

ARTICLE VI.—*Obstruction of the Air-passages a Cause of Death of the Child after Birth.* By Dr L. BUHL.¹ Translated from the German by J. MATTHEWS DUNCAN, M.D., Lecturer on Midwifery.

AMONG twenty-seven children dying from mechanical causes, in labour or shortly after birth, eleven were destroyed by obstruction of the air-passages with foreign matters, or presented this condition.

Most of the children were born dead [eight in number], and of those which were alive at birth none survived the first day of life. One died twelve hours before birth.

Ten of the children were boys and five were girls. They had an average weight of 5·6 pounds.

In ten of the cases the obstruction was produced by a greenish or greenish-brown slimy mass, which often copiously filled the cavity of the larynx and of the trachea as far as its bifurcation, or even completely filled its branches, or it was in less quantity and permitted the passage of air and of fluids to an insignificant extent. In the former kind of cases, the lungs had their foetal position and texture unaltered (six cases); in the latter class, more or less numerous small portions of lung were filled with air; and this, as might be expected, was particularly observed in the three children which survived birth some hours. Only in two who died during parturition could air be shown to be present in the lungs; but in only one of these two was the distention of the air-cells the result of instinctive respiratory movements; in the other, air had been artificially injected.

The parenchyma of the lungs, in the cases where they contained air, had a brownish-yellowish coloration, and from the surface of a section there could be expressed a similarly coloured finely spumous fluid.

Microscopical examination of the matters found in the air-passages always discovered the presence of yellow golden reddish nuclei of colouring matter of different sizes and irregular form, very frequently of tabulae of cholesterine, fat drops, and cylindrical cells,—circumstances which left no doubt that the substance examined was meconium. The superficial inspection of the larger tracheal plugs, and their comparison with the contents of the colon, in the first instance, removed any doubt on the point, especially as the throat, mouth, and nose were filled with the same, and the whole body and umbilical cord were smeared with it, and had from it a greenish tint. This condition of the skin almost establishes the diagnosis of the cause of the death before the autopsy is made.

To complete the proof that the greenish coloration of the skin and of the contents of the air-passages is produced by meconium, it is only necessary to add that this ordinary content of the child's

¹ Klinik der Geburtskunde. Von Dr C. Hecker und Dr L. Buhl. Leipzig, 1861.

large bowel was found in its natural situation either not at all or only in the rectum.

It is not without interest to observe that, in cases where repeated attempts at respiration were made, particles of meconium were always found even in the parenchyma of the lungs, having been drawn as far as the air-cells themselves.

In the pleural covering there were found small hæmorrhages corresponding to the larger accumulations of these foreign matters; but lungs that remained in their entirely foetal condition showed only punctiform hæmorrhages.

In two cases both cavities of the chest were filled with yellowish-red serum.

Considering the admirable researches of Hecker, Schwartz, and others, on premature respiratory movements, there cannot be a doubt that meconium reaches the air-passages only by inspiration,—an instinctive intra-uterine act; and it is supererogatory to make any further remarks on the subject.

In one case, the unfortunate inspiration was not during or before birth, and meconium was not the foreign body which demonstrated the respiratory imperfection. It occurred in a boy born with split palate, harelip, and other deformities in the same situation, to whom, seven hours after birth, the nurse wished to give some milk to drink to stop its crying. It died immediately. Larynx, trachea, and bronchi contained milk, and even in the parenchyma of the lungs milk was recognised by its fat drops; and to the parts containing these there corresponded hæmorrhagic spots in the pleural covering.

Part Second.

REVIEWS.

A Treatise on the Continued Fevers of Great Britain. By CHARLES MURCHISON, M.D., F.R.C.P., Senior Physician to the London Fever Hospital, etc. etc. London: Parker, Son, and Bourn: 1862.

Lectures on the Distinctive Characters, Pathology, and Treatment of Continued Fevers, delivered at the Royal College of Physicians of London. By ALEXANDER TWEEDIE, M.D., F.R.C.P., Consulting Physician to the London Fever Hospital, etc. etc. London: John Churchill: 1862.

VOLUMINOUS as is the literature of fever, we are always glad to see additions made to it by competent observers. To the pathologist,