pendicitis. With regard to the results in these cases: Dr. Hutchison speaks of the result some months hence—my experience is that advanced visceral actinomycosis is an absolutely fatal disease and I gather that that has been the almost universal experience of surgeons. I would like to know if Dr. Hutchison is doing anything in the way of medication.

J. G. ADAMI, M.D.—I confess to a feeling with Dr. Bell that I am rather sorry to give up the old idea that actinomycosis is not associated with grain and that it is by wounds in the mouth, of lower portions of the intestinal tract whereby portions of infected grain get imbedded in the tissue. My experience here in Canada is that we get these cases from agricultural communities and not among city dwellers; the same has been experienced in Russia and Germany. Wright's theory is that to get pure development one must have anaërobic cultures. In my first experiments, in 1891, I was able to grow the fungus quite readily in deep tubes so long as they were present with pyogenic cocci. But the more I tried to get the ray fungus pure and isolate it, the greater my failure to obtain growth, with purification the organism died out. It deserves note that prior to Wright the anaërobic nature of actinomyces had been demonstrated by Wolff. I feel that more evidence as to the mode of infection is required and here in Canada with the large number of cases occurring in the rural districts it should be easy to follow this to a conclusion. Where a chronic suppurating condition is present, which is intractable we must look for these organisms. There is much about their characters and regarding the disease they induce that wants settling.

C. B. KEENAN, M.D.—This case is interesting and illustrates very well some facts concerning actinomycotic infections. Actinomycosis travels and travels widely leaving no trace in the place whence it started, as shown in one case from Dr. Bell's clinic where a patient was operated on for actinomycosis of the appendix and surrounding this was a mass of granulation tissue and pus specimens of which showed general actinomycosis. The patient recovered, wound having healed, but returned to the hospital with a condition simulating liver or lung abscess. The peritoneal cavity was opened and it was found to be free from any trace of disease and later the lung was explored, when a large actinomycotic abscess was found. Again, a patient had clinical signs of an abscess in the upper part of the abdomen which slowly disappeared only to reappear later in the groin, the abdominal cavity being now apparently free.

In regard to the view that actinomycosis is normally present in the mouth and in the intestinal tract I think that its frequent development in wounds in cattle would indicate otherwise, I used to think with Prof. Adami that actinomycosis was a rural disease, but I have had