

twice in the hour, which, even if the incoming air be cold, is not inconsistent with comfort, provided it be discharged or brought into the room-space well above the heads of the occupants. This space of 600 cubic feet is precisely what the soldier gets in his barrack-room, and if the air be changed one-and-two-third times hourly a reasonable degree of ventilation is secured." The whole paragraph was not quoted by Dr. Frengley, who referred to the air-inlets at the rate of 1 square inch to 60 ft. Colonel Firth provides a good deal more than that. He says, "The ordinary appliances in barracks for the inlet of fresh air and the discharge of foul air are doors, windows, fireplaces, and louvred ventilators communicating by means of perforated bricks with the outside through the external walls. It is incumbent upon all concerned to see that these are used intelligently and effectually. The fire, when burning, is mainly an outlet for foul air, but most barrack-rooms have what is called a ventilating-grate, by which air is not only extracted by the chimney, but air coming in from outside and passing round the back of the grate is first warmed and then discharged into the room by a grating above the fireplace."

142. There is no fireplace in the hutments out at Trentham?—No; they could be improvised with an Aurora stove and a little piping.

143. And help the ventilation too?—Yes, immensely.

144. *Mr. Skerrett.*] How do you apply your observations as a criticism of these hutments?—They are overventilated.

145. You are of opinion that these hutments are draughty hutments?—Yes.

146. Interfering with the comfort of the men without the commensurate advantage?—Yes. I think Dr. Frengley deserves very great credit for the success of his buildings for the treatment of consumptive cases, but I would submit that there is a great deal of difference in the building of a hospital for the treatment of people suffering from an otherwise incurable disease. When we are ill we do not mind taking nasty medicine: we might not mind excessive doses of fresh air; but there is no occasion for us to be constantly living in an atmosphere of that kind. We can live perfectly well without that, and there is no occasion to provide that excessive amount of air in a hutment. It does not add to the men's comfort. What they require is what they will live comfortably and healthily in and prevent their getting ill.

147. Have you worked out the allowance of floor-space and air-space in those hutments?—The air-space and floor-space is laid down for hutments—50 square feet of floor-space and 500 cubic feet of air-space for hutments. The reason of there being a little less than in barracks is because of the smaller number of men under one roof. In a barracks you have a hundred men, whereas in a hutment you have twenty-four, and in a hut twelve. If scattered about they are more easily ventilated, and they can do with less air-space and less floor-space.

148. What does the actual floor-space in the Trentham hutments work out at?—At about 300 cubic feet of air-space and about 30 ft. of floor-space—just about half of what there ought to be.

149. What have you to say with regard to the lodging of a hundred men in a hutment divided, as you know, by a division?—I think it is quite wrong.

150. Why?—Because all modern barracks provide for breaking the men up into small sections of twelve to twenty-four men in each room or ward. That is for the purposes of discipline and management. It is much easier to isolate a dozen men than to isolate a hundred in case of a very serious illness breaking out, and if there are a hundred men in a hutment like that it is only reasonable to suppose that if overcrowded any disease would spread rapidly through them.

151. *The Chairman.*] Does not the central division practically make it two huts?—No, sir. I understand it is open at the top.

152. The angle gable is open?—Yes.

153. *Dr. Frengley.*] That is in the sample hut, but we decided to close that up?—It would mean putting two huts together without the interval.

154. *The Chairman.*] You have placed the hutments in line and not in echelon?—Those are conveniently shown for a barrack for military reasons. If I were putting hutments up in a place like that I should certainly put them in echelon. The way they are put at Trentham is absolutely wrong. The block system where applied to hospitals or anything else is a bad system.

155. What is the reason of the block system being bad?—It is bad in so many ways: it interferes with the circulation of air between the buildings. The aspect of the hutments at Trentham is also wrong. They are facing east and west, when they should be facing north and south to get the sun down between the intervals more, and to get the sun into the windows. The northerly hutments keep the sun out of the next one, or a great portion of it, and being on the block system they are too close together. The northerly wind on one would blow the contents across into the next one, so that you would not get that amount of fresh air that you otherwise would get if they were in echelon.

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SATURDAY, 24TH JULY, 1915.

DAVID ROBERTSON sworn and examined. (No. 26.)

1. *Mr. Skerrett.*] Where do you reside, Mr. Robertson?—Lower Hutt.
2. And what are you?—A school-teacher.
3. At what school?—Petone West.
4. In March last were you concerned with others in raising a subscription for the benefit of the medical side of the Trentham Camp?—Yes, sir.
5. Just tell us what you did?—We raised about £10 by means of a social.
6. For what purpose?—For the purpose of presenting a bed to the Trentham base hospital.