our hands, because it has arisen from an organ which periodically bleeds has been deemed unimportant, and not calling for special attention. It may occasionally happen that in such a neglect lies the explanation of the tardy convalescence or fatal termination of some cases which otherwise seem difficult to understand.

Stanley, Durham.

Clinical Notes:

MEDICAL, SURGICAL, OBSTETRICAL, AND THERAPEUTICAL.

A CASE OF COUPLE RHYTHM OF THE HEART.

By W. J. COLLINS, M.D., M.S., B.Sc. LOND., F.R.C.S. ENG.

"COUPLE RHYTHM" was the name first given by Dr. Hyde Salter in 1871 to a rare and curious abnormality of the rhythm of the heart beat which he had observed in three cases. The subject did not appear to attract the attention of any observer until 1882, when Dr. Henry Cook of Bombay published three cases he had observed in India, and added a sphygmographic tracing. Recent medical treatises and dictionaries of medicine do not contain any account of this curious phenomenon; and as the cases are very rare, it may be interesting to publish the notes of one that I have had under my observation. Before doing so I may say that the peculiarity consists in the cardiac systoles going in pairs or couples, the pause between the two being much less than that which separates one couple from another. It is not a reduplication of both sounds, as is proved by the pulse, the sequence of events being lubb-dup, lubb-dup, pause, lubb-dup, lubb-dup, pause. It is neither an intermittence nor an irregularity, as Dr. Hyde Salter pointed out. It is rather an intermittent irregularity than a regular intermittence, and the irregularity is singularly regular. All three of Dr. Salter's cases had valvular disease of the heart, so had two of Dr. Cook's cases, while the other was suffering from malarial fever.

J. R.—, aged nineteen, a footman, was first seen by me in January, 1882. He complained of palpitation, which became distressing upon exertion, and was getting worse every year; it had troubled him altogether about five years. He had never had rheumatism, had had measles and whooping-cough, with subsequent bronchitis, at three years old, but since then had enjoyed fair health. The apex beat was in the normal situation, the cardiac dullness not increased; on auscultation, what first of all sounded like reduplication of both sounds was heard, but on listening more cautiously, the couple rhythm described above was very distinctly audible. The pulse, too, exhibited the usual anomaly in these cases. The rate was 48 per minute, and the radial pulse synchronised with the first of each couple. On coughing or exerting himself—e.g., lifting a chair,—the pulse rate was immediately doubled, the second systole of each couple being then also appreciable at the wrist, giving 96 pulsations per minute. A sphygmographic tracing gave an ocular demonstration of the anomaly, exhibiting the paired rhythm of the pulse, and the first of each pair being a more powerful systole than the second. There was a short systolic bruit, most distinct at the left base, and presumed to be hæmic in character and causation. It was very remarkable to observe the pulse while the transition from the rapid rate to the exact half of that rate took place; every alternate beat weakened down, until at last it was no longer appreciable to the finger, and sank into the pause. Urine: specific gravity 1026, acid, no albumen. No other physical signs or symptoms beyond considerable anæmia were observed.

I saw the patient once or twice again in 1882, and each time observed precisely the same phenomena. Then I lost sight of him until April, 1885, when he came complaining of a severe cough which he had had two months, with occasional hæmoptysis; and at the right apex were observed increased vocal vibrations and crackling crepitation, while at the left apex were coarse breath sounds. The couple rhythm was still present, but less marked than formerly—that is to say, the pause between the members of a couple approximated to that between two couples. As an opportunity to go to Australia presented itself, he left England in

August, 1885. I heard from him in December last from Lithgow (New South Wales). Alas! the voyage had apparently aggravated his lung trouble, and he entered Sydney Hospital on landing with both lungs seriously diseased. Quite recently I have been informed of his death.

In the absence of any better explanation of this rare and striking phenomenon I would suggest as its cause a rhythmic rise and fall in the activity of the medullary cardio-inhibitory centre, akin to the rhythm which we know to exist in the respiratory and vaso-motor centre; this would produce an alternate reining up and relaxation of the heart's spontaneity, and so occasion the symptom described.

ON THE TREATMENT OF HYDATIDS.

By ARTHUR SENNETT, M.D. ABERD., &c.,
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IN THE LANCET of Jan. 15th, 1887, Mr. Laurence Humphry describes a case of hydatid cyst of the liver, in which collapse and an urticarial eruption followed as the result of puncture with a hypodermic needle, and which was afterwards cured by evacuating the cyst. I believe this method is generally adopted, the aspirator or trocar and cannula being used, and the cyst completely emptied. In this country, where the disease prevails, such is the general practice; and I have operated on about a hundred cases in this manner, with a fair percentage of recoveries. My notes do not extend over all the cases, but about ten deaths out of the hundred would be nearly, if not exactly, correct. The conclusion, however, has been forced upon me that this treatment is not the best, and during the last year I have treated each case by puncturing, using a large hypodermic syringe with two needles, drawing off about two drachms of the fluid, and then injecting a similar quantity of a weak solution (two grains to the pint) of perchloride of mercury. The result of each case has been satisfactory; no suppuration has resulted, and the cyst has gradually contracted. The generally accepted principle that collections of fluid in the internal parts of the body should not be suddenly evacuated is thus not violated. The action of the perchloride, even in such minute quantities, is sufficient to destroy the vitality of the echinococcus, which is never great, and the spontaneous method of cure is simulated as nearly as possible. That many cases do get well spontaneously is shown by the fact that in fully one-third of the necropsies I have made at the Hamilton Hospital on men who have lived in the bush for a length of time, and who have been accustomed to drink any water that they might meet with, a shrunken cyst has been found. I am not aware if the above method of treating this disease has been previously described, nor have I opportunities of referring to the literature of the subject. It seems to me to meet the indications and to be based on scientific principles.

Hamilton, Victoria.

FRACTURE OF ASTRAGALUS; SUBSEQUENT NECROSIS; REMOVAL OF CARIOUS BONE; RECOVERY.

By ARTHUR E. SALTER, M.B.

ON August 3rd, 1886, I attended a child (S. C.—), aged four years and four months, with an injury to her left ankle joint, caused by her falling from the top of a heap of house studs, some of the timber falling on the ankle. When I saw her she was in great pain, the accident only having just happened. There was no bruising, but the foot was displaced a little outwards, and there was a large effusion of blood beneath the skin on the inside. She was in intense pain. Having chloroformed her and examined the joint, there was crepitation distinctly below the joint, the inner malleolus was broken. Believing the fragments would unite well, I put up the limb in a splint, guarding against pressure over the effused blood, and in this way it was left for a few days, at the end of which, as great pain was complained of, the splint was removed. The limb having been again put up, it was left for three weeks, when a plaster splint was applied and kept on for another three weeks, after which, the pain commencing to be great, the splint was removed, whereupon some signs of approaching suppuration were visible. In this position it was left without any splint, and on