

were saturated with moisture, and provision made for preventing the sulphurous acid escaping, a very prolonged action would be necessary to do any practical good.

6698. What about the walls?—The application which was made to the walls is said to have been a mixture of whiting, size, and ultramarine. I examined specimens of the coating on the wall, and found that it turned quite black in the flame of a spirit-lamp, and gave out a strong smell of burnt animal matter. It would certainly not be a disinfectant, and would tend rather to act as a cultivation-medium for microbes. No doubt the free circulation of fresh air through a ward for a prolonged period has an excellent effect, but it certainly seems an expensive method, and should not be necessary unless in exceptional circumstances.

6699. Do you think that any amount of the most perfect management by nurses could render the present system of ventilating the Hospital efficient?—No, certainly not; there are not the means there. I have heard a statement with regard to the inlets and outlets provided, and the estimation of the currents at such-and-such rates, and that, therefore, there must be such-and-such an inflow, and such-and-such an outflow; but that estimate makes no allowance for the fact that the ventilating openings are placed for the most part on the same side of the ward, and that there must therefore be local streams flowing between one opening and another which do not affect the general atmosphere of the ward. In the Wellington Hospital there were Tobin's tubes; and, in order to increase the ventilation, openings were made near the ceiling-level, above the Tobin tubes. Instead of producing the desired effect, I found that the upper openings diminished rather than increased the ventilation. The air came in at the Tobin tubes, and a considerable proportion of it passed directly out at the upper openings, or else the air passed in at the upper openings and flowed down through the Tobin tubes. Such results were to be expected from the violation of a primary rule in ventilation, that outlets should be situated at a distance from inlets.

6700. Then you cannot agree with Dr. Colquhoun, that intelligent management by the nurses would render the existing system of ventilation effective?—I cannot. A very important point that I wish to refer to is that there is no adequate means of providing warmth, and that without warmth it is absolutely impossible, in a climate like this, to ventilate a ward properly in winter.

6701. Did you read in the paper of Sir James Hector's experiences in the Hospital the other morning, when he paid a surprise visit?—I did.

6702. If a proper system of ventilation had been in existence, could such a state of affairs as Sir J. Hector found that morning have been possible?—I think it might. It might arise from carelessness, which may happen in the best hospital; in fact, I have seen it in good hospitals.

6703. But with proper supervision might we expect it to happen?—If there were proper supervision it could not happen except by accident. If the ventilation were properly looked after, it could not happen in any well-arranged ward.

6704. We find in this particular case that the reason suggested was that the windows could not be kept open because the wind was blowing too strong?—That is likely enough. I have seen the same thing in Wellington, where there was no adequate means of warming the wards.

6705. We have also heard that the closet was not flushed: that is a possible result, is it not, of the style of closet used here?—Most of the closets appear to be of a good type. A patient may have neglected to flush the closet; but that difficulty could be easily obviated by the use of automatic flushing-gear. With regard to the question of warming and ventilation, I found in Wellington that it was impossible on cold days in winter to keep the air of a ward in a proper state of purity unless the temperature was allowed to fall at times as low as 40° Fahr.

6706. We have also been told by another member of the staff that the Dunedin Hospital is one of the healthiest hospitals in the world. Do you think that such a statement is a reasonable one?—I cannot account for the statement that the Hospital is so healthy, under the conditions that I have seen. I certainly cannot understand it.

6707. This is the gentleman who has invariably used the Hospital as a sanatorium, and says that it never failed him when he called on it for that purpose. We have been told by another medical gentleman that, although admitting the defects which have been pointed out by you, he thinks the Dunedin Hospital compares favourably with the average modern hospital. Is that correct or not?—Upon what basis does he compare the sanitary conditions of hospitals?

6708. We do not know. Is that opinion correct?—It certainly is not my experience.

6709. I want you to tell me whether you consider that there is any exaggeration—it has been called “a gross exaggeration”—in the statement which I made in my opening of this case, “that radical changes are essential in order to give the patients in this Hospital a fair chance of recovery”?—I do not think there is any exaggeration in that. I think it is, perhaps, scarcely a fair way of putting the question, however. I should say that it does not give them the conditions for recovery that they should have in a hospital.

6710. Would you say that radical changes are necessary to give the patients the chance of recovery which they ought to have in a hospital?—Yes, I should certainly say that.

6711. We have been told that it is a fact that all modern knowledge goes to show that the state of affairs which exists in the Dunedin Hospital ought not to exist; yet that the experience of the medical gentleman to whom I have just referred in the Dunedin Hospital goes to show that it does not make much difference. Now I would ask you whether, other things being equal, you can suppose such a state of affairs, and do you think that, if it existed, the death-rate or the average stay in the Dunedin Hospital could, under any circumstances, be expected to compare favourably with a satisfactory hospital. We will take the death-rate first?—The death-rate may apparently compare favourably, but it is not reliable, because there may be other factors which would tend to render the Hospital death-rate here low.

6712. But I said, supposing other things to be equal. I will put it to you in this way: suppose an equality of circumstances in this and other places, do you think that either the death-rate, the average stay of patients, the surgical results, or the results obtained by surgeons here, could possibly be expected to compare favourably with the results obtained in a satisfactory modern hospital?