

important to note that serious leakages existed in connection with the drainage-arrangements of most of the other wards, but no such obvious ill results followed, owing, no doubt, to the fact that all the closets, with the one exception before mentioned, were more or less perfectly disconnected from the wards. The main drain was locked up by unventilated traps, and, owing to the fall being slight and flushing-arrangements inadequate, sand and other *débris* had almost completely filled up the traps, leaving less than 2in. visible. Behind these obstructions large accumulations of paper and excreta gathered. The ward drains entered directly into the main drains, without traps or disconnections.

3115. *Mr. Solomon.*] You have explained to us how an unsatisfactory state of affairs at Seacliff Asylum was attended by an outbreak of erysipelas of a terrible character: do you consider it would be surprising, in the state of affairs which you have yourself seen at the Dunedin Hospital, that it should be attended from time to time by erysipelas?—No, I do not.

3116. *The Chairman.*] Would you expect that there should be erysipelas?—I will not say that I should expect it, but there exists a state of affairs which would be liable to lead to erysipelas—which would, in fact, increase the risks. Vitiating air and wet floors both tend in the same direction.

3117. *Mr. Solomon.*] Is it surprising, with the conditions which exist at the Hospital, that surgeons should from time to time find comparatively simple operations attended with suppurations which they could not account for?—I think it is not surprising.

3118. Do you think that the persons operated on for severe abdominal section, or for gynecological operations, such as Tait's or Emmet's, &c., run an increased risk of septic poisoning from the condition of affairs which exists in the Dunedin Hospital?—Certainly they do.

3119. Suppose that you were engaged in Dunedin Hospital as a surgeon, and were called on at any time to exercise a discretion as to whether or not you should perform an operation on a patient, such operation not being an absolute necessity in order to save the patient's life: could you, in exercising that discretion, honestly exclude from your mind the risk of septic poisoning that exists owing to the unhealthy state of the Hospital?—Certainly not. It would be a foremost consideration—the first consideration.

3120. Do you think that an operator, in a serious case of abdominal section, can operate in the Dunedin Hospital with the confidence which he ought to have in a fairly good hospital?—Certainly not. By the way, may I mention now a point in connection with the ventilation of ward 7 which struck me as being very extraordinary, and which is certainly a serious risk: there is a man-hole in the ceiling more than 2 square feet in area; this is covered by a movable grating, and has been regarded as a means of ventilation, being supposed to serve either as an inlet or an outlet for air, according to circumstances. When I examined it there was no definite current either way, but it must evidently serve as a principal inlet when a fire is burning. On getting through this man-hole into the attic I found immediately beside it an open wooden trough-gutter running through from one side of the attic to the other. The mud in this was more than an inch deep, consisting partly, no doubt, of the excreta of birds washed from the roof. The aperture of entrance to this gutter was close to the man-hole. How long this gutter has been there, and what object it serves, I cannot say, but I suppose it carries water from the central roof to the outside gutter.

3121. *The Chairman.*] How did the place smell when you got up there?—Close.

3122. *Mr. Solomon.*] How do you think our mortality rates in New Zealand should compare with those at Home?—I think they should be lower. You mean, in the general community?

3123. No; I mean in the Hospital?—I meant in the community. I do not know about the Hospital.

3124. Other things being equal?—I do not think there is any necessary connection between the general and hospital death-rates. The death-rate of the community should obviously be lower in a young country which is growing and has a smaller proportional infant population than in an older country.

3125. What do you think would be a fair death-rate in a good hospital in this colony? Can you form an opinion?—I cannot without going into the whole of the facts.

3126. Under present circumstances, do you think it possible that the death-rate of the Dunedin Hospital could be satisfactory?—I should say that the conditions which I have seen there tend to make the death-rate unsatisfactory.

3127. *The Chairman.*] You mean that it would tend to increase the death-rate?—Yes.

3128. *Mr. Solomon.*] Does that apply to patients who have to undergo severe operations and who frequently run an increased risk?—Certainly.

3129. Does it follow that the unsatisfactory results should be apparent at once?—Not necessarily.

3130. Could they go on for a long time without being found out?—Certainly; take the case of the Wellington Hospital, the circumstances of which were, it seems to me, parallel with this to a certain extent. So long as the lead pipes remained intact, or did not give way, in specially dangerous situations, no obvious harm resulted from the defective drainage-arrangements; but directly the cement cracked away, and leakage occurred under the children's ward, the evil manifested itself in the severe epidemic of sore throat which I have already described. To illustrate the condition of lead piping which has been in use for many years I may show you these samples of pipes recently taken from Seacliff Asylum. [Sample shown of lead pipe distorted and thinned by hot water and heavy flushes; junction torn away by sinkage of soil-pipe; cracked seams; portions of lead piping gnawed through by rats; unduly light material, 5lb. lead being used where it should have been 8lb.]

3131. *The Chairman.*] Are you aware what the piping at the Hospital is made of?—Yes, of lead. The soil-pipes should be carried up outside the building. The material is too light. I understand it is 5lb. or 6lb. lead, whereas it should be 7lb. or 8lb.; moreover, the method of seaming used