

84. Is he regarded as one of the latest scientific and medical authorities?—The latest authorities are based upon what Surgeon-Major Duncan wrote. His book is the standard work upon which modern works are built.

85. *The Chairman.*] I understand that all modern works are based upon these experimental manoeuvres?—Yes.

86. *Mr. Gray.*] So that one ought to refer to the modern book rather than to those that existed before the manoeuvres?—Quite so; the experimental camps bore out all Duncan's assertions, and therefore confirmed what he had written.

87. Were not a good deal of the medical directions altered in consequence of what was learned as the experience of the Boer War?—No; the Boer War merely pointed out that things were wrong, and how they were wrong.

88. Did not the experience gained in the Boer War tend largely to correct a great many of Surgeon-Major Duncan's propositions?—No; it confirmed what he had said. The great point was that the mistake they had made was in trusting too much to civilian assistance.

89. You spoke of the hutments: you have had no experience of them?—Not of military hutments, but I have lived in huts many times.

90. I think you only examined the sample hut here?—Yes.

91. There were some alterations carried out in the later huts built?—Yes.

92. You referred to the deaths of the Canadians after they went into hutments: do you know whether their hutments were of the same character as these?—I do not know. I have no idea of what they would be like. But at the time of the great American War, when the troops went into hutments for winter quarters, though they had been practically healthy in camp, they were decimated with pneumonia.

93. Do you suggest that the hutments are altogether wrong?—No; they can be healthy. Those Docker huts are good, and those built on pivots so as to get the sun all the time.

94. *The Chairman.*] Your model hutment is shown on your diagram?—That was an idea elaborating what has been written of them.

95. *Mr. Gray.*] In regard to these hutments I take it that the Board had the idea of increasing the ventilation as well as the accommodation for the men?—Colonel Firth says, on page 132, "What are known as Docker huts have been favourably reported on, and much used both in our own and the German Army. They are made of wooden or iron frames, covered with a kind of felt, and lined with canvas. They are very portable, and the fastenings are so arranged that they can be put together in a very short time. These huts are well ventilated by windows, cross-louvres, and ridge ventilators; if so desired, they can be readily warmed. In addition to these there are a variety of other huts differing from each other only in the nature of the material of which they are constructed. In general design and type they are similar. As a rule huts should not be made to accommodate more than twenty-four men."

96. You are unable to speak from your own experience of them?—No.

97. You criticized the incinerators which Colonel Purdy established: do you suggest that they cannot do good work?—It is well known that they cannot.

98. You have had no experience of these incinerators?—I have tried them.

99. These incinerators in this camp?—No.

100. The same sort of incinerator?—Yes, and it is laid down in the experiments that have been made. These incinerators would give you a great deal of ash, and the less ash you have the better, because it shows that there has been more consumption.

101. You have had no experience of these incinerators in this camp?—Not in this camp.

102. And if the Commission is told, as it has been, that these incinerators did good work, you still maintain that they cannot do it?—I do not say that, but that the other incinerators will do better.

103. But if it is stated that these incinerators answered all requirements?—I saw myself how the tins came out of them: they were not consumed.

104. But they would be harmless?—But it would show the degree of combustion.

105. Some tins were not consumed?—The tins that came out of the Trentham incinerators showed that the combustion was not as great as in the incinerators of which I speak. [Sketch showing incinerators put in.]

106. *The Chairman.*] The incinerators in the book for a permanent camp are made with an iron frame?—Yes, sir. Copies of these from my drawings are posted in every orderly-room throughout Otago, supplied by myself. We used our capitation one year for the purpose of providing these copies. In consequence of this there has been very little sickness in any camps in Otago since they have been put up.

107. *Mr. Gray.*] Do you know anything of the training-camp at Colchester?—No.

108. Would you be surprised to hear that the hutments there have been built to accommodate up to sixty men?—I should not be surprised. It depends entirely upon the way in which they are built.

109. And I suppose you could build a hut to accommodate double that number?—Yes.

110. So that there is not much force in your contention that they should not contain more than twenty-four men?—I should like to know the principle upon which these to accommodate sixty men were built.

111. But there is nothing impracticable in a hut to accommodate more than twenty-four men?—They would not be hutments then, but would be more on the lines of barracks, and would probably be divided into sections for, say, twenty-four men, and so on. Colchester is one of the principal military centres of England. I should like to know the context.

112. As to latrines, you objected to the absence of certain conveniences for the men, such as earth and paper?—Yes.