H.—34.

(Geological Survey 76, Head Office and inspection staff 95, prospectors 296); Post and Telegraph, 161; Public Health, 4,048; Public Works, 35; Railways, 21; other Departments, 48; public bodies, 26; miscellaneous, 30; total, 5,471.

## Customs.

The number of samples submitted by the Customs Department was considerably greater than in previous years.

# POLICE.

Ten series of exhibits were examined for poisons at the direction of the Superintendent of Police, and in four cases cyanide, veronal, strychnine, and sodium arsenate were respectively found. Medicine, ointment, naphtha, and various liquors were also analyzed.

# MINES.

The Geological Survey submitted eighteen rocks and minerals for superior analysis, and many others for less complete examination. There were also waters from irrigation areas of Central Otago, and natural gas from possible petroleum areas. The Head Office and inspection staff required principally analyses of coal, coal-mine dusts, mine-air, stone for gold and silver, and occasionally other minerals. Prospectors' samples show that attention is being paid again to the molybdenite deposits at Karamea, and to possible tin and wolfram areas in Stewart Island. Manganese of good quality was forwarded from Tikiora, Russell, and from Ruapekapeka.

#### HEALTH.

Foodstuffs in great variety, and other samples having some direct bearing on health matters were submitted by the Department of Health. The list comprises—Air from workrooms, apples and apple-juice, bacon, barley, beer, biscuit and biscuit-filling, brandy, brawn, bread, bronchial lotion, Burton salts, butter, celery, Cellu-flour, chocolate liquers, cheese, coffee, cordials, cream, cream and custard powder, desiccated coconut, egg-mixture, essences of lemon and vanilla, Fiji remedy, food-flavouring, germoline preservative, germolets, gin, ginger and hop beers, honey, ice-cream, iodine tincture, iodized salt, lard, lemon-cheese, lemon-squash, lime-juice, lime-water, malt-extract, margarine, Marmite, methylated spirit, mineral-water tablets, Moogrol, Oysto-paste, pears, rubber fabric, rum, sausage and sausage-meat, soap, sugar, tomato-sauce, turpentine, trout, vinegar, washing-powder, whisky, whole meal, yeast tablets.

The bread examined included brown bread and special diabetic bread, some of which was decidedly high in starch content. Four of the butter-samples exceeded the standard for water.

Only three lime-waters were examined, but two of these did not comply with the B.P. standard. In view of the widespread use of lime-water, especially for infants, a much larger number of samples should be taken.

The sausage-meat was shown to contain an excess of starchy foods.

The labelling of a few other samples was not in accordance with regulations.

Beer-samples were taken in various parts of New Zealand, and of great variety of brands. The limit for salt in beer has been fixed at 50 grains per gallon, which would seem ample, but one-fourth of the number examined contained more than this. With spirituous liquors such as whisky, brandy, &c., there is an occasional tendency to dilute overmuch with water, but the more usual offence is the substitution of cheap liquor for well-known case brands. Several convictions for this were obtained during the year.

Following on disquieting reports received from Great Britain of dangerous amounts of arsenic in imported apples, attributed to the use of arsenical sprays, a special examination was made of sprayed fruit from orchards in several parts of New Zealand. A safe limit for arsenic was considered to be  $\frac{1}{100}$  grain per pound of fruit. Only when patches of dried spray were visible or when the fruit had been sprayed immediately before picking was this limit exceeded, while if the fruit were peeled and the skin discarded the arsenic found was less than  $\frac{1}{1000}$  grain per pound.

## Milk.

The numbers of samples taken officially during the year are—Wellington City supply, 1,756; country districts controlled by Medical Officer of Health, Wellington, 769; districts controlled by Medical Officer of Health, Dunedin, 795; total, 3,320.

Wellington City.—Comparatively little wilful adulteration of milk was detected during the year. Nine samples were low in fat and had presumably been skimmed, and five had been watered, in two cases to the extent of 30 per cent. One sample was deficient in milk solids, and there were nine minor breaches of the regulations, for which warnings were advised. The use of an ice-chest by the Inspector, in which samples are placed immediately after being taken and so kept until delivery to the Analyst, has permitted some measure of control over the sale of stale milk. Eight prosecutions were recommended for this offence, and fifteen warnings advised. The supply showed decided improvement over that of previous years as regards dirt. The City Inspector must again be commended for the able manner in which he carried out his duties during the year.