

hospitals, and we have been trying it in the hospitals in that way, and we find it lessens complications, but does not shorten the disease.

Dr. SCHAFFNER, M.P.—How is that? How could it prevent complications in the typhoid? What complications do you refer to now?

Hon. Mr MURPHY.—Ulcers in the bowels.

The CHAIRMAN.—Ulceration in the bowels and the sequelæ of typhoid.

Hon. Mr. DANIEL.—It renders the disease milder?

The CHAIRMAN.—I do not find that it lessens temperature much, but in all cases where it has been used we have had very few complications.

Hon. Mr. DANIEL.—Fewer hemorrhage cases?

The CHAIRMAN.—Yes.

Hon. Mr. DANIEL.—How long after the disease has manifested itself have you tried and used vaccine?

The CHAIRMAN.—It has been used by different men in pretty nearly all kinds except the latter stages.

Hon. Mr. MURPHY.—Dr. Starkey has just made the statement that it would be a mistake to give it in a typhoid epidemic.

Prof. STARKEY.—I would not like to go on record just quite in those words. What I said was that it ought to be made quite clear to the public that this is not a form of treatment for the disease, typhoid, but a prophylaxis—that is, a preventive measure—and I would suggest that you keep off the treatment side of the question altogether.

The CHAIRMAN.—That is an undetermined thing. It has been experimented with; I think they have experimented with it in cases of typhoid in the hospital here and elsewhere.

Prof. STARKEY.—Yes.

Hon. Mr. MURPHY.—You claim benefits from the same experimentation?

The CHAIRMAN.—Yes, in the early stages of the disease we have found that it lessens complications, although it does not abort, or does not shorten the duration of the disease at all.

Hon. Mr. MURPHY.—In how many cases have you tried it in that way?

The CHAIRMAN.—I could not tell you. We have tried it in Lethbridge in perhaps three or four cases, but it has been tried generally all over; Green and King up at Cranbrook have tried it that way, and in fact nearly all the surgeons out there have tried it more or less. I have not all their reports; I have their report as to the number they vaccinated, and the number of people that have had typhoid that were vaccinated, and everything of that kind; I have all those reports in, but this is just a thing that we have been doing amongst ourselves to see if we could derive any benefit at all from it.

Prof. STARKEY.—I should like to add one other little remark which relates to the practice of this prophylactic treatment—that I do not think the idea ought to be created that this prophylaxis or preventive measure should take the place, in any sense, of prevention of typhoid by good sanitation; that it ought to be looked upon as a supplement. In those places, or under those circumstances, where the disease, typhoid, is rampant or endemic—that is, it is there, and sanitation measures have not done much good—then I think this prophylactic treatment ought to be made compulsory, because there you have a means of stamping out the disease. Where sanitary measures have failed, for some reason or other, you have a means of stamping the disease out; in other words you render the population immune so that the disease cannot spread and propagate itself so to speak.

Dr. SCHAFFNER, M.P.—Is it very expensive?