

Three samples of lime-water were deficient in lime, and in six instances ordinary tap-water had been used instead of distilled water as directed in the Pharmacopœia.
Methylated spirit was found in one tincture of iodine, and there was evidence in numerous other cases that the tincture had been carelessly prepared.
All the sausages sent in contained an excess of bread.
One parcel of whitebait was preservatized with boric acid.

MILK.

There were 1,873 samples received under the Sale of Food and Drugs Act during the year. With the exception of one or two check samples from Auckland and Christchurch, these came from Wellington Province, Hawke's Bay, Taranaki, Marlborough, Nelson, and Westland.
Wellington City.—The City Council Milk Inspector has been regular in the performance of his duties, and is responsible for nearly all of the 1,636 samples obtained from city suppliers during the year. Of these eleven were watered, nineteen had been partly skimmed, one was deficient in non-fatty solids, two contained excessive amounts of dirt, twenty-five were decidedly stale, and nineteen were slightly under the standard. The highest amount of added water found was 29 per cent. In the worst case of skimming 48 per cent. of the fat had been removed.
Other Districts.—The results for other districts are summarized in the following table. Two samples from Wanganni were especially bad, as they contained 32 and 40 per cent. of added water respectively.

Locality.	Samples received.	Seriously skimmed.	Watered.	Slightly below Standard.	Locality.	Samples received.	Seriously skimmed.	Watered.	Slightly below Standard.
Blenheim ..	9	..	..	1	Nelson ..	12	..	4	..
Carterton ..	2	..	..	..	Patea ..	1	..	..	..
Dannevirke ..	24	..	2	..	Petone..	14	..	..	..
Denniston ..	2	..	1	..	Stratford ..	2	..	..	..
Eastbourne ..	3	..	..	..	Taranaki Hospital	12	..	..	..
Featherston ..	8	..	..	..	District				
Foxton ..	1	..	1	..	Waipawa ..	9	..	..	2
Gisborne ..	57	..	..	3	Wanganui ..	8	..	2	..
Greytown ..	9	..	..	..	Waverley ..	2	..	..	..
Hastings ..	8	..	..	..	Westport ..	5	..	1	..
Hutt (Lower) ..	9	..	..	..	Woodville ..	4	..	2	..
Johnsonville ..	3	..	..	1					
Marton ..	2	..	..	..	Totals, 1919	234	..	14	8
Masterton ..	3	..	..	..					
Napier ..	25	..	1	1	Totals, 1918	432	6	16	18

Plunket Nurses.—The Laboratory continues to assist Plunket nurses by making analyses of milk when required. Twenty-nine samples were reported on during the year.
Special Investigation.—At the request of the Wellington City Milk Depot an investigation was made on the effect that a clarifier which it was proposed to install would have on the purity of the milk-supply. Samples of clarified milk were taken over a period of five days, and compared with samples of the same milk not clarified. The results indicated that clarification merely removed visible dirt, without affecting any improvement in the bacterial content or keeping-properties of the milk. In some cases the tested milk was worse from a bacterial standpoint, due no doubt to stimulation of activity of the bacteria by breaking up of clumps of bacteria by the machine.

OTHER DEPARTMENTS.

Several coals and boiler-waters were analysed for the Railways Department. A number of different brands of prepared roofing-material were subjected to various tests for the Public Works Department. Some gum-samples and gum-bearing peats were examined for the Kauri-gum Commissioner.

RESEARCH.

Clay.—Work has been commenced on the physical and chemical properties of New Zealand clays. Careful analyses are made of the samples; they are subjected to firing tests, purification by washing is tried if necessary, and experiments with various mixtures are made in certain cases. The firing test has been added to the routine in examining all clays when the sample received is sufficiently large. It is hoped at a later date to issue a report covering a number of representative clays.
Coal.—Some progress has been made in determining the ignition-points of New Zealand coals.
Casein.—An investigation was made of the conditions governing the preparation of casein from buttermilk, to furnish evidence for the Department of Agriculture in a disputed patent case. As a result the validity of the patent was upheld.

REPORT ON THE ADMINISTRATION OF THE EXPLOSIVE AND DANGEROUS GOODS ACT, 1908, FROM 1st JULY, 1919, TO 30th JUNE, 1920.

The work of the Explosives Branch of the Laboratory has been greatly curtailed during the war period, and the regulations under the Act which were gazetted in July, 1914, were enforced only as far as they affected the sale and storage of explosives by merchants and storekeepers. This was rendered necessary owing to the fact that for the greater part of the time only one officer was available for both clerical and inspection work. Now that conditions are returning to normal it is intended to proceed with the licensing of magazines at mines, quarries, and other places where explosives are used, and it is hoped that the end of the coming year will see this work practically completed.