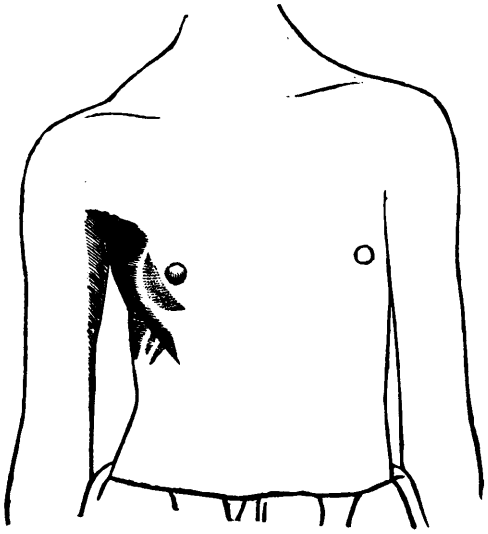
except to make a larger opening by the introduction of the finger, for the insertion of a large-sized drainage tube. There was very slight hemorrhage during the operation, which was arrested by torsion no ligatures being required. The cavity was then thoroughly washed out with carbolic acid solution, a large drainage tube inserted, the wound sutured and dressed with marine tow. There was very little shock. At 6 p. m. pulse, 120; temperature, 99½; the patient felt comfortable with the exception of pain in the wound which was relieved by opiates. Without detaining you by recounting the daily history, I may say that her progress was quite satisfactory, with the exception of a rise in pulse and temperature on the third day which was readily controlled by five grain doses of quinine every four hours. The cavity was washed out daily with solution of carbolic acid, to which tincture of iodine was added; the discharge gradually diminished, and the patient's general health rapidly improved, so that she was able to leave the Hospital early in March, 1884. I have just received a letter from her former medical attendant, Dr. Stalker, in which he says, that she is greatly improved in her general health. He did not enquire as to her increase in weight since her return from Toronto, but it must



be considerable. The cavity is gradually becoming closed up, and he says he feels satisfied that in the course of a month the drainage tube now in use may be discarded, and the wound allowed to heal." Before she left the Hospital there was considerable sinking in of the chest, most marked opposite the sixth and seventh ribs, as shown in the diagram.

The ends of the resected ribs could be distinctly felt, but the tissue between had become more or less firm, showing an attempt at reformation of bone. The patient's general condition was much improved; her appetite was better, and her anæmia had almost entirely disappeared. The report above referred to shows that this improvement has continued, and that she is now almost entirely well.

With regard to the indications for the operation it may be stated in general terms, that in all chronic cases of empyema which have resisted ordinary treatment for a lengthened period, the operation should be resorted to. It is, of course, impossible to fix a stated period, that will apply to all cases; but when a fistula has existed from six to eight months without any sign of improvement, such as diminution in the size of the cavity, or the amount of the discharge, disappearance of hectic, or improvement in the patient's general condition, this procedure should be put in practice, provided there are no contra-indications, such as advanced tuberculosis, albuminuria, or extreme emaciation. The size of the cavity may be easily determined by passing a long probe or catheter through the fistula. Estlander has shown that "even in cases of extreme debility, patients being so weak as to be scarcely able to turn in bed, the operation caused very slight derangement of the system, and was followed immediately by marked improvement. It is scarcely necessary to say that if albuminuria be present from amyloid kidney, the patient is liable to succumb to very slight shock. The operation is by no means a trying one, and may be safely resorted to in very delicate subjects."

With reference to the operation itself, the position, size and direction of the incision will depend upon the situation of the cavity and the fistulous opening. The most favorable position is upon the lateral portion of the thorax in the axillary line, the intercostal spaces being there covered by the serrations of the serratus magnus. The length of the incision and portions of ribs to be removed will depend upon the size of the cavity in the horizontal direction. For the excision of portions of two or three ribs, one single incision parallel to, and either between the two or over the middle rib of the three to be removed, will be quite sufficient. If a greater number are to be excised, parallel