A CASE OF AORTIC REGURGITATION FROM INJURY TO THE VALVES DURING MUSCULAR EFFORT.*

By HENRY SIMPSON, M.D., Physician to the Manchester Royal Infirmary.

J. B., a strongly built man of 40, had good health up to the time of this occurrence. About four years and a-half ago he was helping to carry a piano down stairs, when he suddenly felt something give way in his chest, and immediately heard a noise proceeding from it, which he compared to that "made by a young frog," and imitated by a sort of croaking. It was audible to those about him as well as to himself, for about nine months, becoming gradually weaker, and at length ceasing. He felt no pain or faintness at the time, and went on with his work as if nothing had happened. For about two years he felt no inconvenience, but then began to be troubled with tightness in the chest, occasional palpitation, flatulence and giddiness. He, however, followed his work as door-keeper at a railway-station until fifteen weeks before his admission to the Manchester Infirmary. He was then suffering from dropsy, which continued ever since.

On February 5th, 1868, the pulse was observed to be of a typically regurgitant character, and to be remarkably visible in the radial and ulnar arteries, and the dorsal arteries of the feet when the oedematous swelling was pressed aside. The chest resonance was good, and the respiratory sounds normal. The præcordial region to the left of the sternum was rather prominent; the apex-beat was felt over a somewhat extensive area, its limit to the left being an inch and a-half outside the nipple; and the transverse dulness measured five inches and a-half. The first sound was everywhere extremely feeble and unaccompanied by the slightest murmur; but the second sound was almost entirely replaced by a prolonged musical murmur of high pitch, audible over the whole front of the chest, but of greatest intensity just above the level of the fourth cartilage. It was audible from the occiput, on the left of the spine, to the lumbar region, and on the right, to the middle of the interscapular region. The urine was scanty, loaded with lithates, but free from albumen. The tongue was clean and moist. He slept little, and on the least exertion suffered much from dyspnoea. His face was pallid, but there was no lividity. In a day or two some dulness began to appear at both bases with fine subcrepitant rales, and the expectoration became hæmorrhagic. Effusion took place into both pleuræ; the urine became slightly albuminous; and his condition more unfavourable. On the 17th, the notes state that he had had a very bad night. The expectoration contained a good deal of blood. Pulse 108; respirations 28. The urine was not sufficient to obtain the specific gravity; it was slightly albuminous. During the day he felt better and conversed cheerfully with the other patients. About six P.M. he suddenly raised himself up in bed, saying he was choking, and fell back dead.

At the inspection, a good deal of fluid was found in the peritoneal cavity, in both pleuræ; and about two ounces in the pericardium. There were no pleuritic adhesions. Both lungs were oedematous, and slightly emphysematous at the interior edges. Several nodules of pulmonary apoplexy were found, all recent, but one of somewhat older date than the rest. There was no tubercle. The heart (which was exhibited) weighed 24 ounces. The right auricle was enlarged and filled with partially decolourised clot, which passed into the right ventricle. This was dilated and its walls flaccid. The left ventricle was dilated and its walls greatly thickened. The aorta was slightly dilated, its coats were thickened, and contained several calcareous plates just above the insertion of the valves. The segments of the valves were rather thick and leathery, and somewhat shrunken. Two of the points of attachment were normal, whilst the third was at a lower level. Before opening the vessel it appeared nearly a quarter of an inch below the others, and the attachment of the adjacent segments was separated by more than the eighth of an inch. This stripping down of the attachment of the valves allowed free bending down towards the ventricle of the two segments, and produced marked incompetency, as was tested by a stream of water from above. The mitral valve was perfectly healthy, and did not allow of the slightest regurgitation. This point was tested most carefully. The abdominal organs were congested, but otherwise healthy, with the exception of one mesenteric gland, which was converted into a bone-like mass nearly as large as a walnut.

The points of interest in this case are:—the distinctness of the history, given by an intelligent man; the absence of pain or faintness at the time of the accident; the slight inconvenience felt for a considerable period; the hypertrophy of the left ventricle; and the production of

secondary effects on the pulmonary and systemic circulation without the existence of any mitral insufficiency. Dr. Walshe states that he has scarcely ever seen pulmonary apoplexy except as the result of mitral disease, but that dilated hypertrophy may produce it. In this case there was one mass of the size of a large orange, and several smaller ones. I am of opinion that the great incompetency of the aortic valves allowing of the falling back of a large stream of blood, which interfered with the onward flow from the auricle into the ventricle, must have had a greater share in its production than the hypertrophy.

REPORTS

OF

MEDICAL AND SURGICAL PRACTICE IN THE HOSPITALS OF GREAT BRITAIN.

ROYAL SOUTH HANTS INFIRMARY.

POISONING BY THE OIL OF BITTER ALMONDS.

(Reported by Mr. W. B. SHORTS, House-Surgeon to the Infirmary.)

THE following case illustrates the efficacy of the rousing treatment, such as is recommended in poisoning by opium, in a case of poisoning by the oil of bitter almonds. G. G., aged 3, was brought to the Infirmary, June 15th, suffering from the effects of a poisonous dose of the essential oil of bitter almonds, which had been incautiously left within reach of the child. The following were the symptoms: Foaming at the mouth, difficulty of breathing, pupils dilated and fixed, pulse scarcely perceptible, surface of body very cold, and the general condition inanimate. An emetic was administered at once, and the child placed under a powerful cold douche bath, the water being especially dashed over the head and spine. In a few moments she commenced kicking and screaming, but relapsed into the former condition as soon as the douche was suspended. The treatment was accordingly continued for more than half an hour. The child was then removed from the bath, and gently galvanised by the electro-magnetic current. She still remained in a very drowsy condition, but was kept perfectly awake by slapping and shaking her when necessary; and at the end of three hours appeared quite recovered and rather lively. She was brought to the Infirmary again the next day, and was apparently little the worse for the poison, or the treatment she had undergone. According to the father's account, the child had swallowed nearly a tablespoonful of the essential oil.

BEDFORD GENERAL INFIRMARY.

SUPPOSED HYPERTROPHY OF BRAIN.

By W. G. JOHNSON, Esq.

LEWIS GOBLY, aged 29, a drayman, and consequently accustomed to take a liberal allowance of beer, not of a strong habit of body, and subject to headache, was seized with an aggravated attack, whilst employed in the sun making hay, in May 1866. He was brought to the Infirmary in the following August. His suffering then was most intense. He had constant pain in the head, at times so severe that he could hardly control himself. He would lie doubled up in bed, his head supported by his hands, and moaning constantly. The severe pain seemed to be somewhat intermittent. He suffered much from sickness. His pupils were dilated; pulse feeble; countenance pale; bowels constipated; urine free from albumen. When he walked, which was only when the pain was less severe, it was but a few steps, and with a feeble tottering gait. The remedies used were mercury, which was given until it produced slight soreness of gum; and quinine, which was increased in quantity. Repeated blisters were applied to the neck, and the hair was cut close. He left the Infirmary at the end of three months, without deriving any permanent benefit.

He appeared again in April 1867, much better in health, but wishing to gain strength by better diet. He could now walk very fairly, and stated that he had felt sudden and great relief by something giving way in his head. On examining his head, I found that the coronal suture had separated from the great ala of the sphenoid to the junction of the two parietal bones; the other half of the suture was closed. The sulcus caused by the separation of the bones was widest at the outer end, being there sufficiently wide to allow a finger to be placed easily between the two bones. At the centre of the frontal bone, the groove of separation was very small, possibly not more than one-eighth of an inch in width. He remained in the hospital three months, and improved considerably in health. The bones on the opposite side were separating, or, I should say, had separated an inch further than on admission.

* Read before the Manchester Medical Society.