

"Inspector Cullen has kindly supplied me with a table giving the food taken by each guest and employee in the hotel on the afternoon and evening of Tuesday, 18th March. There was some difficulty in obtaining this information owing to a feeling of resentment evidenced on the part of the hotel employees and their friends, and in one or two instances it is doubtful whether the statements given are in accordance with fact. Again, so many were ill that matters were in a state of confusion, and a panic set in which caused some to believe they were sick, and this was seen even in residents in the district not connected with the hotel. So much so that rumours were circulated—fostered doubtless by interested parties—that there was an epidemic abroad of an infectious nature. A study of Inspector Cullen's table shows that the cause was to be found in one of two articles of diet. Mrs. C.—the fatal case—partook of the following articles at dinner: Barley-soup, roast chicken and bread sauce, with ham, lemon sponge with whipped cream, tea with milk and sugar. Four relatives who were with her and escaped illness also partook of the roast chicken and ham and barley-soup—but, instead of lemon sponge or whipped cream, had plum-pie or sago-custard by way of sweets. Following this up, it is found that the illness was confined to those who partook of lemon sponge and whipped cream, while those who escaped had not so partaken. No other article of diet at the dinner-table shows the same unvarying result. It may be stated thus:—

"*Those who escaped.*—Nineteen did not take lemon sponge, while three partook; twenty did not take whipped cream, two did take it."

"*Those who were sick.*—Fourteen partook of lemon sponge, three did not; fifteen partook of whipped cream, two did not.

"As regards the exceptions (of the three who did partake of lemon sponge and whipped cream) two state they only 'tasted' it; the third—a relation of the proprietor—we had reason to believe was distorting the facts. One of those 'tasting' lemon sponge and cream was slightly sick; the other only tasted the sponge but not the cream, and escaped. Of those who were sick and were said not to have had lemon sponge or cream, one was an infant about whose diet there seems some doubt, and who played in the kitchen and may have got hold of the articles in question unknown. The other was a relative of the proprietor; moreover, she was hysterical and confused. It is evident, on the whole, that the cream seems to have been the source of trouble, as one who escaped tasted the sponge but not the cream, while one who was sick took the cream but not the sponge. That the infected article was used at the dinner on Tuesday is shown by the fact that one guest who took ill only arrived late in the afternoon, and this was the only meal partaken, while another was not present at dinner, and so escaped.

"The lemon sponge was composed of gelatine, white of eggs, sugar, and sliced lemon. The cream was found by the cook (who is a Japanese) to be sour, therefore he whipped it up with bicarbonate of soda and sugar. Both these dishes were made, according to the cook, twenty-four hours before being used, and stood in the interval in a pantry—a dark and not too clean a place.

"All the ingredients entering into the two were examined chemically by Mr. Pond, who failed to detect any mineral poison, such as arsenic; while the stomach and liver also gave a negative result, nor was any alkaloid discovered. Dr. Roberts, who made the *post-mortem*, informs me that the stomach of Mrs. C. showed acute congestion, especially at the pyloric. While the cause has been ascribed to ptomaine poison, I think it is equally probable that some infective agent was at work, such as *B. enteritidis* sporogenes, or one of the *Proteus* group, such infection having been conveyed in the cream. The invasion was rapid, but this was the case in the meat-poisoning cases investigated by Klein some years ago.

"I took samples at random from the milk-dishes in the dairy, heated them, guessing roughly, at a temperature of 80° C., and brought them down for examination. Anaerobic and aerobic cultures failed to show any bacterial growth of any description. This might have been expected, as the pans had doubtless been cleaned with extra care since the occurrence. Examination by anaerobic methods of the gelatine used in the lemon sponge revealed an organism growing after exposure to a temperature of 80° C.—incubated anaerobically at 35°. It produced spores much like those seen in *Edema maligni*. As, however, time and appliances would not admit of a full investigation here, a culture has been submitted to Mr. Gilruth for examination.

"The sanitary condition of the premises was on the whole satisfactory; certainly not less cleanly than most dwellings and hotels in New Zealand. The dairy was in the usual state of superficial cleanliness, and no drains, &c., were so placed as to be likely to affect the milk. The pantry where the food was stored was of the dark, damp pattern common to many houses. The drainage arrangements were good. The water-supply from a large rapid stream was unlikely to have been an agent in the case, though some pigsties about 300 yards above where the water was drawn from must have drained into the river. The cow-shed was the usual clay-floored, and therefore dirty, type universal in the country, and in close proximity was a heap of rubbish and house refuse.

"While there were plenty of such sources from which infection might have carried to the milk, they were no more aggravated than obtains in almost every dairy in the province. The occurrence was, I consider, an accident which is fortunately rare, but which in our present state of rural sanitation might happen in 99 per cent. of the dairies in the district."

At various times during the last year quantities of fruit, potatoes, meat, and fish have been seized and condemned at the instance of the Department.

SPITTING IN PUBLIC PLACES.

Realising to the full the part which infected sputum plays in the spread of tuberculosis, several of the larger municipalities have passed a by-law prohibiting spitting in public places. I am afraid the laxity with which these laws have been enforced have militated very much against their value and usefulness. One or two convictions would do much to educate the public. The Railway authorities have agreed to draw the attention of its passengers to the danger of indis-