The question, therefore, which I wish to ask the medical profession is, Should we adopt the same treatment as is used for collapse from chloroform, and when a man receives a shock should we, before applying artificial respiration, hold the body for a few seconds head downwards at an angle of 45°, thus flushing the brain and stimulating its action? I bring this theory forward with the greatest diffidence, but as I have actual cases to bear me out and also other evidence which points the same way, I think that, considering its vital importance to humanity, I am justified in doing so in the hope of its being investigated by the medical profession, but until this has been done no one realises better than myself that my evidence cannot be considered as conclusive.

In conclusion, I can only say that I am fully aware of the shortcomings of this paper, but it is a real attempt possibly to save a human life by thus endeavouring to get members to give information on this question which so immediately concerns us as electrical engineers.

Clinical Notes:

MEDICAL, SURGICAL, OBSTETRICAL, AND THERAPEUTICAL.

LATENT VACCINIA.

BY J. W. WASHBOURN, C.M.G., M.D. LOND.,
PHYSICIAN TO GUY'S HOSPITAL AND TO THE LONDON FEVER HOSPITAL, ETC.

THE patient, a girl, aged two and a half years, was vaccinated two years ago in four places, only one of which took, and that very slightly. She was seen by Mr. Percy Rose on Feb. 3rd, with the history that she had been ailing for three days. The tonsils were red and swollen, and the sub-maxillary glands on one side were enlarged; there was some stomatitis, and the temperature was 102° F. On the 4th Mr. Rose was informed that "marks" were coming out over the old vaccination sites. On the 5th he saw the patient and found the temperature to be 101·4° F. There were exudation on the left tonsil and a scarlatiniform eruption over the chest and the back. A younger child was also ill with an injected throat, vomiting, and a scarlatiniform eruption. The diagnosis of scarlet fever was made. On inquiry of the mother the following history of the vaccination spots was elicited. On Jan. 31st, the day on which the child was first taken ill, a dry sore was observed on the left arm at the site of the original vaccination; the mother was quite sure that no marks were previously visible. On Feb. 2nd three fresh red places with a scab over them were observed. On the 5th Mr. Rose found that there were four spots on the left arm at the usual site of vaccination; they were all of about the same size as a vaccination lesion, and each of them was surrounded by a small red areola with a thin dry scab in the centre. The appearance was exactly that of mild vaccination at about the seventh day.

I saw the patient on Feb. 7th with Mr. Rose and confirmed his observations. The mother was quite certain that the spots were at the site of the old vaccination, and she was sure that the child had not been recently vaccinated and that nothing had occurred before Jan. 31st. On examining the child there was very slight impetigo of the scalp and the skin was clear elsewhere. The appearance of the marks on the arm and their arrangement were quite unlike anything in the way of secondary infection from impetigo. There was no doubt that the child was suffering from scarlet fever, and the only explanation that we could give was that the vaccination had remained latent during two years and had started afresh with the onset of scarlet fever.

Cavendish-place, W.

NOTE ON THE DISCOVERY OF A NEW TRYPANOSOMA.[1]

BY D. BRUCE, M.B., C.M. EDIN., F.R.S.,
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I HAVE received from South Africa specimens of blood taken from cattle which contain a new species of trypanosoma. This new species can be at once distinguished from the trypanosomas of surra, of tse-tse fly disease, or of the rat by its larger size, it being almost twice as large as any of the others. In general appearance it conforms closely to the others in possessing an oval protoplasmic body, a longitudinal fin-like membrane, and a single flagellum. This new trypanosoma was lately discovered by Dr. A. Theiler, who is in charge of the bacteriological laboratory of the medical officer of health, Pretoria, Transvaal. He states that at first he was under the impression that he had merely hit against the familiar trypanosoma of tse-tse fly disease. He, however, was struck by its larger size and he tried a few inoculation experiments. He found that the new trypanosoma only infected cattle. Horses, dogs, goats, rabbits, and guinea-pigs were all immune, neither showing symptoms nor the presence of the parasites in the blood. With the same blood he infected two calves, which showed distinct febrile reaction, and at the same time the parasites appeared in the blood. He found the parasite for the first time in the blood of a young ox which had just recovered from an attack of rinderpest, and since then he has successfully inoculated calves from two other cattle. He describes the disease as an acute pernicious anæmia with grave blood changes, a general anæmia without deformation of the elements of the blood, or, lastly, only a slight fever. He also believes that there exists a natural immunity in cattle against this trypanosoma. He is of opinion that this disease is the same as that attributed by Dr. Kolle—who studied rinderpest in South Africa with Koch during the last outbreak—to bovine malaria. Dr. Kolle overlooked the trypanosoma, saw that the disease was infectious, and thought that he observed endoglobular parasites and pigment in the red blood corpuscles.

As this discovery seems to me to be an interesting one, and as Dr. Theiler deserves great credit for the observation, I would propose that this trypanosoma be named after the discoverer *Trypanosoma Theileri*.

[1] A paper read before the Royal Society on Feb. 27th, 1902.

A CASE OF REDUPLICATED CARDIAC IMPULSE AND SOUNDS.

BY JOHN MCCLYMONT, M.D. EDIN.

THE following case illustrates the assistance which the Roentgen rays may afford us in connexion with certain cardiac abnormalities.

A gardener, aged 33 years, with no previous special history, consulted a medical man in regard to an attack of coryza. On examination of the chest the cardiac rhythm and sounds presented such unusual features that the medical man formed the opinion that the heart was diseased. This fact coming to the knowledge of the patient's employer he lost his situation and was next at new work as a coalman in London. He did this laborious work with such obvious impunity and in perfect health that he resolved to have his heart re-examined with the prospect of returning to his former pleasanter occupation and in this way came under my notice. The man presented himself in perfect health and without any cardiac symptoms. There was a double cardiac impulse of regular occurrence in the normal position, the second slighter impulse immediately following on the heels of the first. There was no increase of præcordial dulness. There was a slight impurity of the first sound in the aortic area, and the sounds, like the impulse, were reduplicated. This was specially clear at the apex, the second group being like an echo of the first or louder sounds. There was, however, no reduplication of the pulse. The complete absence of any cardiac symptoms, the lack of either hypertrophy or dilatation of the heart, and the unfailing regularity of the second impulse did not suggest the missed beat of a played-out organ.

Through the kindness of Dr. Betrand Dawson and Mr. Harnack, the superintendent of the radiograph department at the London Hospital, I was able to see the working of this heart on the skiagraph screen. There was the first systole dilating the great blood-vessels and causing the pulse wave and first strong cardiac impulse. The apex remaining all the time in systole, there then occurred a second contraction of muscular fibres, principally or alone at the base of the ventricles. The great blood-vessels were not dilated by this contraction, but it doubtless gave rise to the second cardiac impulse and to the fainter, echo-like heart sounds. This peculiar condition of secondary fibrillar contraction was no doubt due to some irregular innervation of the cardiac muscle and was not of the nature of the missed beat of a failing organ.

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