—No, I do not; the average stay might, because the average stay is often low in hospitals which have a large mortality; but with regard to the other points, I do not think so.

6713. Our attention has been drawn to a death-rate of 7 per cent. in 1877, whilst now it is 10 per cent., can you suggest any explanations of that?—I think I can.

6714. What, then, do you suggest has caused the death-rate to be higher here now than it was in 1877?—If those figures are to be taken as correct, as showing—as it appears to be desired to show—that a death-rate of 7 per cent. could be got in a hospital that has all the faults we have just heard of, and that a death-rate of 10 per cent. exists in the same hospital after numerous improvements in its hygienic condition have been made, then I say that the whole science of sanitation is a perfect farce.

6715. In other words, that the modern science of sanitation is a snare and a delusion?—But I think that there is an explanation. I think it is possible to show how statistics may be comparatively valueless under certain circumstances. In the first place, one objection to the Hospital in 1877 appears to have been that the mattresses were filled with straw. I do not know what the material may be that they are now made of, possibly flock or horsehair, but straw mattresses so far as hygiene is concerned are regarded as exceedingly good, nothing else is used in the new Belvidere Hospital at Glasgow; they are considered to be the best in regard to infection, are readily destroyed, and need never be allowed to get dirty. With regard to the system of removal of slops—of carrying them out through the ward twice daily—that is not, so far as hygiene is concerned, a specially undesirable practice, provided that the utensils are kept perfectly clean in order to avoid the growth of micro-organisms; in other words, you have not such great danger from micro-organisms in a crude method of that kind as you have from drain gas delivered directly into your wards. That has been found to be the case at Home in regard to many sanitary improvements. The water-carriage system has often been attended with the greatest evils, and this has led some people to declare that the old crude system which preceded it was much better; unless the water-carriage of sewage be accompanied by perfect drainage, it becomes a source of the greatest danger, because it may take sewer-gas directly into the building, and directly into the rooms. There is practically little or no danger from fæces or other animal excreta, so long as they are removed in due time. The old system was indecent, but not necessarily dangerous. Another point is, as to the building having being whitewashed—probably lime and water were used; now, size and whiting are improperly employed. These, at any rate, are some reasons which readily suggest themselves, and doubtless there are other explanations—for instance, with regard to the kind of patients who were formerly admitted into the Hospital. But as I have said before, it is impossible without having the whole of the facts before one to arrive at any reliable conclusions from a mere statement of statistics.

6716. *Mr. Chapman.*] What method of disinfecting the walls would you suggest in place of sulphur?—I do not think that disinfection should be much resorted to; the fact is, that it is aseptic conditions you want, not antiseptics, for once the germs of micro-organisms exist they are exceedingly difficult to kill. It might be well to wash the walls with a 10 per cent. solution of crude carbolic acid; and chlorine derived from chloride of lime might be used as an aerial disinfectant; it is not, however, very penetrating.

6717. How would a wash of corrosive sublimate do?—It would act very efficiently, but there might possibly be a risk of causing mercurial poisoning.

6718. You have made some experiments with some of the bricks taken from No. 7 ward?—Yes.

6919. Your experiments were made with the view of ascertaining whether the bricks harboured micro-organisms?—Yes. You will remember that in the earlier part of the inquiry I was asked to give an opinion as to the probable state of the walls, and expressed my inability to do satisfactorily. To settle the matter, I afterwards procured a brick from ward No. 7. It contained no appreciable quantity of organic matter, and, although thirty cultivations upon sterilized boiled potatoes were made from various portions of the brick, no growth of microbes resulted in a single instance. A few spores of mould-fungi, which accidentally gained access to two of the potatoes, grew actively, as did also an inoculation from an erysipelas case. The conclusion is obvious. [Specimens exhibited.]

6720. I think you have stated that you would be surprised if good results were obtained in this Hospital?—I said a total of good results: as to individual good results they are perfectly consistent with an unhealthy Hospital; but you would not get an average of good results such as you would expect in a healthy Hospital, if there be any truth in medicine or in sanitary science.

6721. Dr. Maunsell, who is a surgeon who has been connected with the Hospital for many years, has said that with strict antiseptic precautions he has always had good results, and that in his long experience he has had nothing to complain of as to his results?—I cannot, in a matter of this kind, take the experience of any individual as against the experience of the whole civilised world.

Witness: There are one or two points in regard to the Hospital which I have observed since I was examined before. I refer to the site, and the drainage, as being imperfect.

6722. *Mr. Solomon.*] The subsoil-drainage you mean?—I have discovered that there is no proper system of subsoil-drainage, and the drains for carrying the sewage matter are defective.

6723. How defective?—They are not properly ventilated, and there is no proper system of flushing. As a result of these things the currents of air must be polluted. The number of water-closets is also inadequate.

6724. What should they be?—One watercloset is used for every fifteen or sixteen patients, and it serves as a slop-sink and urinal as well.

6725. Then there should be twice as many closets?—One for eight patients and two for twelve is put down as the number, when slop-sinks and urinals are provided as well. I also find that the defective condition of the bath-room floors has not been sufficiently emphasized. With regard to the ventilating-shaft, I may explain that I only suggested it as a means by which, without large