

82. *Mr. Skerrett.*] You see no reason why regular spacing of tents should not have been adopted at Trentham?—No, by having all small camps scattered all over the ground, leaving plenty of room.

83. Colonel Purdy has suggested that the modern practice in standing camps is not to shift the tents: what have you to say with reference to that?—I do not agree that it is correct.

84. *The Chairman.*] Did you see the statement in the Field Army Service Manual, quoted by Colonel Purdy, at page 72?—Yes. Instructions are given in all books recommended by the authorities that tents should be struck if possible every four days, weather permitting. It is a very, very old regulation. If you are in a standing camp you put it back, of course, on the same ground until the period has elapsed in which that camp is permitted to be permanent, and then you shift the whole camp, or shift each tent either every fortnight or three weeks on to the ground in front of it. [Witness explained by reference to diagram of tents.]

85. *Mr. Skerrett.*] Apparently the military authorities at Trentham have acted upon the principle that it was not necessary to remove the tents from their existing site during the whole period of the camp?—Yes, that is so. It is obvious.

86. Is it a right or wrong thing to do?—It is very wrong.

87. I want you to tell the Commission why it is wrong?—Because the ground on which the men had been sleeping is poisoned by the emanations from their breath and their skin.

88. *Mr. Gray.*] That is, floored tents?—There were no floored tents. They were sleeping on the bare ground when I saw them in January.

89. *Mr. Skerrett.*] When did they have the floors?—Quite recently.

90. In the Manual of Elementary Military Hygiene, 1912, page 66, it says, "Tent-flies are to be looped up the first thing every morning, in wet weather on the leeward side only, and bedding exposed to the sun and air whenever possible, as these are the most useful disinfectants. In a standing camp tents will be struck periodically, and the ground underneath well swept and left exposed for some hours at least, the tents being eventually replaced on their former sites. Tents should never be pitched for occupation in the intervals. Tent-doors should generally face away from the prevailing wind; in mounted units they should face the horse-lines"?—That has been the regular constant practice for years and years. It says the tents should never be pitched for occupation in the interval. The tent-door should face away from the prevailing wind. That book is simply an elementary reference to what is laid down in the advanced manual. The language is almost identical.

91. *The Chairman.*] There is nothing there about shifting the site of the tents or shifting the occupied area?—But that is an elementary book.

92. Evidently that does not go far enough for you?—No.

93. *Mr. Skerrett.*] Do you regard it as of importance that the tents of the camp should have been shifted from time to time?—Yes, most important.

94. In your opinion has the neglect of that precaution conduced to the sickness in the camp?—It has, in my opinion.

95. You see there is a very serious difference between Colonel Purdy and the military authorities and yourself upon this point. Colonel Purdy asserts that the recent practice is to leave the tents in standing camps on the same site, merely striking them from time to time. You assert that the recognized and proper hygienic practice is either to shift the individual tents from time to time or to shift the camp: is that so or not?—Yes.

96. It is confidently asserted that you are wrong, and that you are advocating a practice that is out of date—that it is the practice not to shift tents?—It is quite contrary to common-sense and military practice. You might as well ask a man to sleep in the same dirty sheets year in and year out.

97. What is the authority for the military practice?—Surgeon-Major Duncan, on "The Prevention of Disease in Tropical and Sub-tropical Campaigns." It is the work that gained the Parkes' Prize in 1886, and it says (Chapter vii, pages 58 and 60), "Tents, to begin with, are but little pervious to air, and when wet nearly impervious. The organic matter given off from the lungs, as is well known, does not tend to diffuse itself, as do the gases given off from the lungs; hence the mere opening of the doors of the tent does not act so beneficially as regards the organic matter as it does with respect to the carbonic acid. The organic matter tends to attach itself to the walls of the tents and to their contents. . . . Under every precaution organic matters are thrown out in camp, and by intercourse pressed into the soil, and thus gradually the earth becomes infected. And in hot countries, under the heat and rainfall, the process becomes much more acute, especially where the soil itself does not possess any disinfecting-power. Sandy soils, for instance, act prejudicially both by not disinfecting these organic matters and by their drying-power, so that when clouds of sand are raised by the wind these clouds contain in suspension organic matters. It is thus easily seen how both the alimentary and respiratory passages can admit poisonous materials into the system." That is a very sandy soil at Trentham, and in hot weather it conveys the germs from the tents.

98. We were told by Colonel Purdy that the tents were struck at least once in seven or once in ten days. In your opinion was that practice sufficient?—It is not enough if the weather is fine: it should be done at least once every four days. My information is that they were not struck anything like that—more like once a month. I asked the officer of the day specifically about it. I said, "How often have you seen the tents struck?" and he replied, "I think I have seen them struck twice since I have been here." I said, "How long have you been in camp?" and he said, "Two months." I do not know the officer's name, but that was in May: that was when the sample hutments were open for inspection.

99. Is there anything in the history of the use of Trentham which ought to have required the adoption of the recognized principles for changing tents and striking tents? What had the