

7. *Dr. Martin.*] The walls are made of uralite?—Yes; that is a form of asbestos. We decided that asbestos would be useless in a camp; because a man could put his arm through it; it would be broken very easily.

8. *Mr. Ferguson.*] You could not have got a sufficient quantity?—That is so; moreover, a large amount of it is made in Germany. So that I hold emphatically that these hutments have been designed on the most modern lines; and I would like the Commission to allow me to mention that Dr. Makgill, when consulting with the authorities at Home, found that the Local Governing Board then was discussing the making of shelters for consumptives similar to those which New Zealand had erected something like ten years before. They were considering the same plans as we had already worked upon. I deny that these hutments are draughty. I admit they are cold on a winter's night, but you should provide the man then with more blankets; keep the body warm, but do not do it by making the air stifling. Reference has been made to the cubic space in these hutments. Roughly speaking, they provide 300 cubic feet per man, and it has been said that a departure has here been made from the principles laid down in military hygiene books. The authority selected by me all along has been Lieut.-Colonel Firth, Royal Army Service Corps. He is also the standard authority on general hygiene. He is Professor of Military Hygiene in the Army, and Lecturer on Camp Sanitation. He lays it down that there should be provided 600 cubic feet for a barrack and 57 square feet. For huts he lays it down as 500 cubic feet and 50 square feet. But, sir, my point is this: that the inlet and outlet of air laid down in these text-books is 1 square inch per 60 cubic feet. Worked out on that principle 300 square inches would have done for these hutments. It would have been practically useless to provide for the admission of air through about 300 square inches, and the provision that has been made in these hutments allows for nearer 5,000 square inches, which in this climate is much more reasonable. All rules and regulations as to cubic space, in England or elsewhere, are purely arbitrary. It is laid down that a soldier in barracks requires 600 cubic feet, and with these small inlets it is laid down that a soldier in a hutment requires 500 cubic feet. If that poor fellow happens to leave the Army and goes to an artisan's dwelling the Local Governing Board has laid it down that 300 ft. is enough for him. If he drops lower down in the scale of life and has to go on a canal-boat, the same Board has decided that 60 cubic feet is enough. These figures are not scientifically assigned. Then, if he happens to get ill and has to go into a hospital with bronchitis he must have 1,000 ft. If he requires a surgical operation he must have 1,500 ft., and for an infectious trouble he must have 2,000 ft. In the Infectious Diseases Hospital, Wellington, of which I had the initial planning, we there reduced the space from nose to nose of the patients from 12 ft. to 9 ft., 12 ft. being the Local Governing Board's standard (England). We decided upon that course because we were providing much more ventilation current through the ward than is provided for in the English plans, and in that case, though the air-space is very much less than is laid down by the Local Governing Board of England, there is no one but has praised our hospital here as being one of the most up-to-date and best-arranged infectious-diseases hospitals that they have seen. A reduced air-space is not a drawback provided you get more air. There is a big difference between the available air and air-space. Take a man in a paddock—his air-space is infinite. If you put a box round him 10 ft. by 10 ft. it is reduced to 1,000 cubic feet; but if that box has an opening in the four sides of 4 in., it is wrong to say that that man has only an air-space of 1,000 cubic feet. In regard to the criticism of these hutments, it cannot be considered a fair thing to say that that man has only 300 ft. of available air. I say his actual air-space is less, but the amount of air given to him is a long way ahead of the requirements for the English barracks. I am a distinct believer in plenty of air. It would be monstrous to have an opening of 1 square inch for 60 ft.

9. *Mr. Ferguson.*] And I presume that those are for permanent hutments such as they have at Aldershot?—Barracks.

10. They have practically become barracks: therefore it is necessary to have a larger capacity than for hutments used for temporary purposes?—That is so. I have always regarded these hutments as of a partially permanent character, and my colleagues on the Board have referred to them as being of a partially permanent character. We never at any time regarded them as permanent barracks. Now, sir, these hutments are designed for fifty men as an absolute maximum.

11. By the military?—They were put before us by the military to hold fifty men, and in view of the ample air-space I, as a member of the Board, decided that they would be suitable for fifty healthy men, but absolutely no more. It is a big number—fifty—and my reasons for fixing the maximum at that were (1) the fact that every man who goes into camp is medically examined first; (2) that generally our soldiers who have gone away are a fine physical type of man; and (3) it is an axiom in the Army that every officer ought to know everything about his men, and that should hold good for the Medical Officers also. He ought to be cognisant of each man's physical condition, and with adequate inspection he ought to have been able to pick out any man in that hut who had a temperature or was out of condition. By that means you could have continually fifty men in those huts, but absolutely no more. Once a man becomes infected, however, then I do not say that fifty men should be put into those huts, particularly when there are grave infectious diseases about. And that is why I say it was wrong to put more than fifty men into a half-hut.

12. Has that been done?—On the 29th June I inspected the huts at night-time. It was a muggy, calm night. There was no wind. I wished to satisfy myself if there was too much air. Could the opening be said to be too small for such conditions as that? Because these huts have to serve for windy weather and calm weather, summer and winter. I found fifty-five men in one hut. I was never consulted as to whether more than fifty men could be put into one of those huts. I always regarded fifty as the maximum. I was then informed by the Medical Officers