

conditions, however, appeared to indicate that life was not extinct: the pupils continued contracted, and cyanosis did not supervene. The glassy stare of the eyes was present, and outside of the two favorable conditions mentioned, it appeared that death could not be far off.

At this point Dr. Harrington's father made the remark, that if this young lady was made to live it would indeed be "a miracle." However, I kept up the forced respiration, saying that I would do so for a little while longer, "just for the fun of it." In a short time auscultation on the part of Dr. Harrington gave us the satisfactory information that the heart was beating. In the course of a few hours these reflexes were more and more marked, and consciousness supervened. Forced respiration was continued through the forenoon and until late in the afternoon, making some twelve to fourteen hours of continual forced respiration before the patient could be allowed to breathe for herself. She has made a good recovery. In this case artificial respiration would at no time have been of any avail to the patient.

#### CASE XVIII.—Dr. FELL.

Sunday, March 15th, 1891, at 11.30 a.m., I was called to attend Joseph Altieri. A prescription containing phenacetin, morphine, and cocaine in small quantity, had been prescribed by the attendant physician for neuralgia of the stomach. The patient had taken repeated doses, without regard to instructions upon the prescription, until a large poisonous dose of these very dangerous drugs had been taken. At 11.30 a.m., forced respiration with the face-mask was commenced, and quickly overcame the marked cyanosis, which was intensified undoubtedly by the phenacetin. With the face-mask, forced respiration was kept up all the afternoon, the patient at times becoming conscious. The cyanotic condition seemed, however, to increase, owing to the base of the tongue falling back and occluding the larynx. A ligature was placed through the tongue and the organ pulled well up, with the result that the lungs were more readily inflated.

In this case oxygen gas was administered in connection with the forced respiration apparatus, it being supplied in greater

or less quantities, as seemed to be desirable. At times the amount of air passing to the stomach and bowels was so great as to markedly distend them, thus interfering to a certain extent with the inflation of the lungs by the forced respiration, and indicating one of the difficulties to be met with in forced respiration with the face-mask. In the afternoon the patient became comatose, and responded very little to the respiratory work. During the evening it was evident that the patient was not progressing satisfactorily, the influences of the poisons being peculiar in their action, there not appearing to be any elimination of the drugs, although the catheter was used as often as was necessary, and the antidotes which seemed to be indicated, and stimulants, such as digitalis and alcohol, injected hypodermically. At 10 p.m., Sunday night, I made tracheotomy, and forced respiration was then kept up by the direct method. The result, as in the former case, indicated the very great readiness with which the method could be used in the inflation of the lungs; and the patient was apparently holding his own. I left for home at 11 p.m., trusting that the patient would be in good condition in the morning.

An army of students was present to assist in the work of respiration, and with Dr. Harrington they kept faithfully at work through the night, until 5.30 in the morning. At this time the patient was breathing with comparative ease, and the prospects looked encouraging. However, a spasmodic contraction of the stomach occurred; its contents were ejected with force. Every effort was made to prevent any of the vomited matter from passing into the lungs, but the spasm resulted, however, in the ceasing of the action of the heart, and the labor of eighteen hours was lost.

The necessity of something other than manual labor in the forcing of a column of air into the lungs was strongly demonstrated in this case. Although there were plenty of persons present—the students, and the relatives of the patient—who performed all the labor required, no one who has not witnessed a case of forced respiration can really appreciate the amount of energy expended in respiring for a human being, be it even so easy comparatively as