close contact. Thus the object in view in making use of the metallic suture in this case was, to obtain ossific union without deformity.

For the following notes we are indebted to Mr. W. P. Mallam:—

Alfred R.—, aged thirteen, admitted into Guy's Hospital on November 19th, 1866. The patient, a healthy lad, on the morning of the same day had wounded his right hand with the blade of a chaff-cutter. He lost much blood, and fainted; but soon recovered, and was brought to the hospital. On ad-

mission, he was found to have an incised wound at the right wrist. It commenced at the skin over the middle of the dorsal surface of the metacarpal bone of the forefinger, and passed transversely outwards over the back of the metacarpal bone of the thumb to the extreme radial margin of the palmar surface of the ball of the thumb. It was about an inch and three-quarters in length, and traversed the tissues at about one inch below the web of the thumb. The metacarpal bone of the thumb was completely divided transversely at about three-eighths of an inch from its carpal articular extremity, and the extensor tendons of the thumb were cut across at the same spot; the surrounding soft parts being incised apparently just beyond the point where the radial artery passes into the palm, this vessel seemed to have escaped injury. The hæmorrhage described had ceased before the boy attended at the hospital.

Treatment.—At a quarter past three P.M. chloroform was given, and with the view to obtain a useful thumb Mr. Birkett proposed to insert a wire suture in the bones. To this end, with a fine awl he bored a hole through each fragment of bone, and, passing a piece of thin flexible steel wire through each channel so made, was enabled to bring the two fragments into apposition, and to unite them by twisting together the ends of the wire. Whilst boring the bone, Mr. Birkett found it very fragile, so that he was compelled to use the awl with great care and gentleness. He then stitched together, with silk sutures, the extremities of the divided tendons; tied one small artery; adjusted and united the edges of the wound with three silk sutures; and placed the hand and forearm on a splint. Simple water-dressing was applied to the wound.

Nov. 20th (second day).—Patient was kept awake all night by pain in the thumb. Pulse 102; skin hot; tongue slightly furred.

21st (third day).—Hand comfortable.

27th (ninth day).—Progressing favourably.

30th (twelfth day).—Wound granulating healthily; he complains of great pain when the wire suture is touched.

Dec. 11th (twenty-third day).—Wire suture removed; it had kept its looped form and ulcerated out like one in soft parts. The wound is rapidly skinning over, and has a perfectly healthy appearance.

21st (thirty-third day).—Hand almost entirely healed over.

Jan. 11th, 1867 (fifty-fourth day).—Splint removed; wound quite healed; the two portions of divided bone firmly united, yet not so rigidly but that they allowed (as it was thought) of some faint flexion of the one on the other; boy's general health very good.

16th.—Left the hospital.

Feb. 11th (eighty-fifth day).—Patient returned to show himself. The fragments of bone are now firmly united, and quite motionless the one on the other. He can adduct the thumb with considerable force, but has only slight power of abduction, flexion, or extension. The thumb usually remains quite extended, owing to adhesion of the divided extensor tendons, and a little separated from the index finger.

MIDDLESEX HOSPITAL.

CASE OF CEREBRO-SPINAL ARACHNITIS.

(Under the care of Dr. MURCHISON.)

WE had recently the opportunity of observing the following case, which deserves record from its great rarity:—

Clara U—, aged thirty-eight, a servant, and unmarried, was admitted on Dec. 24th, 1866. Her father and mother had lived to an advanced age, and although she stated that two sisters had died of consumption, this subsequently turned out to be erroneous. She had never been very strong, but had been able to work until twelve months before admission. The catamenia had ceased for four or five years, and during this period she had slight leucorrhœa, and had suffered from attacks of frontal headache with nausea. About a year ago she began to complain of pain in her right arm between the shoulder and elbow, increased by movement, and so severe as to compel her to give up work. After six weeks the pain subsided, but never entirely left her. Her present illness commenced two months ago, with pain in the loins and down the back of the legs, which was increased on rising up or on attempting to sit down, and was believed to be rheumatic. A fortnight before admission this pain increased so that she was compelled to lie on her back, and about the same time she became feverish, restless, talkative in her sleep, and costive, and lost her ap-