77. What do you consider a minimum distance?—First of all, such pits should be on the lower side, if any, of the buildings, and they should be at least 50 yards away.

78. You have not, of your own knowledge, known that there are insanitary conditions arising from these pits, but on principle you disapprove of them for a permanent camp?—Yes, that is so.

79. But for a tent camp or for field operations?—I think it would be quite satisfactory; but even then the pits should be on the lower side of the buildings, and not less than 50 yards

80. You said that you were of opinion that it was desirable to provide one and a half times the height of the buildings (mean height) between the buildings in order to give the air-space and sun-space. We have been told that it is customary at night-time to place two tins for latrine purposes between these hutments, at each end, so that each fifty men have two tins: did you consider that at all when fixing the distance between the huts?—No; we were not aware that it was proposed to use those tins.

81. There must certainly be a certain amount of splashing from these tins—an ordinary kerosene-tin or an oil-drum—and, seeing that these tins have to be removed in the morning and the places disinfected, do you consider that a desirable arrangement?—I think that in any

such places the surface of the ground should be made impervious to moisture.

82. They should have concrete bases, and provision made for draining the moisture away — More branch drains should be provided for those purposes into the drainage system which was provided; but at the time we had no information that such tins were to be used, or what was to be done in that respect.

- 83. The Chairman.] Did you not consider that with a hundred men in a hut night necessities would arise with some of them, or did you think they would have to go to the ordinary latrine?—I might say that there were a lot of things which might have arisen but which I did not consider were referred to us, and I think myself that we went out and did very much more than was asked of us.
- 84. Mr. Ferguson.] It was purely voluntary work?—Exactly; and that which we did beyond what was referred to us we thought necessary, because it came particularly under our notice without anybody having directed attention to it. The question of latrines was under consideration at one time. I remember, when visiting the camp, that I suggested that there should be latrines on the opposite side.
 - 85. You are quite satisfied with the present arrangement of the latrines?—No, hardly.
 - 86. The Chairman.] You do not know the present arrangement?—I have a pretty good idea.
- 87. Mr. Ferguson. As a latrine you are satisfied with it?—Where you have no means for the proper disposal of the sewage—and except you waited a considerable time to adopt proper means—I consider that the earth-pan is the proper means to adopt. I felt that some latrines should have been provided on the opposite side of the camp. I was informed at the time that the military authorities had considered the question of latrines, and that the position in which they were placed was decided upon because of the fact that the earts which removed the nightsoil were not required to enter the camp-grounds. They would deal with it from the road more satisfactorily. I do not think that the concentration in one particular spot is altogether satisfactory.
- 88. The Chairman.] In dealing with the buildings and the sanitation, you would not have to deal with it on the same footing as if it were a permanent town: I take it you would have some regard to the semi-temporary character of the camp?—It is very difficult to get exact information as to how it should be considered. So far as I was concerned, I came to the conclusion that it was neither really temporary nor yet permanent, but that it was necessary to take steps to prevent any possible pollution of the air in which the men were living.

 89. Mr. Ferguson.] Do you think there was too great a density of the population in the

89. Mr. Ferguson. Do you think there was too great a density of the population in the camp?—I cannot conceive that to be the case in view of the large open space in which the camp was situated.

90. And in view of the large open area, and the nature of the soil, and the winds which sweep across that plain, you are of opinion that it should be a sanitary camp?—I can see no reason why the camp should not be sanitary. I would like to make it clear that the question of surface drainage was a matter which I did not consider was referred to us, and we also had the impression that the military people themselves would make all the roads about the hutments.

91. And, as a matter of fact, you know that they employed Captain Jickell to lay out those

roads?—I only know that from the newspapers.

92. Mr. Gray.] You have had a certain amount of military experience in the Territorials?—I have had about seventeen years' military experience, both in Australia and in New Zealand.

93. With experience in camps?—Yes, and barracks.

- 94. And were you able to apply your knowledge of these matters in considering the questions of hutments and drainage at Treutham?—Yes, I endeavoured to do so.
- 95. In your opinion was the system of drainage that you recommended satisfactory for that camp !—Thoroughly satisfactory as far as polluted water affecting the sanitation of the camp is concerned, and the health of the men.
- 96. These were matters which you had before you when planning this drainage system?—Yes. 97. Have you any reason to suppose that insanitary conditions have arisen in that camp by reason of the lack of drainage of polluted water?—No, I am not aware of any. The only thing I did hear was that the drain had become blocked, and I told them to open out a larger area, which would be necessary.

98. You have naturally given special consideration to the drainage by reason of your position?—Yes.