

THE Ambulance Challenge Shield (value 200 guineas), offered by the Volunteer Medical Association, will be competed for on Saturday, July 15th next.

THE forty-seventh report of the Commissioners in Lunacy, for the year ending May, 1893, was presented to Parliament on Wednesday last. The report will be printed next week.

THE annual dinner of the Association of Fellows of the Royal College of Surgeons of England will be held on Thursday, June 22nd.

THE annual dinner of the members of the West London Medico-Chirurgical Society will be held at the Criterion on Wednesday, June 21st.

THE PROPER VALUE OF THE DIAPHANOUS TEST OF DEATH.

BY EDWIN HAWARD, M.D. EDIN., F.R.C.S. ENG.

A CASE has come lately under my observation in which the value of the diaphanous test of death has been illustrated at its just worth, and as the matter is one of supreme practical moment I think it may be considered deserving a brief notice in the pages of THE LANCET. Readers of THE LANCET need scarcely be informed that the diaphanous test consists in taking a hand of a supposed dead person, placing it before a strong artificial light, with the fingers extended and just touching each other, and then looking through the narrow spaces between the fingers to see if there be there a scarlet line of light. The theory is that if there be such a line of scarlet colour there is some circulation still in progress and therefore evidence of vital action, whilst if there be no illumination then the circulation has ceased and death has occurred. The French Academy of Medicine was so impressed with the value of this test that it awarded, I believe, to the discoverer of it a considerable prize. The illustration I am about to give indicates, however, that this test must be received with the utmost caution. The facts run as follows. I was called in January last to visit a lady seventy-three years of age, suffering from chronic bronchitis. She had often suffered at intervals from similar attacks during a period of twenty-five years. The present attack was very severe, and as she was obviously in a state of senile decrepitude her symptoms naturally gave rise to considerable anxiety. Nevertheless she rallied and improved so much that after a few days my attendance was no longer required. I heard nothing more of this lady until Feb. 6th—a period of three weeks—when I was summoned early in the morning to see her immediately. The messenger told me that she had retired to bed in the usual way and had apparently died in the night, but that she looked so lifelike there was great doubt whether death had actually taken place. Within half an hour I was by her bedside; there was no sign of breathing, of pulse, or of heart-beat, and the hands, slightly flexed, were rather rigid, but the countenance looked like that of a living person, the eyes being open and lifelike. I believed her to be dead and that the rigidity of the upper limbs indicated commencing rigor mortis; but this curious fact was related to me by a near relative that once before she had passed into a death-like state, with similar symptoms, even to the rigidity of the arms and hands, from which state she had recovered, and after which she had always experienced the direst apprehension of being buried alive. Her anxiety, it will be easily conceived, was readily communicated to her relatives, who urged me to leave nothing undone for determining whether life was or was not extinct. Under the circumstances I suggested that Dr. (now Sir) Benjamin Ward Richardson, who has made the Proofs of Death a special study, should be summoned. He soon arrived and submitted the body to all the tests in the following order, each testing being written down at the moment by myself: 1. Heart sounds and motion entirely absent, together with all pulse movement. 2. Respiratory sounds and movements entirely absent. 3. Temperature of the

body taken from the mouth the same as that of the surrounding air in the room, 62° F. 4. A bright needle plunged into the body of the biceps muscle (Cloquet's needle test) and left there shows on withdrawal no sign of oxidation. 5. Intermittent shocks of electricity at different tensions passed by needles into various muscles and groups of muscles give no indication whatever of irritability. 6. The fillet-test applied to the veins of the arm (Richardson's test) causes no filling of veins on the distal side of the fillet. 7. The opening of a vein to ascertain whether the blood has undergone coagulation shows that the blood was still fluid. 8. The subcutaneous injection of ammonia (Monte Verdi's test) causes the dirty brown stain indicative of dissolution. 9. On making careful movements of the joints of the extremities, of the lower jaw and of the occipito-frontalis rigor mortis is found in several parts. Thus of these nine tests eight distinctly declared that death was absolute; the exception, the fluidity of the blood, being a phenomenon quite compatible with blood preter-naturally fluid and at a low temperature, even though death had occurred. 10. There now remained the diaphanous test, which we carried out by the aid of a powerful reflector lamp, yielding an excellent and penetrating light. To our surprise the scarlet line of light between the fingers was as distinct as it was in our own hands subjected to the same experiment. The mass of evidence was of course distinctively to the effect that death was complete; but, to make assurance doubly sure, we had the temperature of the room raised and the body carefully watched until signs of decomposition had set in. I made a visit myself on a succeeding day to assure myself of this fact.

The results of these experimental tests were satisfactory as following and corroborating each other in eight out of ten different lines of procedure; but the point of my paper is to show the utter inadequacy of the diaphanous test, upon which some are inclined entirely to rely. Sir Benjamin Richardson has reported an instance in which the test, applied to the hand of a lady who had simply fainted, gave no evidence of the red line; she therefore, on that test alone, might have been declared dead. In my case the reverse was presented; the body was dead, whilst the red line, supposed to indicate life, was perfectly visible. Hence the test might possibly lead to a double error and ought never of itself to be relied upon.

It is a question worthy of consideration whether the colouration observed was due to the fluid state of the blood after death; it is not unreasonable to suppose so, but I prefer merely to offer the suggestion without further comment.

CHOLERA.

ACCORDING to information received at the Madrid Foreign Office from the Spanish consuls in France sporadic cases of cholera have made their appearance at several places in France, and the Madrid Government has consequently taken action in the way of imposing either a short quarantine or a period of observation upon all vessels arriving from infected or suspected districts. The consul at Marseilles reports that his information shows fourteen cases and eleven deaths from cholera at that port between May 22nd and June 1st. Some cases have also occurred at Cete and Toulouse. From the latest accounts it would appear that the disease is spreading in the south of France. At Nimes a death is reported, and there were eight fatal cases at the neighbouring town of Alais on the 7th inst. A few fatal cases of cholera have also occurred at Montpellier, and sporadic cases have continued to make their appearance at Cete since the date of the outbreak there. Four patients were admitted to the lazarettos on the 6th inst.

We learn from Berlin that the text of the convention drawn up at the recent International Sanitary Conference at Dresden was published in the official *Reichsanzeiger* of the 4th inst. The line taken by the Conference is, speaking generally, in the directions which have been already published. It is declared to be the duty of the Government of a cholera-infected country to inform other Governments of the occurrence of cholera and of the precautionary measures that have been taken. The measures to be adopted in regard to the prohibition of the importation of rags and cholera-infected clothing are also laid down. Land quarantine is to be abolished in future, and the convention deals with sea traffic