

## Return of Analyses at the Analytical Laboratory, Christchurch—continued.

| Department or Person from whom Sample received. | Date received.     | Nature of Sample.   | Adulteration suspected, or for what analysed. | Result of Analysis.  |
|---|--------------------|---|---|--|
| Health ..                                       | 1906.<br>June 7 .. | Water from Kurow Station                                    | ..  | Volatile matter, 7.28 gr. per gallon; carbonates and sulphates of lime and magnesia, 3.64 gr. per gallon; chloride of sodium, 3.69 gr.; nitrates and sulphates of alkalies, 4.43 gr.; nitric anhd., 2.21 gr.; chlorine, 2.24 gr.; phosphates and iron, traces. The high amounts of nitric anhd. and chlorides, and the traces of phosphates indicates that the water supplying the well is contaminated by infiltration of matters from the cess-pit.<br>Found to be free from poison. |
| Sister Dora ..                                  | " 16 ..            | Medicine ..   | ..  | 59.21 per cent. acetic acid.   |
| Customs ..                                      | " 26 ..            | Acetic acid ..  | ..  |  |
| Health ..                                       | " 26 ..            | Water, 21 Peacock Street, Christchurch (Inspector McKenzie) | Purity ..                                     | Volatile matter, 1.4 gr. per gallon; sodium-chloride, 1.04 gr. per gallon; nitrates and sulphates, 0.64 gr. per gallon; insoluble matter, 1.68 gr. per gallon; free ammonia, 0.08 parts per million; albuminoid ammonia, 0.008 parts per million. The colour of the water is bad—this is due to the presence of iron and a little carbon; otherwise the water is good. It would be best to filter it before drinking.  |
| Customs ..                                      | July 1 ..          | Acetic acid ..  | Tariff ..                                     | 58.5 per cent. acetic acid.  |
| H. W. Bishop, Esq., Stipendiary Magistrate      | " 4 ..             | Opium ..  | To see if genuine ..                          | A mixture of starch, invert sugar, water, other organic matters, and a little colouring; probably made from sago, treacle, and a little gum. The sample was free from opium.   |
| Ditto ..  | " 4 ..             | " ..  | For comparison ..                             | Genuine opium for smoking.   |
| " ..  | " 4 ..             | Opium-ash ..  | To see if suitable for smoking                | Opium-ash containing 49 per cent. of opium, which could be recovered and used for smoking.   |
| Health ..                                       | " 1 ..             | Water, Kurow River  | Purity ..                                     | Volatile matter, 1.4 gr. per gallon; carbonates and sulphates of zinc, 1.41 gr. per gallon; sodium-chlorides, 0.23 gr. per gallon; clay-silicates, 0.53 gr. per gallon; free ammonia, bare trace; albuminoid ammonia, bare trace; iron and sulphate, traces. The water is a very pure one.   |
| Customs ..                                      | July 20 ..         | Acetic acid ..  | Tariff ..                                     | 26.5 per cent. acetic acid.  |
| " ..  | " 20 ..            | " ..  | " ..  | 4.6 "  |
| " ..  | " 31 ..            | " ..  | " ..  | 30 "   |
| " ..  | " 31 ..            | " ..  | " ..  | 57.4 "   |
| " ..  | Aug. 10 ..         | " ..  | " ..  | 56 "   |
| Police (Mr. Cook)                               | " 16 ..            | Chops ..  | Phosphorus poison..                           | Found free from phosphates, but containing contagious photogenic bacteria—a luminous species of putrefactive bacteria.   |
| Customs ..                                      | " 27 ..            | Concentrated vinegar  | Tariff ..                                     | Acetic acid.   |
| " ..  | " 27 ..            | Acetic acid ..  | ..  | "  |
| " ..  | " 27 ..            | Vinegar ..  | ..  | "  |
| " ..  | " 27 ..            | Acetic acid ..  | ..  | 56.5 per cent. acetic acid.  |
| " ..  | " 30 ..            | " ..  | ..  | 58.7 "   |
| " ..  | Sept. 14 ..        | Glacial acetic acid..                                       | ..  | 98 per cent. acetic acid; 56° Fahr. melting-point.   |
| " ..  | " 14 ..            | Acetic acid ..  | ..  | 56.3 per cent. acetic acid.  |
| Health ..                                       | Oct. 14 ..         | Water, well at Lincoln                                      | Purity ..                                     | Volatile matter, 1.96 gr. per gallon; sodium-chloride, 1.27 gr. per gallon; lime, 1.54 gr. per gallon; sulphate of soda, 0.63 gr. per gallon; iron and silicate, 0.42 gr. per gallon; free ammonia, 0.03 parts per million; albuminoid ammonia, 0.008 parts per million. A very good water.  |
| " ..  | " 24 ..            | Water, Geraldine water-supply                               | " ..  | Volatile matter, 1.01 gr. per gallon; sodium chloride, 0.69 gr. per gallon; lime, iron, and silicates, 1.41 gr. per gallon; free ammonia, 0.003 parts per million; albuminoid ammonia, 0.014 parts per million. Very good water.   |
| " ..  | " 24 ..            | Ditto ..  | " ..  | Volatile matter, 1.12 gr. per gallon; sodium-chloride, 0.69 gr. per gallon; lime, iron, and silica, 0.99 gr. per gallon; free ammonia, 0.005 parts per million; albuminoid ammonia, 0.01 parts per million. A very good water.   |