

ear on March 19th, 1890, followed a week later by similar inflammation of the left. Both drums were much congested, and severe pain, with deafness, was complained of. Ultimately rupture of both membranes took place; and when I first saw him, on April 25th, there was a large perforation in each, with considerable congestion of the drums and meatus; there was a very profuse discharge from both ears, and a good deal of deafness. By May 23rd the discharge had entirely ceased, and soon afterwards hearing on the left side became normal, but the patient continued to be very deaf in the right ear; the perforations had completely healed, and the appearance of both tympanic membranes was nearly normal; some congestion, however, remained present. Curiously enough, the patient's wife on April 27th of the same year was also attacked by acute inflammation of both ears, which ended by perforation and discharge of pus. Subsequently the discharge stopped, and hearing was perfectly restored. No further symptoms were noticed up to July 20th in the husband, he having meanwhile returned to his work in an office and being apparently in good health, although he had certainly lost flesh and colour since his illness. He now began to complain of neuralgic pains about the right half of the head, particularly in the supra-orbital region and the side of the neck. The pains continued for about ten days, and then slowly disappeared; the left side of the head was then affected in a similar manner. About the middle of August the pains on the right side reappeared, but could not be in any way localised; the neck was said to be painful but not at all tender. Tonics were given and anodyne applications to the head and neck were used; they gave temporary relief. Being suspicious of the formation of an abscess we carefully examined the patient, but nothing definite except loss of flesh could be made out. On Sept. 5th, for the first time, the pain was said to be more confined to the back of the head, somewhere about the posterior inferior angle of the right parietal bone. The paroxysms of pain came on at various times during the twenty-four hours, and were very severe in character, necessitating the frequent injection of morphia, which had a very good temporary effect; if not immediately injected the patient became wretched in the extreme, begging for the morphia, and quite unable to bear the sharp pain which he felt shooting down the neck and back of the head. On Sept. 10th we again saw the patient, and I felt convinced that there was an abscess somewhere in the brain, but could not localise it. There was and had been no fever, but the severe pain, inability of the patient to do any work, and the fact that he seemed rather stupid and slow in answering, were very suspicious symptoms. As the patient was of a sallow complexion naturally, it was difficult to say whether there was or was not any change in his appearance. The pulse was feeble and slow, and he suffered from dyspeptic symptoms, constipation, and loss of flesh. The eyes were normal. I accordingly recommended an exploratory operation, but the relatives would not hear of it. The patient continued in this state, suffering severe pain and becoming almost frantic and uncontrollable if not at once injected with morphia, so that his medical attendant was constantly being sent for both night and day. On Sept. 18th the patient became delirious and remained so until the 20th, when I again saw him, with Brigade Surgeon W. Gray, who agreed with me that immediate operation was necessary. Arrangements were completed for its performance that day, when, a little before the appointed hour, the patient became suddenly conscious and intelligent; the relatives, therefore, would not permit the operation to be performed. He now stated that he felt pain behind the right ear and tenderness on percussion over the temporal bone. The severe neck pains still, however, continued. There was no paralysis of any muscles discoverable, and the appearance of the membrana tympani was unaltered. Next day we succeeded in getting the consent of his relatives to an operation, and chloroform was administered. It was then believed that the muscles of the left arm and leg were much sooner under the influence of the anæsthetic than those of the right side, which remained rigid until there was complete anæsthesia. A small flap was then dissected up behind the right ear, and a small trephine applied an inch and a quarter above and behind the meatus; a trocar was then slowly introduced, and after it had gone into the brain about three-quarters of an inch a quantity of healthy-looking pus escaped, to the amount of an ounce and a half. A drainage-tube was put in and dressings applied, and the patient awoke free from pain. Next day he

rapidly became unconscious, and died about noon. No examination was allowed. In this case acute otitis was followed by cerebral abscess very rapidly, and ended fatally within the year. No cause could be ascertained for the ear attack, either in the case of the man or his wife.

I am indebted to Mr. Shepherd, who attended him, for part of the notes in this interesting case.

Bombay.

## Clinical Notes:

### MEDICAL, SURGICAL, OBSTETRICAL, AND THERAPEUTICAL.

#### DEATH BY AN ELECTRIC SHOCK.

BY WALTER BUCHANAN, M.R.C.S., L.S.A.

ON March 4th I received a message to visit an accident by an electric light alternating current of 2400 volts. The patient was seen by me, as far as I could judge, about ten minutes after the accident; he then presented the following appearances. The face was livid, lips congested, pupils dilated, bloody mucus issued from both nares, his hands were almost clenched. He was lying on his back, inclined a little towards the *right side*. *Artificial respiration* was resorted to, he inspired slightly three times, and then died. In about four minutes he became quite rigid. There were no marks of violence on the body or head, but on the palm of the right hand there was a dirty mark (no doubt that of japan) about three inches by half an inch. There is no doubt now that this was fused off an iron bar, which it was proved he had in his hand, by the electric current, he having struck at the induction wire off which the insulating india-rubber was fusing. After having raised the bar to strike at the wire, he fell back with *one cry* for help. He was then carried away insensible to the place where I visited him.

Thirty-one hours after death, in conjunction with Drs. Voisey, Holroyde, and Burns, I made a post-mortem examination, and the following appearances were noted. The deceased appeared to be about the age of twenty-six; he was 5 ft. 8 in. high, and weighed about 11 st. The body was well-nourished and strongly muscular; it was cold, post-mortem rigidity well marked, no marks of violence, lividity well marked. Incision showed a quarter of an inch of fat. Abdomen looked healthy when first opened; on lifting up the great omentum the superficial intestines were slightly congested, and the deeper intestinal contents highly congested (hyperstatic). Kidneys normal in size, capsules not adherent, but deeply congested. Liver firmly and universally adherent on the upper surface, normal in size, and very deeply congested. Gall-bladder normal, containing two drachms of fluid. Urinary bladder congested, containing two ounces of fluid. Spleen firmly adherent to the posterior part by bands of adhesions, slightly enlarged, and deeply congested. Stomach contained much semi-digested food and some evidences of old inflammation. Heart normal in size, superficial veins highly congested, right auricle distended, right ventricle flaccid, left ventricle firm and solid, left auricle empty; blood liquid from one to two ounces; walls normal in thickness, no hypertrophy or dilatation; aortic and pulmonary valves slightly thickened and nodular; cordæ tendinæ normal; right auriculo-ventricular ring admits three fingers, and the left one two. Lungs: Right one firmly and universally adherent; both universally congested, the right one more than the left. Tarry blood and air issued on pressure; lungs float easily in water; entire absence of disease. Epiglottis: Larynx and trachea deeply congested, but otherwise normal; no foreign body in larynx. Brain healthy, but congested. Spinal cord healthy, but congested.

*Remarks.*—We particularly noticed the tarry condition of the blood, as it has been stated that this is caused by the action of the electric current on the red blood-corpuscles. The auriculo-ventricular rings were no doubt enlarged by muscular contraction. The cause of death was evidently by asphyxia. The case is interesting, as we get very limited evidence of deaths from electricity. In those occurring from lightning coroners rarely engage the services

of medical men, and far more rarely order a post-mortem examination, taking other evidence for granted. I cannot conclude without thanking the medical men before mentioned for their valuable coöperation and assistance.

### FATAL CASE OF INHALATION OF ROBURITE FUMES.

BY W. A. HATTON, M.B.

IT is a strange coincidence that while a committee was investigating the probable effects of this explosive compound, of which THE LANCET of last week gave so able a summary, a fatal case should have occurred lately in the Atherton district, the leading features of which will, no doubt, be of interest on account of its very rare occurrence. The deceased, a miner, was at work on Feb. 9th, and allowing a reasonable time (eight minutes) to elapse after the firing of a roburite shot, proceeded to take down the hanging coal. Ten minutes afterwards he complained of pain in the head and faintness, though he worked till closing time. The next day, when I saw him, he was in a confused condition and complained of a good deal of dizziness and pain, chiefly above the frontal and supra-orbital region; his articulation was thick and almost unintelligible; he was, however, able to give a short account of the whole occurrence, and attributed the onset of the symptoms to the inhalation of the fumes. There were some nystagmus and indistinctness of vision, owing no doubt to the retinal congestion present. The pulse was thready and irregular, ranging from 70 to 90 in the minute; temperature 101°; there was also marked cyanosis about the lips. The respiration was good, though a little hurried, and there were no abnormal physical signs on examination of the chest, no cough or odour noticeable in the breath, neither was there anything to lead to a suspicion of any pulmonary congestion. There had been no vomiting or feeling of sickness. The knee-jerk was a little exaggerated. The cephalalgia became more intense, coma rapidly supervened, and the patient died on the third day. The post-mortem examination was made, in conjunction with Dr. R. Martin of Atherton, on the 15th; the only noticeable point on external examination was the cyanosis of the lips. On opening the skull the dura mater was adherent, and found to be inflamed; there was intense venous congestion on the brain surface, and there was some superficial encephalitis present. Punctiform ecchymoses were unusually numerous on section, and very little fluid was present in the lateral ventricles. On opening the thorax, there was no odour perceptible, as has been noticed in cases of nitro-benzine poisoning; the lungs were intensely congested, more so at the apices, though there was no sign of any inflammatory change. The remaining organs were quite healthy, and portions of lung, liver, the stomach, and a kidney were sent to Dr. Paul for especial examination, though with negative results. There was no trace of carbon monoxide in the blood, tested by the spectroscope, or of the presence of any nitro-benzine compounds. In the report drawn up by Professor Dixon and Messrs. Mounsey and Hannah in the Park-lane Colliery dispute, in relation to the probable effects of the use of roburite, the presence and smell of nitro-benzine were detected in the fumes. On the other hand, at a meeting of the Manchester Geological Society the fumes were stated to be nothing but carbon dioxide and nitrogen; and the joint commission appointed by the workers and owners of the Durham collieries declared that there was no trace of nitro-benzine found in their experiments.

Walkden.

### INTER-PARTUM HOUR-GLASS CONTRACTION.

BY H. MARTYN EAMES, L.R.C.P. & S. ED., L.F.P.S. GLAS.

THE following case of inter-partum hour glass contraction seems to me to be of sufficient rarity and interest to warrant its publication.

On Sunday, Jan. 31st, I was called to a young multiparous woman in labour, whom I had delivered with forceps eleven months previously. On examination I found the os uteri fully dilated, and the uterine contractions strong and regular. I therefore ruptured the membranes, which resulted in the rapid descent of the head to the perineum.

After this the pains gradually, as in her last labour, became inefficient and unsatisfactory; so I applied the forceps, and her delivery was effected without any difficulty, and in about a quarter of an hour a placenta was expelled. Having discovered it to be a case of twins, I examined for the purpose of ascertaining the presentation of the other child, when I found that the liquor amnii had escaped, and the left arm was presenting. I therefore determined, if practicable, to turn and deliver without delay; but upon introducing my hand into the uterus I found the internal os uteri intensely constricted, rigidly unyielding, and tenaciously gripping the upper region of the presenting arm, rendering it impossible for me to pass even one finger beyond the barrier into the upper uterine segment. There being no special indication on the part of the mother for immediate delivery, I determined to await the effect of forty grains of chloral hydrate in two doses of half an hour's interval. On re-examination I found that the internal os had slightly relaxed, and that the funis had descended, and was being compressed by the contracted ring, the pulsation being only slightly appreciable. However, I was able to return the prolapsed cord, but foetal turning was out of the question, as I was unable to pass more than a couple of fingers through the constriction. In the interests of the child, as indicated by the almost pulseless cord, I placed the patient deeply under chloroform for the purpose of prompt delivery, by turning if possible. Despite this the obstruction only yielded very slightly, and as I found the funis had ceased to pulsate, and there being no maternal indications for immediate delivery, I decided to leave matters alone for a while. In an hour or so I was summoned to my patient, when I found the contraction obliterated, uterine action regular and efficient, the arm protruding from the vagina and the shoulder had descended into the pelvis. I again administered chloroform, turned and completed the delivery without any further trouble. The hand and arm of the child were deeply cyanosed, much swollen, and a deep sulcus remained on the upper arm at the point where it was gripped, thus proving the intensity and persistency of the spasm. I have referred to several authorities, who only describe cases of ante- and post-partum hour-glass contraction, and hence I presume that hour-glass contraction after the birth of the first child in cases of twins is of very rare occurrence, and it suggests itself to me that it may not be inaccurately defined as *inter-partum* hour-glass contraction.

Goole, Yorks.

## A Mirror

OF

### HOSPITAL PRACTICE, BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.* lib. iv. Proœmium.

#### ST. BARTHOLOMEW'S HOSPITAL.

ACUTE YELLOW ATROPHY OF LIVER; NECROPSY.

(Under the care of Sir DYCE DUCKWORTH.)

THIS case is recorded as it appears worthy of notice, first, on account of the rarity of the disease, and, secondly, because it differs in some respects from most other published cases. As in many older cases, the jaundice followed a mental shock. With the onset of coma physical signs pointed to rapid diminution in the size of the liver. This probably cannot wholly be accounted for by the shrinking of the liver, but must be partly due to some change of its position—falling away from the ribs. Instead of the urine, as was supposed usually to be the case, being not very deeply bile-stained, albuminous, and with diminution of salts and urea, the excretion in this case was exceedingly deeply bile-stained, not albuminous, and contained a fair amount of salts and urea. The urea, however, in this case was only estimated by the nitrogen method, which, like Liebig's method, is open to error. The nearly complete absence of any hæmorrhage throughout the case is noteworthy. For the account