

Calcutta, but nevertheless it is actually quite able to support life without discomfort. With regard to these analyses I hold that the very fact that the temperature was low shows that we made arrangements to keep down the temperature so that there can be no fear that the conditions would become as dangerous as in a barrack-room, where the temperature is usually very much higher. I desire to quote from Price's Handbook on Sanitation: "Until very recently the CO_2 in excess of 3 or 4 volumes per 10,000 was regarded as the only reliable index of air-impurity. Pettenkoffer, De Chaumont, and others have taught that we must regard the air in a room in which human beings are present as impure when CO_2 exceeds 6 per 10,000 in volume. This has been regarded as a valuable index of air-impurity, and this test is still used to determine the character of the air in houses, schools, &c. As has been noted, large quantities of CO_2 may be breathed with comparative impunity when they are not due to the products of respiration and an increase of temperature, and the presence of organic emanations from overcrowding are of much more importance in the determination of the purity of air than the mere quantity of CO_2 . It is very important to make tests of the amount of dust and the number and kind of bacteria found in the dust of the air of rooms, and it is imperative when determining the character of the impurities of the air in a room to measure all the various factors, such as the increase of CO_2 , the increase of relative humidity, the temperature, and the amount and character of the dust and bacteria." And again: "The decrease in the amount of oxygen is not very serious and has very little effect upon the quality of the air. The increase of carbonic acid is usually very slight, and very seldom exceeds 20 or 25 per 10,000 volumes. The increase of CO_2 was formerly thought to be the main cause of the bad effects of vitiated air. It is doubtful, however, whether the ordinary increase of CO_2 in the air is of much consequence, as CO_2 becomes toxic only when its amount in the air is not less than 10 per cent. Increase of moisture adds to the relative humidity of the air, which causes discomfort when it exceeds 80 or 85 degrees. Serious discomfort is also caused by the increase in temperature in overcrowded rooms." I wish to make this point: that though CO_2 is apparently about the recognized percentage, at the same time the temperature being low, I hold that it is by no means injurious, even on a very calm night, to breathe the atmosphere of those huts. And I think it was hardly what I would call a fair test to make the analyses when it was known that the windows on the lee side were not being used. The windows were shut. Nor was it fair to contrast the hut-air with the tent-air when the huts had about thirty in them and the tent only three. It would have been fairer to have taken it when the tent had eight men in it. This point has been made, that so long as the temperature is kept down the inhabitants can breathe without injury to themselves a good deal more CO_2 than if the temperature is raised.

12. Then you may have a different temperature in winter to that in summer?—Yes; we require much more air in the summer than in the winter.

13. You were a member of the Board which reported upon the prudence or otherwise of the troops being returned to Trentham?—Yes, sir.

14. You have heard the report read recently?—Yes, sir.

15. And you know the history of the camp since that report was drawn up: do you desire to qualify or add to your report in any way?—No, sir.

16. In view of all that has been brought out recently?—No, sir.

17. You still adhere to the opinion expressed in the report?—Yes, sir.

18. Subject, of course, to the carrying-out of those conditions laid down by the Board?—Yes, sir.

The Chairman: I may say that we sent a telegram to Dr. Champtaloup, of Dunedin, who was also a member of the Board, as follows: "Trentham Camp: Referring to experts' conjoint report, in which you concurred, and having regard to history since, particularly in view of your subsequent experience cerebro-spinal meningitis or carriers, do you still adhere to the report? We ask this of you as if you were called as a witness, as we desire to report on the fitness of camp for return of men for occupation." His reply to telegram is as follows: "Still adhere to report of Medical Board on which I sat *re* Trentham site, provided all conditions laid down by Board are given effect to."

TELEGRAM TO DR. CHAMPTALOUP.

Dunedin, 10th August, 1915.

TRENTHAM Camp: Referring to experts' conjoint report, in which you concurred, and having regard to history since, particularly in view of your subsequent experience cerebro-spinal meningitis or carriers, do you still adhere to the report? We ask this of you as if you were called as a witness, as we desire to report on the fitness of camp for return of men for occupation.

J. H. HOSKING, Chairman, Trentham Commission.

REPLY FROM DR. CHAMPTALOUP.

Mr. Justice Hosking, Wellington.

STILL adhere to report of Medical Board on which I sat *re* Trentham site, provided all conditions laid down by Board are given effect to.

CHAMPTALOUP.