out, will answer as a very good substitute.

There is one form of pyo-thorax which is very fatal, viz., that resulting from, or rather accompanying, acute suppurative pleuritis. I believe free drainage, as soon as pus forms, to be the most rational treatment for it. In this connection I cannot refrain from reporting the only case of acute suppurative pleuritis I ever met with. Mr. C., a C. P. R. policeman, age 34, stout, well built, never seriously ill, had bronchitis in 1880, modified typhoid in 1886, and with a good family history. On the 7th of last February he consulted me about a slight cough which troubled him a few days. There were no constitutional symptoms whatever. The next morning (8th) I was called to see him. He had had chills, complained of pain in his left side. His temperature was 101° F. and pulse 100. He complained very much more than his symptoms and condition appeared to me to warrant. During the evening he got much worse. It being then impossible for me to see him Dr. Pennefather very kindly attended for me. I did not see him again till late the next night, when Dr. P. accompanied me. His pulse was over 120; temp. 103° and respirations 60. We also detected considerable fluid in the left pleural cavity. The accommodation and nursing were inefficient, so we advised him to go to the hospital, to which he was taken that same night. On the 10th delirium set in, and it was found necessary to aspirate the chest to relieve the great dyspnœa present. The fluid removed was purulent. A second aspiration was found necessary soon afterwards. The constitutional symptoms increased in severity until the morning of the 13th, when he died, evidently from pyæmia. In these cases I believe the proper treatment should be the same as that for suppurative peritonitis, that is, free drainage, by incision, and thorough cleansings with antiseptic solutions.

2. The second surgical procedure in the management of pyo-thorax is that of simple continued drainage, by making a small opening between two ribs, just sufficiently large to admit a drainage tube and no more. This simple, open method may be conducted either through a single orifice with a permanent canula or soft India-rubber tube, or through two openings. A syphon apparatus may be used instead of antiseptic dressings to receive the pus.

Before opening the chest the side ought to be first washed with soap and water, then with corrosive sublimate solutions 1 in 1000 to thoroughly clear away all extraneous substances. When there is but one opening through which the fluid is to pass, it should, I think, be made low down. *The 8th inter-costal space in the* post-axillary line is perfectly safe on the right side, while on the left a higher space should be selected. Lower than that the diaphragm has been encountered. A spot a little below the centre of the dull area is highly recommended, particularly in loculated empyema. In simple empyema some advise the 5th interspace in the mid-axillary line, and occasionally it has been found necessary to open the 10th or 11th interspace. Whatever point *is chosen*, before the knife or trocar is passed into the pleura we ought always to insert an exploratory hypodermic needle as a crucial test of the presence of fluid. Should the odor become putrid or gangrenous, or hectic symptoms show that the secretion is profuse and has no free exit, it becomes necessary at once to resort to medicated solutions of some one of the antiseptic drugs Very weak solutions should be used at first and very gentle force employed. Tolerance is soon established in many cases. 1 to 2 per cent. of carbolic acid; 1 gr. to 1 oz. of permangante of potash; one drachm of pot. chlor. to one *pint; one drachm to four drachms of* iodine to a pint; half a grain to three grains of corrosive sublimate to a pint, or for the first few washings I prefer to use borax, four drachms and glycerine one ounce to the pint of water, as being much less irritating.

Should at any time dyspnœa, cough, spasms, or syncope begin, the injections must be stopped immediately, and these allayed. This mode of treatment is suitable for *simple* cases of recent origin, but not when the formation of pus is very abundant or mixed with flocculi; or when the chest wall falls in and presses upon