

of May, 1875, being under the influence of chloroform, and there was drawn off about a pint and a half of pus. May 23rd, the trocar was again introduced in the same place, and a similar quantity of pus drawn off. May 24th, trocar introduced, and pus drawn off as before, the patient being under the influence of chloroform at each operation. In two or three days after this, the place of discharge in front closed up. The patient not being able to stand the daily introduction of the trocar, and the use of chloroform, an india rubber tube was inserted into the chest, and allowed to remain in. This was done by introducing a large sized trocar into the chest, and then passing the india rubber tube, selected to fit, through the canula, and withdrawing the latter. Through this tube the pus was withdrawn, and the cavity washed out every day with a solution of carbolic acid $\mathfrak{z}\text{ij}$ to the Oj . The washing of the cavity was effected by means of a Davidson's syringe, (the bulb of which holds $\mathfrak{z}\text{j}$.) This syringe in order to be used for this purpose, was slightly modified. A piece of rubber tubing, about three or four inches in length, is attached to the suction pipe, and into the former is inserted a piece of glass tube three inches in length. This glass tube here serves two purposes :—First, it is an easy means of connecting the suction pipe of the syringe with the rubber tube leading from the chest, and secondly, it allows the surgeon to see if there is any pus or air passing along the tube.

The end of the glass tube which is to be inserted into the tube leading from the chest, should be drawn out so as to render it somewhat pointed, in order to facilitate its introduction into the tube ; this may be easily done by heating it over a spirit lamp.

The india-rubber tube should be about 16 inches in length, and introduced into the chest about 3 inches. It is prevented from slipping out, by tying a thread moderately firm around it close to the wall of the chest, and making it secure by strips of adhesive plaster laid on the walls of the chest. The portion of the tube outside is coiled and held *in situ* by a few more strips placed over it, after the washing process is completed. For emptying the chest the syringe is used in the ordinary manner, by connecting the glass tube in the suction pipe with the tube in the chest. When the fluid is to be injected into the chest, the syringe is reversed. Care must be taken not to inject the fluid with too

much force, as it sometimes produces faintness, and also for fear of driving the tube out of the chest as happened once in this case. It is well also to fill the syringe with water before inserting it as a precaution against air getting into the chest. But from the treatment of this case, it would seem, that there is not so much danger to be apprehended from air getting into the chest, as is generally supposed. A good deal of air got in in this case, if not through the tube, at least between the tube and the sides of the wound, without producing any dangerous symptoms ; however, it is always best to take every precaution where there are any signs of dangerous symptoms being produced.

This mode of drawing off the matter and washing out the chest was continued every day, and the matter diminished about $\mathfrak{z}\text{ss}$ every week, until about the 12th of July, when the quantity of pus seeming not to diminish, and the patient also feeling very ill (supposed to be caused by the long continued use of the carbolic acid), tincture of iodine was used. But this also did not seem to have the desired effect. It was then proposed by Dr. Fulton to use a combination of the carbolic acid and tincture of iodine, the strength of which was—carbolic acid $\mathfrak{z}\text{ss}$, tincture of iodine $\mathfrak{z}\text{ss}$, and water Oj . The addition of the carbolic acid has the effect of almost completely decolorizing the iodine, a circumstance which is worthy of note. However, it acted as a splendid healing and disinfecting agent, and under its use the pus rapidly decreased (it seemed to act a great deal better than either the carbolic acid or the tincture of iodine used alone) ; the pus diminished about as much as $\mathfrak{z}\text{j}$ every week, until about the 10th of August, when not a drop could be got from the tube, and on percussion the chest had regained its normal resonance. On the 11th of August, the tube was taken out, and the parts poulticed, but no discharge continued, and in two or three days the wound closed up. On examining the chest a couple of weeks later, no sign of fluid could be detected.

The internal medicinal treatment was tonics of quinine and iron, together with good diet, throughout the whole course of the disease. The patient is now in the enjoyment of comparatively good health, but still somewhat feeble, though not more so than might be expected from a man at his time of life.

REMARKS.—The points worthy of note are, 1st.