the seat "as if in a fit," was at once carried inside and laid on a couch. She was at once seen by the doctor, and found to be dead.

Necropsy.—This was performed next day. On opening the pericardium a large amount of clot was found lying in the anterior surface of the heart, and distending the pericardium. The heart was fatty as a whole, and showed two medium-sized milk spots on the left ventricle. At a distance of 1 inch from the apex, on the anterior aspect of the left ventricle, was an area reddish-purple in colour from effused blood, in the centre of which was a small irregular tear about $\frac{1}{4}$ inch in length. On inserting a probe it was found to lead upwards and inwards into the cavity of the left ventricle, about $\frac{3}{4}$ inch from the interventricular septum. Otherwise there was nothing of note, except that the whole heart showed marked fatty change; it weighed 9 ozs. As regards the other organs, there was little of interest; the lungs were emphysematous, the liver and kidneys were somewhat fatty, and the brain showed signs of degeneration.

Fig. 2.—Drawing from a photograph by Mr. G. A. Rorie.

Case 3.
J.S., aged 79, was admitted to the Dorset County Asylum in October, 1900, suffering from senile mania. The previous history shows nothing of importance, and he had been in fair bodily health for his age up to the time of his death.

On going to bed on the evening of November 8th, 1901, he had a quarrel with another patient, in the course of which they both rolled back on his bed. On the attendant separating them, the patient got up and walked into another dormitory, discussing the subject of the quarrel with the attendant. He then sat down in bed, asked the attendant not to leave him, and fell back in bed unconscious. He was at once seen by the medical officer, and found to be unconscious, slightly cyanosed about the lips, and pulseless; after one or two shallow respirations he died.

Necropsy.—A post-mortem examination was performed next day. On opening the pericardium it was found full of bloody fluid, and covering the entire surface of the heart was a thick layer of dark clot. On removing this, a small fissure was found on the posterior aspect of the heart. It was exactly $\frac{1}{2}$ inch in length, 1 inch from the auriculo-ventricular septum, 1 inch from the border of the pulmonary artery, and followed the direction of the muscle fibre. It communicated directly with the cavity of the left ventricle. The heart as a whole was very fatty; there was a milk spot on apex of left ventricle; the muscle was soft and friable; the mitral valve was much thickened, and there was some calcification of the cusps of the aortic valve, which, however, was competent. Otherwise there was no other naked-eye pathological change noticeable. The other organs of the body were healthy.

THE German Balneological Congress will hold its twenty-third annual meeting at Stuttgart, March 8th to 12th, 1902. All communications should be addressed to the General Secretary, Geh. Sanitätsrath Dr. Brock, Melchiorstrasse, 18, Berlin, S.O.

ATHEROMATOUS ULCERATION OF THE HEART : PERFORATION : SUDDEN DEATH.

By D. E. ANDERSON, M.D. PARIS, M.B., B.A.,
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As ulcerative perforation of the heart is extremely rare, the following case, which came under my care recently, will probably prove of interest. The notes were taken by Dr. Clark, the house-physician.

C. H., aged 62, a manufacturer's agent, was admitted on September 16th into the Hertford British Hospital, Paris, suffering from "pain in the chest and dyspnoea."

History.—He had not been feeling well for five days, and had to lie up on account of pain in the chest running through to the back, the pain being more intense on the left side. As this had increased, notwithstanding the medical advice obtained, he had come to the hospital. He had seen better days, but for the last twelve years had led a very anxious life. There was no history of tubercle or syphilis. About a year ago, he had an acute attack of pleurisy and nearly succumbed; his urine then contained albumen, but it disappeared afterwards.

Condition on Admission.—Patient was of medium height, florid, short neck, and stout. Temperature 99.6°; pulse 104; respirations 31. Breathed with difficulty, and lay in a semi-recumbent position. The lungs were emphysematous, with signs of pleurisy over the lower third of back and side of left lung, but none over right lung. The heart's dulness was not made out owing to emphysema of the lungs. The impulse was in the fifth space and in the nipple line. The heart sounds were distant, the first sound prolonged at apex, but no bruits were heard anywhere. The pulse at the wrist was quite regular, strong, and compressible. There was pain on palpation of epigastrium. The liver and spleen could not be felt on account of fat in the abdominal wall. Percussion was not attempted, as it distressed the patient. Examination of the kidneys was for the same reason omitted. The urine was acid, specific gravity 1030, of high colour, and contained 0.5 parts per 1,000 of albumen.

Treatment and Progress.—Linseed poultices were applied over the front and back of the chest. A cathartic pill and a diuretic mixture, milk, and barley water were given. The next day (in the morning) the patient was better, the pulse normal, and the pain local. In the afternoon, at about three o'clock, pain returned, urine was passed in larger quantity, he perspired profusely, looked very anxious, and said he felt he was dying. Four hours later, whilst the nurse was changing the poultices, the patient suddenly fell back, had twitchings of the hands and face, and died.

Necropsy (17 hours after).—The dura mater and pia mater were thickened, with atheromatous patches in several places; the sinuses were gorged with blood. The arteries were atheromatous. No clots or effusion of blood were found in the brain substance. The right lung was emphysematous; the left showed old adhesions to the chest wall; the lower lobe was collapsed (*post mortem*), owing to pressure of the large pericardial effusion. The heart was hypertrophied and dilated, with much fat on its outside. Its muscle was fairly good. The coronary arteries were atheromatous. There was a perforation as big as a small crowquill on the posterior wall of the left ventricle, or about midway from the upper and the lower extremities, and about half an inch from the interventricular septum. This perforation was in the centre of an ecchymosed patch. The pericardial sac, the front of which was adherent to the chest wall, contained about 8 or 10 ozs. of blood clot. On opening the left ventricle of the heart it was found that the perforation corresponded with a ragged, funnel-shaped ulcer, the size of a shilling, which had given way at its apex; and about an inch lower down there was another smaller ulcer which extended as deeply as the visceral layer of the pericardium. The branches of the coronary artery near these ulcers were blocked for about $\frac{1}{2}$ inch by thrombi of an atheromatous nature. Evidently these had been the cause of the ulceration. The mitral valves showed old vegetations. The aortic were competent but contained small particles of chalky material. The pulmonary and tricuspid valves were not diseased. The aorta was dilated and very atheromatous a short distance from the heart. The liver, spleen, and intestines were normal. The kidneys were granular, with small retention cysts. Their substance was rather hard; the cortex was slightly diminished; the suprarenal capsules normal.

ACUTE RHEUMATISM : HYPERPYREXIA : POST- FEBRILE MANIA : RECOVERY.

By D. HAMILTON KYLE, M.B., C.M. GLASG.,
St. Andrews.

THE condition of hyperpyrexia in acute rheumatism is so uncommon that I have thought it worth while reporting the following case:

W. W., aged 32, married, a gardener, very dark complexion, nervous temperament, intelligence under average.

History.—Family history could not be ascertained. His previous health was fairly good; he had suffered from colds and indigestion, but had had no acute illnesses. During the early three months of the year he had felt weak and out of sorts, had had little appetite, and his food had disagreed with him, but prior to the onset of his present illness he had no rheumatic symptoms. He first felt pain in the right wrist, which was swollen, on April 6th. He thought he might have sprained it at his work. Next day he went to work, but by afternoon he had to knock off, as his right knee became affected; by night both knee-joints were so painful that he got no sleep.

State on Examination and Treatment.—I saw him first on April 8th, when he complained of pain in both knee-joints and the right ankle, and they were slightly swollen, but not red. He was sweating a little, and his temperature was 103° . I put him on a milk diet, and prescribed 15 grs. of sodium salicylate every hour until its characteristic effects were produced, and thereafter at four-hourly intervals until I saw him again. On April 9th, at 12 noon, I found him delirious and semiconscious, with tremors and a temperature of 106.4° . He had taken eight powders before showing the constitutional effects of the salicylate, and has had three others since. No bath being available, I determined on ice-packing to reduce the temperature, but before I had made the necessary arrangements I found that the fever was declining naturally; at 4 P.M. it was 103° , and by 7 it had dropped to 102° . At this time, except for the deafness and other effects of the salicylate, he was fairly well. He had slept at intervals during the afternoon, and had taken milk well. At 10 P.M. his temperature had risen slightly, and I took the precaution of having plenty of ice at hand in case of necessity.

Progress.—April 10th, I was sent for at 7 A.M. by the nurse, who had found his temperature 108° . He was again semiconscious and delirious, with tremors and twinges all over his body. I ice-packed him immediately, and in little more than half an hour his mind became quite clear and his temperature came down to 99° . He expressed himself as quite comfortable, and the joint pains seemed to have gone. During the rest of the day he kept well, the temperature varying (see chart). At my evening visit I noted a temperature of 101° , with no delirium and very little pain in the joints. He was taking the salicylate powders every eight hours, and had consequently lost their disagreeable effects.

April 11th, 11 A.M. Temperature 101° , pulse 90, sweating profusely. Had not slept during the night; was somewhat maniacal. The first sound was indistinct at the apex. 2 P.M. Temperature 102.4° , pulse 108. 4.30 P.M. Temperature 100.6° , pulse 108. Was still wandering in mind, did not know he was in bed; was spitting constantly over the bed and room. The sodium salicylate was stopped and a mixture of potassium iodide and bromide with antipyrin was given instead. 9.30 P.M. Had taken one dose only of his medicine and refused food; he imagined he was being poisoned. He was with difficulty kept in bed, into which he was passing his urine. I injected morphine $\frac{1}{4}$ gr.

April 12th, 11.30 A.M. Had not slept. Would not lie down, talking constantly, but was somewhat more alive to his surroundings. No pain was complained of unless specially asked for. The right knee was still swollen. The first sound of the heart was slightly muffled; there was no friction or murmur. I found him sleeping at the afternoon visit. 9 P.M. Had slept more or less since 2 in the afternoon; was complaining more of pain in the right knee, and had some pain in the cardiac region; his respiration-rate was 24, mind clear, was taking food again.

April 13th, 11 A.M. Mind quite clear, slept all night, taking food well, no chest pain, no murmur, right knee still swollen, no redness, herpetic eruption on lips; sodium salicylate was begun again at eight-hourly intervals. 9.30 P.M. Very comfortable.

April 14th. Has had a good night, very little pain, bowels moved naturally for the first time since the beginning of his illness, and his temperature almost normal.

April 16th. Convalescent.

April 24th. Although otherwise well, the right knee-joint was still

swollen and painful on movement. Heart sounds normal; skin desquamating very freely.

REMARKS.

The interest in cases of this character lies chiefly in the question as to whether or not they shed any light upon the causation of hyperpyrexia. I cannot say that there is anything in the facts of this case as I have stated them which does so. It has been noted before that there was an apparent connection between mildness of the arthritic symptoms and this condition, and my case would lend some weight to the observation.

There is a point which does not come out in the report of the case, but may be worth noting. The attack coincided with a marked increase in the number of acute rheumatic cases in this town and district.

TORTUOSITY OF BOTH INTERNAL CAROTID ARTERIES.

By G. H. EDINGTON, M.D.,
Glasgow.

THE condition which forms the subject of the present communication was discovered in the course of preparing a dissection of the constrictors of the pharynx. The anterior portion of the base of the skull, including the temporal bones, was removed, along with the soft parts of the neck in front of the prevertebral muscles. On cleaning the surface of the pharynx the abnormal course of the internal carotid artery on either side was observed. The artery arose in the normal way from the common carotid at the level of the upper border of the thyroid cartilage.

On the right side the vessel ran upwards for a distance of 3.5 cm. It then turned sharply forward and slightly inwards for a distance of 1.25 cm., after which it suddenly turned upwards and outwards to the lower opening of the carotid canal. This last portion measured 2 cm. in length (see illustration).

On the left side the first portion of the artery measured 3 cm. in length, and coursed vertically upwards. It then turned abruptly forwards and inwards for 1.5 cm., and again sharply upwards and slightly outwards to the base of the skull, a distance of 2.5 cm.

Previous to the dissection the pharynx had been packed