the expansion of the lung. The air cannot all be withdrawn if the lung is incapable of expansion, but enough should be withdrawn to keep up not an intermittent but a constant pulling upon the lung, by the vacuum produced, if I may be allowed the use of common parlance. When the lung ceases to expand and the condition of the patient will warrant it, the ribs may be resected and the chest wall pressed inward to obliterate cavity. Let us now make the application of the principles to the treatment of free or uncomplicated empyema. If the empyema is recent the pleura is probably in a healthy condition excepting where inflamed. If the abscess is small and the condition of the patient indicates a subsidence of the acute inflammation, repeated aspiration might be resorted to from one to three times a day, or *as often as any accumulation of pus may take place.* This will obliterate the cavity and if union takes place between the pleural surfaces a cure is effected. This manner of aspirating might be termed *drainage by aspiration* and is the only manner in which it should ever be applied in empyema If the pus is fœtid, the cavity may be carefully washed and disinfected by injecting and withdrawing warm Condy's fluid or carbolated water, one part to eighty.

To facilitate the operation and to aspirate effusion loaded with flakes of fibrin, I devised this aspirator and needle which is a modification of Potain's for the same purpose. (*See Fig.* 1.) If the empyema is of long duration, the entire pleura, which has been bathed with pus, becomes thickened and changed to a pus secreting surface, or may become gangrenous and inclined to slough or ulcerate in places. The collapsed lung may be bound down by bands of organized material. If the operation is deferred, the pus may burrow through the pleura into the lung or externally. A case of this kind should never be aspirated, but proceed at once upon the general principles laid down in this paper, keeping in view the fact that we are aiming at the *obliteration of a pus-secreting cavity by the expansion of the lung and falling in of the chest wall, one or both.* The first step is to empty the cavity and establish a thorough drainage; the point selected should be at the bottom of the pleural cavity, which is