

trachea could be irritated. Irritation of the trachea, followed by incision, seemed to stimulate the respiratory centres for some time, but as the case was approaching a crisis, at last a small-sized catheter, $\frac{1}{8}$ inch external diameter, was used to make connection with the trachea, and by an increasing series of larger tubes, this was connected with the tube from the air-valve of the forced respiration apparatus. About 6 p.m. the forced respiration was begun, Dr. A. M. Curtis giving valued assistance in holding the small tube in the trachea. In fifteen to twenty minutes the cyanotic condition passed away, the child steadily improved for an hour, when the cyanosis returned. Examination revealed that the tube had slipped out of the trachea. After replacing, forced respirations were continued, and natural hue of health returned. The pulse improved, ranging for a time at 134 per minute. Drs. W. H. Heath and Geo. W. T. Lewis were called in to assist. Natural movements of the limbs returned, reflexes again established, the limbs moved, bowels acted freely, and eight or ten natural respirations were taken. Hopes for recovery were almost entertained from the remarkable changes produced by the forced respirations, but at 9.30 p.m. the little heart ceased beating.

In this case, no less than in those preceding, the result of forced respirations was remarkable. The infant, only eighteen days old, had for five and one quarter hours been subjected to the influence of one grain of morphine, in an asphyxiated condition for at least four and one-quarter hours, thus weakening the muscular tissue of the body. Under forced respiration life was retained, with the results mentioned, for three and one-half hours. I hazard the opinion that if forced respiration had been instituted within the first two hours, the results might have proved different.

June 18, 1888, I was called to attempt the resuscitation of a still-born babe. No heart action could be detected. A catheter was placed in the trachea by intubation method, connected with the forced respirator, lungs were inflated and expiration produced by pressure; no results. The child was undoubtedly dead before the forced respiration was begun. The

feasibility of the operation was demonstrated.

CASE VII.--Dr. FELL.

Frederick Ryers was found in front of an "opium joint," and taken to the "Emergency" hospital. His condition was so serious that the house physician sent for me. Cyanosis was marked, absence of reflexes, contraction of pupils, spasmodic respiration, doing little good. Tracheotomy made. Blood venous. Forced respiration was kept up, calling the heart into positive action, and causing the return of the pulse at both wrists, and a change from the venous to the arterial state of the blood at the wound in the neck. Reflex action could not be induced; the brain tissue did not respond to the revived circulation, and the pupils continued dilated. The action of the heart kept up for about an hour before final stoppage. A few days previously I had had at the same hospital a case in which the patient was saved without resort to forced respiration, although the indications were such as almost to warrant the operation. I was preparing to operate, when, a slight improvement being noticed, I desisted, and the patient recovered without requiring tracheotomy. Influenced by this case I waited too long with Mr. Ryers, until, in fact, the pulse was lost at both wrists, and, on auscultation, no action of the heart could be detected.

CASE VIII.—Dr. FELL.

I was called to attend a case of "still-birth" by Dr. Geo. R. Stearns. Face presentation. Application of forceps in delivery had ruptured brain tissue, producing, as was subsequently ascertained, sufficient hæmorrhage to prevent resuscitation. Previous to my arrival, the nurse had kept up the action of the heart by mouth to mouth insufflation. Cyanosis was extreme. As I did not wish to attempt tracheotomy, for a time I resorted to the same means.

This not giving satisfactory result, the tube connecting with the air control valve of the apparatus was placed in the mouth of the infant, the nostrils closed, and the lips compressed about the tube, and forced respiration instituted. The change was immediate. Cyanosis passed away, the heart action became good and full, reflexes of the