5077. Have you prepared any statistics on the subject of deaths in hospitals?—Yes; I have prepared some statistics showing the deaths in this Hospital compared with other large hospitals in New Zealand.

5078. Do they relate to medical cases?—To all cases, both medical and surgical. 5079. Where were they compiled from?—From the returns of the Inspector-General from 1886 to 1889. I had only these four years available.

5080. Do you mean the reports of the Inspector-General of Hospitals, or the Registrar-

General?—I have taken the hospital returns.

5081. Have you perfect confidence in the way that the statistics are compiled, or any reason not to be satisfied with the way they are filled in?—I think they are as good as any statistics are,

and are apparently reliable.

5082. We have been told that some cases appear several times over, and under different diseases?—If that occurs, it does not go so far as to vitiate the returns. For the four years that I have been dealing with, I find that the average death-rate for all the hospitals in the colony was—1886, 8.5 per cent.; 1887, 8.5 per cent.; 1888, 8.23 per cent.; 1889, 8.01 per cent. For the same four years the average death-rate in the hospitals of the four large centres was-Auckland, 9.6 per cent.; Christchurch, 8·38 per cent.; Wellington, 7·87 per cent.; Dunedin, 9·44 per cent.
5083. That is the death-rate for all cases?—Yes. I next endeavoured to ascertain in what

class the greatest number of deaths occurred in one centre.

5084. In any one hospital?—Yes. I found that in the Dunedin Hospital there was a very large death-rate under the heading of Class IV.—constitutional diseases—and that in that class the deaths were mainly due to phthisis and cancer. I have worked the percentages out, excluding Class IV.

5085. I should like to have the percentages of all the groups, from 1 to 8 inclusive. [Witness read and handed in list.] You withdraw group 4?—Yes. That is the constitutional diseases group, and includes phthisis. I find that for the four years already named the average deaths were: Dunedin, 7.47 per cent.; Christchurch, 7.21 per cent.; Wellington, 6.98 per cent.; Auckland, 7.63 per cent.

5086. Did you deal with the question of venereal diseases?—I did not. I may say that I spent a good deal of time in trying to come to a conclusion on the matter, and that there were a great many puzzling things about them. For instance, in 1887—I am speaking from memory now—I think we had something like twenty-one deaths from cancer in Dunedin, and that of these twentyone cases twelve died in the Hospital. Wellington had twenty deaths, against twenty-one in Dunedin, but in Wellington only three died in the hospital, showing that the incidence of cancer was greater in the population there, while here the Hospital has evidently been made use of by the people for cancer cases.

5087. What was the proportion of scarlet fever cases?—That is the class zymotic diseases—No. 1—which includes scarlet fever. The deaths from zymotic diseases are far higher in Auckland.

The figures are: Auckland, 19.05 per cent.; Dunedin, 4.05 per cent.

5088. I suppose, if you take individual years, the ratio would be found to be heavier?—In 1886, Wellington had a death-rate of 10 per cent.; Auckland of 10.5 per cent.; and Dunedin of 9.8 per

cent.; while that for the whole colony averaged 8.5 per cent.

5089. What is the general result of your statistical investigation? Is it to show that the analysis gives no reliable results, or does it give a decided opinion one way or the other?—The decided result, to my mind, is to show that the Dunedin Hospital is not in an appreciably bad condition, and that the results obtained in the Dunedin Hospital are as good as can be expected under ordinary circumstances.

5090. You say that the Dunedin Hospital results are not bad?—I do.

5091. Not worse than in other hospitals, you mean?—They are not worse than the others in proportion. I do not know if Mulhall's statistics have been referred to, but I may allude to what he says in regard to the hospitals of Ireland. He says that the death-rate in Irish hospitals is 6 per cent.; in England, 8 to  $8\frac{1}{2}$  per cent.; and in Scotland,  $9\frac{1}{2}$  per cent. Here, again, local habits must be considered in regard to these statistics. As a matter of fact the Irish withdraw their friends from hospitals as soon as they find that they are going to die. There is a very strong feeling among the Irish in favour of having their friends at home to die.

5092. Mr. White.] But Mulhall points that out?—I think not; he simply gives the figures. I should like to mention another thing which makes our figures more unsatisfactory than the Home ones. In all the London hospitals there is a strict rule against admitting cancer or phthisis cases, or incurable cases generally, and there is also in the majority of the London hospitals what is

known as the two months' rule, which is pretty strictly adhered to.
5093. There is a two months' rule in the Dunedin Hospital?—Which is not adhered to. I was saying, the hospitals at Home will not take in incurable cases nor cases of phthisis. Of late years, within the last twenty or thirty years, special institutions have been established simply to meet phthisis cases. A great many of the cases which come into the Dunedin Hospital would go to the poorhouses and infirmaries at Home. So that, taking all these things into consideration, I have come to the conclusion that our statistics compare very favourably with those of the Home hospitals. All over the colony this class of cases has necessarily to go into a general hospital, because we have practically no poorhouse or special infirmary.

5094. There is another element, is there not, which you might have taken into account—the chronic cases, which are not taken now into the Dunedin Hospital but are sent to the Benevolent

 ${\bf Institution\,?}$ 

5095. The Chairman. Since when was that?—Since 1886, when the Trustees took the Hospital in hand. 5096. That would be before the period to which your statistics apply, would it not?-1886