

the immediate contact of a heated body with an anasarous part that blisters can be raised in a dead body—in such a case the cuticle may indeed be elevated at the part, but it will be by air, and never will contain a liquid; the number and size of the ampullæ appear to him to depend upon the quantity of combustible employed, the distance of the heated body from the skin, and the duration and intensity of its rays. If a metallic ball heated to redness, or a metallic vessel filled with boiling water, be placed within an inch or two from the anasarous limb of a dead body, no vesications will be produced, because the heat is not furnished as quickly as it is dissipated; but if, on the contrary, the body be placed at a convenient distance from a fire, the rays of heat from which continue for some time of the same intensity, phlyctenæ will constantly be produced. By known physical laws, when the heat has diminished the atmospheric pressure on some spot of the trunk or limbs, the serous fluids flow to the part, raise the epidermis, and form collections perfectly like the phlyctenæ which characterize burns in the living body. In proof of this theory of the phenomenon, take a cupping-glass of the proper size, apply it on an oedematous spot of a dead body, and exhaust its air, numerous vesicles filled with reddish serum will be immediately produced. The removal of the atmospheric pressure from an oedematous part in a dead body, whether by heat or other means, seems the only cause of the production of these appearances; but the vesications are produced in a different way in the living body—are in fact the result of the organic sensibility of the part. M. Leuret remarked that the serum was bloody in his observations, but the red colour is rare, for in M. C.'s experiments the serum was red in but six out of twenty-two instances. In experiments on dead bodies the blistering does not appear suddenly in general—it takes from two to six hours for their appearance, but no doubt the time might be shortened by increasing the degree of heat. M. Champuillon having only experimented on young subjects, cannot say but modifications might be found in the results from age, sex, &c. In no cases has he remarked any difference to occur from the experiments being made immediately after death, or during cadaverous rigidity, or when putrefaction has commenced; the productions of the vesications did not seem either favoured or retarded by these conditions of the subject. Christison has laid it down as an established principle that a permanent red circle round the part indicates that the burn took place during life, and it has become therefore a guide in evidence, but M. C.'s observations are far from sanctioning the value of this test, as an appearance almost identical can be produced in the dead body, and in fact every experiment in which vesications were produced, but one, the red line, regularly indented, was also produced, and is considered by him accordingly as necessarily connected with the vesications. In the dead as in the living body the red line has the same superficial appearance, but an incision through the skin distinguishes them from each other beyond any doubt—in the one case, it is found a simple injection of the cutaneous capillaries, perfectly resembling the vascular ramifications on the intestines of persons killed by drowning—in the second case, the blood is found extravasated among the tissues, and incorporated with them; the inflammation in the one is marked by an opaque homogeneous layer, but in the other there could have been no vital reaction to cause it. When the cuticle is removed from the vesications caused by heat to the anasarous limb of a dead body, the cutis is found converted into a white mass, its surface gluey, and a total absence of injected vessels—is this the case with burns occurring during life? M. C. had occasion to examine the bodies of four artillery-men covered with these vesications, who had been killed by the explosion of a mine; the cutis beneath these vesicles continued to present a high degree of inflammatory redness which could not be effaced by refrigerants. From all that has been said it appears demonstrable

that whether the burn is caused before or after death, the appearances are precisely the same; that it is not possible to distinguish them except by a careful dissection of the skin; that even dissection furnishes results too inconstant and subtle to be much depended on; and finally, that Christison's diagnosis is worth nothing when the subject for examination is anasarous.—*Annales d'Hygiène Publique.*

## THE HYDROPATHIC SYSTEM.

### IMPORTANT CORONER'S INQUEST.

Friday the investigation was concluded before Mr. W. Payne, concerning the death of Mr. Richard Dresser, who was alleged to have died from the effects of improper treatment received at the hydropathic establishment of Dr. Ellis, Sudbroke-park, near Petersham.

The inquiry excited the most intense interest, and the jury-room was densely crowded by the professors of the hydropathic system, and other members of the faculty, amongst whom were observed Dr. Schnitz, the celebrated German professor of hydropathy, Dr. Caric, Mr. B. Rotch, the county Magistrate, &c. Dr. Ellis was also in attendance, supported by Mr. Prendergast, the barrister, and Mr. Hance, solicitor. Mr. Jones, solicitor, of Bucklersbury, attended on behalf of the friends of the deceased.

The evidence taken prior to the adjournment went to show that the deceased had for the last three weeks been subject, as he considered, to rheumatism and sciatica. He was very ill, and expressed himself much in favour of the hydropathic system of medical treatment, and in consequence, his wife was induced to write to Dr. Ellis, who keeps a hydropathic establishment at Sudbroke Park, Petersham, Surrey. The deceased went to Dr. Ellis's establishment on Friday week last, and was there subjected to the water system of treatment, under which he died on the following Tuesday.

John Maynard was first called.—He said, I am bath attendant at Dr. Ellis's establishment, near Petersham. I recollect seeing the deceased Mr. Dresser, from the Friday evening till the Tuesday morning. When he came on Friday evening I saw him, and he appeared very ill. I saw nothing done for him before he was put to bed. On Saturday morning he had a bath at a temperature of 65°. He was in the bath for 30 seconds. He was attended by Dr. Ellis during the day, but I saw nothing more done for him that day. I carried water into the room, both hot and cold, during the day, two or three times, but I don't know what was done with it by Dr. Ellis to Mr. Dresser. There was about half a gallon of cold and half a gallon of hot water each night. On Sunday morning I prepared deceased a bath as before, and I also carried in hot and cold water. When I carried water in, Mr. Dresser was lying on the bed in blankets. After Mr. Dresser had the bath on Sunday morning, he went out and walked in the pleasure ground with me for about five minutes, and afterwards with Dr. Ellis. He then went to breakfast with other patients in the public room. He afterwards lay down with the blankets over him, and I carried in water as before. I saw Mrs. Dresser there on the Sunday. On Monday morning he again had a bath, and tapioca and bread and butter as nourishment during the day. I carried no water in on Monday until the evening. A bath might have been given to Mr. Dresser without my knowledge. I made no observation on Monday evening about the perspiration in which deceased had previously been having stopped. I did not see Mrs. Dresser in the room on Monday night, or make such an observation to her. I saw deceased on Tuesday morning, and I believe that the Doctor sat up with him all Monday night. He had no bath on the Tuesday morning. It was about 7 o'clock in the morning, and he was lying on the bed. I did not see him afterwards alive. I am not aware that he had any other food than the tapioca and bread and butter I have spoken of. One of the bathmen was ill on Monday, and the "boots" attended for him.

By Mr. Jones.—The "boots" was in deceased's room on Monday evening, and might have taken a bath without my knowledge. There are no written minutes of the temperature of the baths, but there are written orders as to the heat hung up in the patient's rooms. We try the heat with a thermometer.

By Mr. Prendergast.—On the Sunday I took some castor oil to deceased by order of the Doctor. The deceased took all the food he desired.