

he lay in bed. The expectoration when in bed was very copious and offensive, and was composed of pus; the amount of expectoration, on the other hand, diminished when he walked about.

Chloroform was administered on October 25, 1893; the administration was extremely difficult and dangerous; the empyemic cavity apparently drained into the lung when the patient was recumbent, and the pus collected in the air tubes and choked the patient. Moreover, the cough was much aggravated by the chloroform vapor. The moment the patient was completely under, the cough stopped and the pus blocked the trachea, and cyanosis supervened. An attempt was made to render the surface anæsthetic with ethyl-chloride, but this was only partially successful, and the operation was proceeded with whilst the patient was only partly under the influence of the anæsthetic.

An incision was made nearly vertical, but somewhat obliquely from above downwards and inwards, near the nipple line, from the fourth to the ninth ribs. The edges of the incision were held aside by ligature retractors. The sixth and seventh ribs were bared of periosteum, and by means of a Hey's saw and cutting pliers about two inches of each rib were removed. The thickened pleura within was now freely opened, and a large quantity of thick fœtid pus escaped. The patient's pulse, which had been very feeble up to this time, improved at once. The seventh rib was extraordinarily thick; my notes state that it was as thick as the middle of an adult ulna, and of quadrilateral shape on section.

On introducing the fingers into the wound the cavity was found to extend downwards to the diaphragm, about a finger's length, not quite as far forwards to the mediastinum. The lung could be felt high up, just within reach of the finger; the limit of the cavity posteriorly could not be reached with the finger. The cavity was washed with 1-20,000 bichloride of mercury, and a tracheotomy tube placed in position. A drainage tube was fixed in position.

A note made a week after the operation was to the effect that the condition of the patient had vastly improved. The cough was much diminished, and expectoration not one-fifth what it was before operation. His appetite was excellent. He made an excellent recovery; he gained twenty-one pounds in weight in twenty-one days; the discharge diminished, and the cough had almost disappeared when he left the hospital.

I met the patient in June, 1895, nearly two years after the operation; he was then a motorman in charge of a car on the Toronto Street Railway. He informed me that he was in excellent health, and had been in the employ of the street railway for eighteen months.

I had an opportunity of examining this patient to-day (two years and four months after operation). The cavity has never opened since the