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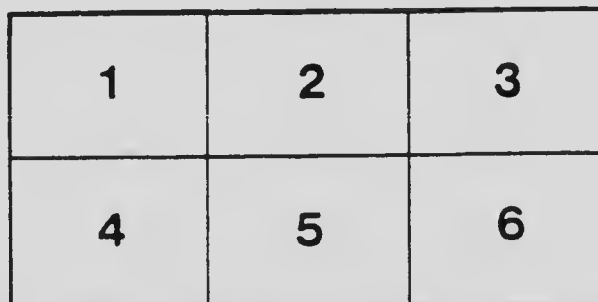
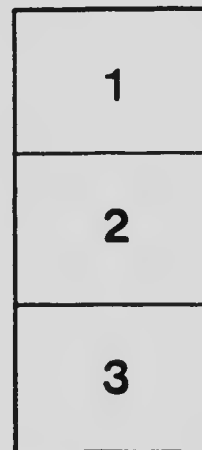
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LABORATORY  
OF THE  
INLAND REVENUE DEPARTMENT

OTTAWA, CANADA.

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BULLETIN No. 286

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Ground Ginger and a Study of Analytical Results.

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## CORRECTION.

*In Bulletin No. 275*, page 6, an error occurs in connection with samples Nos. 56132 and 56133 (District of Quebec), in column headed "Manufacturer." Sample No. 56132 is made by the T. A. Lytle Co. of Toronto. Sample No. 56133 is made by the Heinz Co., Pittsburg, U.S.A.

*Bulletin No. 280. Sample 50370.* This sample is in error. Reported as containing Saccharin. The amount of Salicylic Acid present is so considerable that its incomplete removal by Oxidation led to the error mentioned.

Sample No. 60050, page 14, under column headed "Manufacturer" should be stated "Unknown."

LABORATORY  
OF THE  
INLAND REVENUE DEPARTMENT  
OTTAWA, CANADA.

BULLETIN No. 286

Ground Ginger and a Study of Analytical Results.

OTTAWA, April 23, 1914.

GEO. W. TAYLOR, Esq.,  
Acting Deputy Minister, Inland Revenue.

SIR,—I have the honour to submit a report on Ground Ginger as sold in Canada. This report deals with 259 samples, purchased in November and December of 1913, and in January of this year.

Ginger has been inspected on five occasions, before the present; and has always been found to be more or less adulterated, as shown by the following record:—

| Year.     | Bulletin. | Total samples. | Adulterated | Percentage of adulteration. |
|-----------|-----------|----------------|-------------|-----------------------------|
| 1907..... | 48        | 98             | 26          | 26                          |
| 1904..... | 95        | 10             | 4           | 40                          |
| 1907..... | 137       | 30             | 1           | 3                           |
| 1909..... | 184       | 150            | 32          | 21                          |
| 1912..... | 236       | 151            | 14          | 9                           |
| 1914..... | 286       | 259            | 48          | 20                          |

The adulteration referred to in the above tabulation may be called *gross*, inasmuch as it consists, mainly of added foreign material, viz.: starches or flour, turmeric, cayenne or mineral matter.

A more subtle form of adulteration, namely, the intermixture or substitution of exhausted ginger, has for the most part escaped penalization. Exhausted ginger is ginger from which the components which give the article value as a spice have been extracted. After extraction, the residual tissues retain their characteristic forms and the starch may be so little altered as to be indistinguishable from normal ginger starch. As a spice, this residue possesses practically no value, and should not be

found on the market except perhaps as an ingredient in Cattle Foods, where it may possibly find legitimate use, although even this is doubtful. It is however quoted in many wholesale price lists, and I find one of this year, offering Spent Ginger at 4 cents f.o.b. Montreal, while genuine ginger is quoted at 10½ cents.

It will be readily understood that the availability of this comparatively useless article offers a great temptation to grinders; and there can be no doubt whatever that many samples reported herewith, as well as in former bulletins, consist in part of the spent ginger, or exhausted ginger above referred to.

The difficulty of detection lies in the fact that the characteristic microscopic structure remains unaltered, and even the chemical characters are so little changed that a considerable percentage of spent ginger may be added to a good quality of genuine ginger without modifying the specific constants to such an extent as to justify the analyst in declaring the sample adulterated.

The only effective way of meeting the case would seem to be the establishing of standards for moisture, total and water soluble ash, and extractive matters, beyond which a sample should be declared illegal.

This alternative has been kept in view from the first, and I am of opinion that the data which we have accumulated since 1897, will be found sufficient basis for standardization of commercial ground ginger.

The moisture content varies from about 6.5 to 10 per cent so far as the present report is concerned. Somewhat higher numbers were found in 1897 (Bull. 48), 1904 (Bull. 95), while distinctly lower percentages of water were found in 1906 (Bull. 137). It is however quite unusual to find less than 7 per cent of water in genuine ginger. This datum is of little value, considered in itself, but in its relation to total extractive by cold water, it must be regarded as essential.

The ash content of ginger depends much upon the way in which the rhizomes are cleaned before grinding, and is of course, greatly influenced by the presence of lime used as a coating of the rhizome. This practice is quite common, and must be held to account for the extremely variable amounts of total mineral residue obtained on incineration.

The most important datum for judging adulteration by addition of spent ginger is the percentage of cold water extractive.

The exhaustion of ginger by water entails loss of soluble salts, and consequent reduction of water soluble ash; so that a lowered water extractive is usually accompanied by a lowered soluble ash. The following study illustrates the effect of previous extraction upon the ash percentage.

Four samples of genuine gingers were worked before and after extraction with cold water, and ash determined.

| Sample.     | Total Ash. |        |       |            | Water Soluble Ash. |        |       |             |
|-------------|------------|--------|-------|------------|--------------------|--------|-------|-------------|
|             | Before.    | After. | Loss. | p.c. loss. | Before.            | After. | Loss. | p. c. loss. |
| 37584 ..... | 5.42       | 3.14   | 2.28  | 42         | 2.18               | 0.65   | 1.53  | 70          |
| 37587 ..... | 4.65       | 2.25   | 2.40  | 52         | 1.98               | 0.30   | 1.68  | 85          |
| 39158 ..... | 4.59       | 1.38   | 3.21  | 70         | 3.38               | 0.24   | 3.14  | 93          |
| 39164 ..... | 3.63       | 0.98   | 2.65  | 73         | 1.86               | 0.15   | 1.71  | 92          |

From Bulletin No. 184.

**Method of working for determination of cold water extractive in ground ginger.**

Weigh 10 grammes into a 500 cc volumetric flask of Wagner form; fill to the mark with distilled water, close, and place on a rotator of 24 inches diameter revolving 40 times per minute for 30 minutes. Centrifuge a portion of the mixture, filter and evaporate 50 cc to dryness in platinum at 100°C. Cool and weigh residue.



It will be observed that the exhaustion of ginger by cold water results in notable reduction of both the total ash, and the water soluble ash; but the percentage reduction of soluble ash is much greater than that of the total ash.

It follows that an exhausted or spent ginger yields not only a lower extractive, but also a lower soluble ash number.

Before attempting to interpret the numbers obtained on analysis it is desirable to ascertain characteristic numbers for samples known to be genuine.

The first work done in these laboratories upon ground ginger was published in Bulletin No. 48 (May, 1897), and a mean of 14.03 per cent. cold water extractive was found for seven samples of ginger believed to be genuine. The mean soluble ash for these samples was 2.96.

An improved method of determining cold water extractive was applied to four samples (reported in Bulletin No. 95—p. 23—February, 1904), and resulted in an average of 19.3 per cent extractive. The ash was not determined.

Bulletin No. 137 (July, 1907), gives extractives for twenty-eight samples of ground (mostly Jamaica) gingers, by the method employed in 1904, the average extractive being 21.95 per cent. The ash was not determined.

These results appear to indicate that genuine ginger should yield about 19 to 20 per cent of extractive to cold water, under conditions of working as described in Bulletin No. 95.

Two samples of African ginger, accompanied by guarantees of genuineness have recently been worked in this laboratory, with the following results:—

Sample A—12.80 Extractive

B—14.90 “

A sample of Jamaica ginger, guaranteed genuine, was worked at the same time and yielded 19.90 per cent extractive.

It follows that a distinction should be made between Jamaica and African gingers in this regard; and it is possible that Cochin, Cape and other varieties of ginger may differ among themselves, characteristically.

Bulletin No. 184 (July, 1909), contains a report on 150 samples of ground ginger. Of this number 112 showed only ginger tissues under the microscope. Ninety-seven of these gave extractive above 14 per cent, and it will be convenient for purposes of study to consider separately, such samples of ground ginger, showing no foreign admixture under the microscope, as yielded above and below 14 per cent extractive to cold water.

The subjoined table (1) gives a synopsis of 97 samples of presumably genuine ginger, as reported in July, 1909, (Bulletin No. 184).

TABLE I.

| District.                  | No. samples. | Extractive. |       |       | Soluble |      |       |
|----------------------------|--------------|-------------|-------|-------|---------|------|-------|
|                            |              | Max.        | Min.  | Mean. | Max.    | Min. | Mean. |
| Nova Scotia .....          | 7            | 17.47       | 14.30 | 15.61 | 2.69    | 1.80 | 2.24  |
| Prince Edward Island ..... | 6            | 20.41       | 14.06 | 16.57 | 3.13    | 2.14 | 2.63  |
| New Brunswick .....        | 9            | 20.38       | 14.20 | 16.29 | 2.48    | 1.60 | 2.11  |
| Quebec .....               | 3            | 18.06       | 15.80 | 16.18 | 2.82    | 1.74 | 2.28  |
| St. Hyacinthe .....        | 5            | 18.61       | 14.08 | 16.03 | 2.70    | 2.37 | 2.53  |
| Montreal .....             | 4            | 17.15       | 14.27 | 15.91 | 2.53    | 1.38 | 1.95  |
| Ottawa .....               | 5            | 18.54       | 14.68 | 16.78 | 2.97    | 2.18 | 2.57  |
| Kingston .....             | 5            | 18.45       | 16.27 | 17.13 | 2.70    | 1.86 | 2.28  |
| Toronto .....              | 5            | 17.72       | 14.90 | 16.69 | 2.82    | 2.02 | 2.46  |
| London .....               | 9            | 19.56       | 14.85 | 16.31 | 3.04    | 2.14 | 2.59  |
| Windsor .....              | 10           | 18.66       | 15.62 | 16.31 | 2.70    | 2.10 | 2.40  |
| Manitoba .....             | 6            | 17.32       | 14.73 | 16.23 | 2.77    | 1.72 | 2.24  |
| Calgary .....              | 6            | 18.75       | 14.22 | 16.61 | 2.78    | 1.80 | 2.29  |
| Vancouver .....            | 9            | 16.92       | 14.58 | 15.95 | 2.62    | 1.89 | 2.25  |
| Victoria .....             | 8            | 19.5        | 14.73 | 16.93 | 2.62    | 1.99 | 2.30  |

The following synopsis similarly arranged, shows the maximum, minimum and mean results obtained in analysis of 133 samples, reported in Bulletin No. 236, and yielding more than 14 per cent extractive.

TABLE II.

Sample showing no foreign tissues—Extractive above 14 per cent.

| District.                 | No. samples. | Extractive. |       |       | Soluble Ash. |      |       |
|---------------------------|--------------|-------------|-------|-------|--------------|------|-------|
|                           |              | Max.        | Min.  | Mean. | Max.         | Min. | Mean. |
| Nova Scotia .....         | 10           | 19.51       | 15.44 | 16.78 | 3.10         | 1.86 | 2.39  |
| Prince Edward Island..... | 8            | 19.49       | 14.46 | 17.28 | 4.11         | 1.98 | 2.67  |
| New Brunswick.....        | 9            | 19.95       | 14.42 | 17.41 | 3.46         | 2.12 | 2.46  |
| Quebec.....               | 7            | 17.17       | 14.95 | 16.13 | 2.60         | 1.20 | 1.93  |
| St. Hyacinthe.....        | 10           | 20.42       | 15.47 | 17.75 | 3.04         | 0.86 | 2.00  |
| Montreal.....             | 7            | 20.61       | 15.46 | 17.40 | 6.08         | 1.80 | 2.69  |
| Ottawa.....               | 9            | 19.28       | 14.86 | 17.49 | 2.88         | 1.28 | 2.34  |
| Kingston.....             | 9            | 19.03       | 15.55 | 17.60 | 3.52         | 1.43 | 2.45  |
| Toronto.....              | 5            | 19.28       | 15.35 | 18.76 | 2.76         | 2.06 | 2.30  |
| Windsor.....              | 10           | 19.14       | 15.45 | 17.60 | 3.54         | 0.93 | 2.52  |
| Manitoba.....             | 10           | 19.05       | 15.93 | 17.60 | 2.68         | 1.40 | 2.11  |
| Calgary.....              | 10           | 18.87       | 14.77 | 16.29 | 4.20         | 1.88 | 2.42  |
| Nelson.....               | 9            | 18.94       | 16.20 | 17.34 | 3.74         | 1.34 | 2.48  |
| Vancouver.....            | 10           | 17.92       | 15.46 | 16.69 | 3.06         | 1.40 | 2.38  |
| Victoria.....             | 10           | 18.89       | 15.29 | 17.06 | 4.46         | 1.94 | 2.54  |

Finally the next Table (III) shows the results obtained with 194 samples yielding above 14 per cent extractive and reported in the present Bulletin No. 286.

TABLE III.

Samples giving more than 14 per cent extractive, and containing no foreign tissues.

| District.              | No. samples. | Extractive. |       |       | Soluble Ash. |      |       |
|------------------------|--------------|-------------|-------|-------|--------------|------|-------|
|                        |              | Max.        | Min.  | Mean. | Max.         | Min. | Mean. |
| Nova Scotia.....       | 20           | 19.05       | 15.00 | 18.04 | 3.68         | 2.02 | 2.60  |
| New Brunswick.....     | 13           | 20.05       | 15.05 | 17.96 | 3.24         | 1.50 | 2.46  |
| Quebec.....            | 7            | 20.25       | 15.00 | 17.25 | 2.42         | 1.46 | 2.15  |
| East Quebec.....       | 7            | 19.95       | 14.35 | 16.41 | 2.68         | 1.48 | 2.23  |
| Three Rivers.....      | 7            | 17.70       | 14.70 | 16.20 | 2.62         | 1.12 | 2.04  |
| Eastern Townships..... | 5            | 18.90       | 14.65 | 16.30 | 2.52         | 1.44 | 2.10  |
| Montreal.....          | 6            | 19.90       | 14.00 | 16.44 | 2.78         | 1.80 | 2.21  |
| Valleyfield.....       | 9            | 20.00       | 14.15 | 17.60 | 3.18         | 1.84 | 2.67  |
| Ottawa.....            | 8            | 19.20       | 14.45 | 15.97 | 2.80         | 1.92 | 2.37  |
| Kingston.....          | 14           | 19.90       | 14.30 | 17.31 | 3.32         | 2.10 | 2.41  |
| Toronto.....           | 16           | 20.80       | 14.25 | 17.46 | 2.74         | 2.04 | 2.36  |
| Hamilton.....          | 11           | 19.45       | 15.35 | 17.52 | 2.74         | 2.02 | 2.29  |
| Windsor.....           | 12           | 20.60       | 15.95 | 17.67 | 2.90         | 2.06 | 2.50  |
| Manitoba.....          | 15           | 20.55       | 15.10 | 16.91 | 3.28         | 2.00 | 2.42  |
| Alberta.....           | 15           | 18.25       | 16.50 | 17.35 | 2.96         | 1.84 | 2.43  |
| Rocky Mountains.....   | 13           | 18.30       | 14.05 | 16.21 | 2.72         | 1.92 | 2.40  |
| Victoria.....          | 14           | 18.80       | 14.30 | 16.60 | 2.64         | 2.00 | 2.38  |
| Two Mountains.....     | 2            | 17.30       | 15.50 | 16.40 | 2.90         | 2.33 | 2.61  |

The three reports quoted in these tables, deal with representative collections of ground ginger as found on the Canadian markets, and may be summarized as follows:—

| Bulletin.     | Samples adulterated with foreign material. | Samples showing ginger tissues only. |                           | Total. |
|---------------|--|--------------------------------------|---------------------------|--------|
|               |  | Above 14 p.c. extractive.            | Below 14 p.c. extractive. |        |
| No. 184 ..... | 38   | 97                                   | 15                        | 150    |
| No. 236 ..... | 7  | 133                                  | 11                        | 151    |
| No. 286 ..... | 33   | 194                                  | 32                        | 259    |
|               | 78   | 424                                  | 58                        | 560    |

If this work done upon 560 samples may be taken as representative of the article, it is apparent that all the better grades of ginger yield above 14 per cent extractive to cold water, and fully 2 per cent of soluble ash.

Further, the best grades of ginger yield much more than 14 per cent extractive, Jamaica ginger apparently yielding as high as 19 to 20 per cent.

It would seem reasonable that this class of gingers should be distinguished in commerce (retail commerce) from the more ordinary varieties; and it is not uncommon to find Jamaica ginger sold as such.

The following Table (IV) gives a conspectus of results obtained with gingers which yielded less than 14 per cent extractive matter.

TABLE IV.

Samples showing less than 14 per cent extractive, and containing no foreign tissues.

| No. | Bulletin No. 184. |              | Bulletin No. 236. |                          | Bulletin No. 286. |              |
|-----|-------------------|--------------|-------------------|--------------------------|-------------------|--------------|
|     | Extract.          | Soluble Ash. | Extract.          | Soluble A <sup>n</sup> . | Extract.          | Soluble Ash. |
| 1   | 13.00             | 2.25         | 12.57             | 1.90                     | 13.45             | 2.40         |
| 2   | 11.17             | 1.81         | 13.69             | 3.40                     | 13.45             | 2.18         |
| 3   | 11.80             | 1.66         | 12.83             | 1.50                     | 6.80              | 0.54         |
| 4   | 9.11              | 0.79         | 10.88             | 1.14                     | 12.00             | 2.14         |
| 5   | 5.83              | 0.62         | 11.83             | 1.59                     | 13.20             | 1.50         |
| 6   | 11.93             | 1.59         | 12.18             | 1.42                     | 10.00             | 1.44         |
| 7   | 13.89             | 1.96         | 11.75             | 1.10                     | 13.60             | 1.48         |
| 8   | 12.97             | 1.27         | 11.49             | 1.60                     | 13.10             | 1.18         |
| 9   | 13.98             | 2.09         | 10.43             | 1.46                     | 12.20             | 1.88         |
| 10  | 13.01             | 1.37         | 13.88             | 3.36                     | 12.10             | 1.88         |
| 11  | 13.54             | 2.06         | 13.33             | 1.60                     | 12.75             | 1.26         |
| 12  | 13.84             | 2.52         |                   |                          | 12.90             | 2.00         |
| 13  | 12.26             | 2.46         |                   |                          | 13.25             | 2.00         |
| 14  | 12.47             | 2.39         |                   |                          | 11.35             | 2.86         |
| 15  | 12.24             | 2.52         |                   |                          | 13.50             | 1.68         |
| 16  |                   |              |                   |                          | 13.60             | 1.54         |
| 17  |                   |              |                   |                          | 12.30             | 2.18         |
| 18  |                   |              |                   |                          | 13.65             | 1.62         |
| 19  |                   |              |                   |                          | 13.60             | 1.68         |
| 20  |                   |              |                   |                          | 13.00             | 1.66         |
| 21  |                   |              |                   |                          | 7.20              | 0.82         |
| 22  |                   |              |                   |                          | 13.65             | 1.62         |
| 23  |                   |              |                   |                          | 7.30              | 0.54         |
| 24  |                   |              |                   |                          | 13.80             | 1.00         |
| 25  |                   |              |                   |                          | 11.15             | 1.16         |
| 26  |                   |              |                   |                          | 7.15              | 0.44         |
| 27  |                   |              |                   |                          | 11.00             | 1.46         |
| 28  |                   |              |                   |                          | 13.75             | 1.76         |
| 29  |                   |              |                   |                          | 12.50             | 2.04         |
| 30  |                   |              |                   |                          | 13.15             | 2.00         |
| 31  |                   |              |                   |                          | 12.70             | 1.96         |
| 32  |                   |              |                   |                          | 13.55             | 2.48         |

It is quite evident that Table IV shows a distinctly inferior grade of ginger. In the light of our knowledge that African ginger may yield less than 14 per cent of extractive matter, it would be going too far to conclude that all the samples reported in Table IV are adulterated, or even suspicious; but it is to be remembered that our experience with low grade gingers, vouched for as genuine, is extremely limited. I shall endeavour to secure data in regard to this class of gingers, as soon as possible.

Samples showing less than 10 per cent extractive are, however, so entirely exceptional that it is impossible to regard them as free from admixture of spent ginger. Under this head must be reckoned two samples reported in Bulletin No. 184 and four samples included in the present report. In all these cases the soluble ash is notably less than one per cent.

Adulteration of ginger by admixture of foreign matters is apparently giving place to adulteration by the use of spent ginger. This latter mode of adulteration is much more difficult of detection than the former; and the following statement appears to show that it is replacing the cruder one. Per cent of adulteration by admixture of foreign matter reported in:—

|                            |      |           |
|----------------------------|------|-----------|
| Bulletin No. 184.. . . . . | 25   | per cent. |
| “ “ 236.. . . . .          | 4.6  | per cent. |
| “ “ 286.. . . . .          | 12.7 | per cent. |

The importance of the soluble ash number as a criterion of the genuineness of ginger is suggested by the following synopsis of results obtained with samples showing low percentages of soluble ash:—

|                               | Bulletin No. 184. |              | Bulletin No. 236. |                | Bulletin No. 286.            |                                  |
|-------------------------------|-------------------|--------------|-------------------|----------------|------------------------------|----------------------------------|
|                               | Soluble Ash.      | Extract.     | Soluble Ash.      | Extract.       | Soluble Ash.                 | Extract.                         |
| Ash below 1 per cent. ....    | 0.79<br>0.62      | 9.11<br>5.83 | 0.86<br>0.90      | 16.56<br>16.70 | 0.54<br>0.82<br>0.54<br>0.44 | 6.80<br>7.20<br>7.30<br>7.15     |
| Ash below 1.25 per cent. .... |                   |              | 1.14<br>1.10      | 10.83<br>11.75 | 1.18<br>1.00<br>1.16<br>1.12 | 13.10<br>13.80<br>11.15<br>17.00 |

With three exceptions it will be seen that a soluble ash of less than 1.25 per cent is accompanied by a suspiciously low percentage of extractive.

The results of the present inspection may be summarized as follows:—

|   | Samples. |
|---|----------|
| Found genuine.. . . . .                     | 194      |
| “ adulterated with foreign matter.. . . . . | 32       |
| “ “ spent ginger.. . . . .                  | 4        |
| Published without comment.. . . . .         | 28       |
| Doubtful.. . . . .                          | 1        |
| Total.. . . . .                             | 259      |

It will be seen from the accompanying report that genuine ground ginger has been sold to our inspectors at prices (retail) varying from 25 to 40 cents per pound. None of even the most grossly adulterated samples are sold at lower prices. This fact tells against the retailer who certainly bought his stock-in-trade at a lower price than he would have paid for high grade goods.

We are often asked to blame the manufacturer rather than the small dealer; but in view of the fact above referred to, there can be no doubt that the retail dealer is thinking of his own profit, and not of furnishing cheaper goods to his customers, when he stocks up with lowest priced wares.

I beg to recommend publication of this report as Bulletin No. 286.

I have the honour to be, Sir,  
Your obedient servant,

A MCGILL,  
*Chief Analyst.*

| Date of Collection. | Nature of Sample. | No. of Sample. | Name and Address of Vendor. | Cost.     |        | Name and Address of Manufacturer or Furnisher, as given by Vendor. |            |
|---------------------|-------------------|----------------|-----------------------------|-----------|--------|--|------------|
|                     |                   |                |                             | Quantity. | Cents. | Manufacturer.  | Furnisher. |

## DISTRICT OF NOVA SCOTIA—

| 1914.   |               |       |  |       |    |   |                 |
|---------|---------------|-------|--|-------|----|---|-----------------|
| Jan. 15 | Ground Ginger | 53866 | Nat. Drug & Chem. Co.,<br>Halifax, N. S. | 1 lb. | 30 | Vendors.....                                |                 |
| " 19    | " "           | 53867 | John P. Mott & Co., Hal-<br>ifax, N. S.  | 1 "   | 16 | " .....                                     |                 |
| " 22    | " "           | 53868 | Canada Food Co., Halifax,<br>N. S.       | 1 "   | 24 | W. H. Schwartz &<br>Sons, Halifax, N.<br>S. | Manufacturers.. |
| " 22    | " "           | 53869 | Brown Bros. & Co., Hal-<br>ifax, N. S.   | 1 "   | 40 | S. H. Ewing &<br>Sons, Montreal.            | " ..            |
| " 22    | " "           | 53870 | Wentzells Ltd., Halifax,<br>N. S.        | 1 "   | 22 | J. P. Mott & Co.,<br>Halifax, N. S.         | " ..            |
| " 23    | " "           | 53871 | Bauld Bros., Halifax, N.<br>S.           | 3/4 " | 19 | W. H. Schwartz &<br>Sons, Halifax, N.<br>S. | " ..            |
| " 23    | " "           | 53872 | R. B. Adams, Halifax, N.<br>S.           | 3/4 " | 25 | J. P. Mott & Co.,<br>Halifax, N. S.         | " ..            |
| " 23    | " "           | 53873 | D. J. Stewart, Halifax,<br>N. S.         | 3/4 " | 24 | W. H. Schwartz,<br>Halifax, N. S.           | " ..            |
| " 23    | " "           | 53874 | R. S. McDonald, Halifax,<br>N. S.        | 1 "   | 40 | N. D. & C. Co.,<br>Halifax, N. S.           | " ..            |
| " 23    | " "           | 53875 | Jas. D. Walsh, Halifax,<br>N. S.         | 1 "   | 40 | " "   | " ..            |
| " 23    | " "           | 53876 | Cahill & Co., Halifax, N.<br>S.          | 1 "   | 40 | Gorman Eckart<br>Co., Toronto.              | " ..            |
| " 26    | " "           | 53877 | C. A. Barnstead, Halifax,<br>N. S.       | 1 "   | 40 | Lyman & Sons,<br>Ltd., Montreal.            | " ..            |
| " 26    | " "           | 53878 | J. R. Rawley Estate,<br>Halifax, N. S.   | 1 "   | 40 | Ewing & Sons,<br>Ltd., Montreal.            | " ..            |
| " 26    | " "           | 53879 | Corkum & Ritcey, Hal-<br>ifax, N. S.     | 3/4 " | 20 | Gorman & Eckart,<br>Toronto, Ont.           | " ..            |
| " 27    | " "           | 53880 | W. H. Schwartz & Sons,<br>Halifax, N. S. | 1 "   | 20 | Vendors.....                                | " ..            |
| " 29    | " "           | 53881 | H. E. Wilson, Windsor,<br>N. S.          | 1 "   | 40 | Lyman & Sons,<br>Montreal.                  | " ..            |
| " 30    | " "           | 53882 | G. A. Burbidge, Halifax,<br>N. S.        | 1 "   | 40 | N. D. C. Co., Hal-<br>ifax, N. S.           | " ..            |
| " 30    | " "           | 53883 | E. J. Butcher, Dartmouth,<br>N. S.       | 1 "   | 40 | " "   | " ..            |
| " 30    | " "           | 53884 | Kinleys Ltd., Halif ax,<br>N. S.         | 1 "   | 40 | " "   | " ..            |
| " 30    | " "           | 53885 | R. J. Blackie, Halif ax,<br>N. S.        | 1 "   | 40 | " "   | " ..            |

## DISTRICT OF NEW BRUNSWICK—

| 1913.   |               |       |   |       |    |             |  |
|---------|---------------|-------|---|-------|----|-------------|--|
| Nov. 28 | Ground Ginger | 59333 | G. E. Barbour Co., Ltd.,<br>St. John, N. B. | 1 lb. | 25 | Vendors.... |  |
| Dec. 3  | " "           | 59334 | H. W. Cole, Ltd., St.<br>John, N. B.        | 1 "   | 20 | " .....     |  |

## GROUND GINGER.

| Inspector's Report.<br>(Is not an expression<br>of Opinion.) | Results of Analysis. |        |                |        |                           |                              | Microscopical Exam-<br>ination. | No. of Sample. | Remarks and<br>Opinion of the<br>Chief Analyst. |
|--|----------------------|--------|----------------|--------|---------------------------|------------------------------|---------------------------------|----------------|---|
|  | Moisture.            | Ash.   |                |        | Cold Water<br>Extractive. |                              |                                 |                |   |
|  |                      | Total. | Water Soluble. | Ratio. | Normal.                   | Calculated to<br>dry Sample. |                                 |                |   |

## R. J. WAUGH, INSPECTOR.

|                     | p. c. | p. c. | p. c. |      | p. c. | p. c. |                                    |       |         |
|---------------------|-------|-------|-------|------|-------|-------|------------------------------------|-------|---------|
| Sovereign Brand 1.. | 9.55  | 5.16  | 2.80  | 0.54 | 16.45 | 18.20 | Ginger tissues and<br>starch only. | 53866 | Genuine |
| .....               | 9.30  | 7.32  | 3.30  | 0.45 | 13.60 | 15.00 | " "                                | 53867 | "       |
| .....               | 10.07 | 3.58  | 2.12  | 0.59 | 16.00 | 17.80 | " "                                | 53868 | "       |
| .....               | 8.57  | 3.78  | 2.24  | 0.59 | 17.20 | 18.85 | " "                                | 53869 | "       |
| .....               | 8.92  | 5.86  | 2.52  | 0.43 | 14.35 | 15.75 | " "                                | 53870 | "       |
| .....               | 9.67  | 4.48  | 2.02  | 0.45 | 15.30 | 16.95 | " "                                | 53871 | "       |
| .....               | 8.65  | 6.56  | 3.68  | 0.56 | 14.80 | 16.20 | " "                                | 53872 | "       |
| .....               | 9.82  | 5.28  | 2.66  | 0.50 | 14.35 | 15.90 | " "                                | 53873 | "       |
| .....               | 8.02  | 4.06  | 2.74  | 0.67 | 17.50 | 19.00 | " "                                | 53874 | "       |
| .....               | 9.15  | 4.72  | 2.72  | 0.58 | 16.30 | 17.95 | " "                                | 53875 | "       |
| .....               | 8.75  | 3.78  | 2.52  | 0.67 | 16.70 | 18.30 | " "                                | 53876 | "       |
| .....               | 9.17  | 3.46  | 2.40  | 0.69 | 17.00 | 18.70 | " "                                | 53877 | "       |
| .....               | 9.50  | 5.10  | 2.56  | 0.50 | 16.05 | 17.75 | " "                                | 53878 | "       |
| .....               | 8.67  | 5.02  | 2.56  | 0.51 | 15.90 | 17.40 | " "                                | 53879 | "       |
| .....               | 10.32 | 6.66  | 2.94  | 0.44 | 13.90 | 15.50 | " "                                | 53880 | "       |
| .....               | 9.67  | 3.30  | 2.38  | 0.72 | 17.20 | 19.05 | " "                                | 53881 | "       |
| .....               | 9.22  | 4.36  | 2.44  | 0.56 | 16.60 | 18.25 | " "                                | 53882 | "       |
| .....               | 9.52  | 5.04  | 2.60  | 0.51 | 15.90 | 17.55 | " "                                | 53883 | "       |
| .....               | 9.80  | 4.58  | 2.40  | 0.51 | 16.25 | 18.00 | " "                                | 53884 | "       |
| .....               | 9.25  | 4.70  | 2.48  | 0.53 | 16.90 | 18.60 | " "                                | 53885 | "       |

## J. C. FERGUSON, INSPECTOR.

|                   |      |      |      |      |       |       |                                    |       |         |
|-------------------|------|------|------|------|-------|-------|------------------------------------|-------|---------|
| Jamaica Ginger... | 7.72 | 4.56 | 3.24 | 0.71 | 17.65 | 19.15 | Ginger tissues and<br>starch only. | 59333 | Genuine |
| .....             | 7.62 | 4.40 | 2.58 | 0.59 | 16.20 | 7.55  | " "                                | 59334 | "       |

| Date of Collection. | Nature of Sample. | No. of Sample. | Name and Address of Vendor. | Cost.     |        | Name and Address of Manufacturer or Furnisher, as given by Vendor. |            |
|---------------------|-------------------|----------------|-----------------------------|-----------|--------|--|------------|
|                     |                   |                |                             | Quantity. | Cents. | Manufacturer.  | Furnisher. |

## DISTRICT OF NEW BRUNSWICK—

|       |    |               |   |       |    |   |                                       |
|-------|----|---------------|---|-------|----|---|---------------------------------------|
| 1913. |    |               |   |       |    |   |                                       |
| Dec.  | 8  | Ground Ginger | 59335 Vanwart Bros., St. John, N.B.                       | 1 lb. | 40 | Unknown   |                                       |
| "     | 10 | "             | 59336 Puddington, Wetmore, Morrison, Ltd., St. John, N.B. | 1 "   | 25 | Vendors   |                                       |
| "     | 17 | "             | 59337 Hill Bros., St. Stephen, N.B.                       | 1 "   | 30 | Gorman, Eckhart & Co., London & Winnipeg, Can.      |                                       |
| "     | 17 | "             | 59338 Yexxa Grocery Co. Ltd., St. Stephen, N.B.           | 1 "   | 25 | White, Swan S. & C. Co., Ltd., Toronto, Ont.        |                                       |
| 1914. |    |               |   |       |    |   |                                       |
| Jan.  | 6  | "             | 59339 Currie Bros., Fredericton, N.B.                     | 1 "   | 30 |   | A. F. Randolph & Son.                 |
| "     | 6  | "             | 59340 G. T. Whelpley, Fredericton, N.B.                   | 1 "   | 40 | Pure Gold Mfg. Co., Ltd., Toronto, Ont.             |                                       |
| "     | 7  | "             | 59341 B. H. Smith & Sons, Woodstock, N.B.                 | 1 "   | 35 | S. H. & A. W. Ewing, Montreal.                      |                                       |
| "     | 9  | "             | 59342 H. N. Dickinson, Perth, N.B.                        | 1 "   | 40 | G. F. Barbour Co., Ltd., St. John, N.B.             |                                       |
| "     | 13 | "             | 59343 King Asbell & Co., Sussex, N.B.                     | 1 "   | 25 |   | G. S. DeForest & Sons, St. John, N.B. |
| "     | 14 | "             | 59344 Geo. A. Robertson, Moncton, N.B.                    | 1 "   | 30 | S. H. Ewing & Sons, Montreal.                       |                                       |
| "     | 14 | "             | 59345 D. A. McBeath, Moncton, N.B.                        | 1 "   | 40 | Puddington, Wetmore, Morrison, Ltd., St. John, N.B. |                                       |
| "     | 16 | "             | 59346 W. S. Loggie Co., Ltd., Chatham, N.B.               | 1 "   | 35 | White, Swan S. & C. Co., Ltd., Toronto, Ont.        |                                       |
| "     | 16 | "             | 59347 A. H. Marquis, Chatham, N.B.                        | 1 "   | 40 | "   |                                       |

## DISTRICT OF QUEBEC—

|       |    |               |  |       |    |                              |                          |
|-------|----|---------------|--|-------|----|------------------------------|--------------------------|
| 1913. |    |               |  |       |    |                              |                          |
| Nov.  | 27 | Ground Ginger | 56006 L. Desgagne, 914 rue St. Valier, Quebec.       | 1 lb. | 40 | Unknown                      | G. E. Hamel              |
| "     | 28 | "             | 56007 Emile Blouin, 30 rue Carillon, Quebec.         | 1 "   | 30 | "                            | Turcot's & Frere         |
| "     | 28 | "             | 56008 Jos. Poulin, 2 ave Renaud, Quebec.             | 1 "   | 40 | S. H. Ewing & Son, Montreal. |                          |
| "     | 28 | "             | 56009 Louis Blouin, 81 ave Renaud, Quebec.           | 1 "   | 40 | Unknown                      | Quebec Preserving Co.    |
| "     | 28 | "             | 56010 Alphonse Turgeon, 111 rue St. Germain, Quebec. | 1 "   | 40 | "                            | Derouin Frere & Rattray. |



## GROUND GINGER.

| Inspector's Report.<br>(Is not an expression<br>of Opinion.) | Results of Analysis. |        |                |        |                           |                              | Microscopical Exam-<br>ination. | No. of Sample. | Remarks and<br>Opinion of the<br>Chief Analyst. |
|--|----------------------|--------|----------------|--------|---------------------------|------------------------------|---------------------------------|----------------|---|
|  | Moisture.            | Ash.   |                |        | Cold Water<br>Extractive. |                              |                                 |                |   |
|  |                      | Total. | Water Soluble. | Ratio. | Normal.                   | Calculated to<br>dry Sample. |                                 |                |   |

## Conclude 1.

|                    | p. c. | p. c. | p. c. |      | p. c. | p. c. |                                  |       |          |
|--------------------|-------|-------|-------|------|-------|-------|----------------------------------|-------|----------|
| .....              | 7.15  | 5.24  | 2.40  | 0.46 | 12.50 | 13.45 | Ginger tissues & starch<br>only. | 59335 |          |
| Signet Brand.....  | 7.10  | 4.26  | 2.11  | 0.60 | 17.20 | 18.50 | " "                              | 59336 | Genuine. |
| Forest City Brand. | 7.25  | 3.54  | 2.38  | 0.67 | 16.25 | 17.50 | " "                              | 59337 | "        |
| .....              | 7.25  | 3.64  | 2.58  | 0.71 | 18.20 | 19.60 | " "                              | 59338 | "        |
| .....              | 7.17  | 3.16  | 1.50  | 0.47 | 14.65 | 15.80 | " "                              | 59339 | "        |
| Jarasia Ginger.... | 7.77  | 3.34  | 2.36  | 0.71 | 17.80 | 19.30 | " "                              | 59340 | "        |
| .....              | 7.90  | 3.56  | 1.84  | 0.52 | 13.90 | 15.05 | " "                              | 59341 | "        |
| .....              | 8.02  | 4.62  | 2.60  | 0.56 | 16.45 | 17.90 | " "                              | 59342 | "        |
| .....              | 8.12  | 5.80  | 2.90  | 0.50 | 14.30 | 15.55 | " "                              | 59343 | "        |
| .....              | 7.42  | 3.70  | 2.54  | 0.69 | 18.55 | 20.05 | " "                              | 59344 | "        |
| Signet Brand....   | 8.42  | 4.26  | 2.18  | 0.51 | 12.30 | 13.45 | " "                              | 59345 |          |
| .....              | 7.85  | 3.30  | 2.32  | 0.70 | 16.80 | 18.20 | " "                              | 59346 | Genuine. |
| .....              | 7.70  | 3.70  | 2.64  | 0.71 | 17.80 | 19.30 | " "                              | 59347 | "        |

## F. X. W. E. BELAND, INSPECTOR.

|       |      |      |      |      |       |       |                                  |       |                                |
|-------|------|------|------|------|-------|-------|----------------------------------|-------|--------------------------------|
| ..... | 7.32 | 3.58 | 2.36 | 0.66 | 17.70 | 19.10 | Ginger tissues & starch<br>only. | 56006 | Genuine.                       |
| ..... | 7.45 | 3.82 | 2.38 | 0.62 | 15.90 | 18.15 | " "                              | 56007 | "                              |
| ..... | 7.32 | 2.96 | 0.54 | 0.18 | 6.30  | 6.80  | " "                              | 56008 | Extractive low<br>Adulterated. |
| ..... | 7.20 | 4.42 | 1.76 | 0.40 | 15.35 | 16.55 | " "                              | 56009 | Genuine.                       |
| ..... | 6.95 | 2.00 | 0.50 | 0.25 | 7.65  | 8.25  | About 50% maize starch           | 56010 | Adulterated.                   |

| Date of Collection. | Nature of Sample. | No. of Sample. | Name and Address of Vendor. | Cost.     |        | Name and Address of Manufacturer or Furnisher, as given by Vendor. |            |
|---------------------|-------------------|----------------|-----------------------------|-----------|--------|--|------------|
|                     |                   |                |                             | Quantity. | Cents. | Manufacturer.  | Furnisher. |

## DISTRICT OF QUEBEC—

|         |               |       |   |       |    |  |                          |
|---------|---------------|-------|---|-------|----|--|--------------------------|
| 1913.   |               |       |   |       |    |  |                          |
| Nov. 28 | Ground Ginger | 56011 | V. Bedard, 112 rue St. Germain, Quebec.       | 1 lb. | 30 | Unknown                                    | Gagnon & Garent          |
| Dec. 1  | "             | 56012 | Jos. Guimond, 179 rue Bayard, Quebec.         | 1 "   | 30 | "  | Unknown                  |
| " 2     | "             | 56013 | Jos. Peltier, 185 rue Mas-sue, Quebec.        | 1 "   | 40 | "  | J. B. Reneaud & Cie.     |
| " 2     | "             | 56014 | H. Paquet, 132 rue Mont-calm, Quebec.         | 1 "   | 30 | "  | Unknown                  |
| " 2     | "             | 56015 | J. B. Routhier, 1023 Rue St. Valier, Quebec.  | 1 "   | 50 | "  | Bedard & Frere.          |
| " 2     | "             | 56016 | J. F. Ratte, 1170 Rue St. Valier, Que.        | 1 "   | 40 | "  | Drouin, Frere & Rattray. |
| " 3     | "             | 56017 | T. Langlois, 1175 Rue St. Valier, Que.        | 1 "   | 30 | "  | Unknown                  |
| " 3     | "             | 56018 | C. G. Carpenter, 1271 Rue St. Valier, Quebec. | 1 "   | 40 | J. J. Duffy Co., 5 St. Paul St., Montreal. | Whitehead & Turner.      |
| " 3     | "             | 56019 | J. Rousseau, 1289 Rue St. Valier, Quebec.     | 1 "   | 40 | Unknown                                    | Ewing, Mon-treal.        |
| " 3     | "             | 56020 | Albert Faucher, 49 Rue St. Bernard, Quebec.   | 1 "   | 30 | "  | Turcotte & Frere.        |

## DISTRICT OF EAST QUEBEC—

|         |               |      |                                  |       |    |                         |                              |
|---------|---------------|------|----------------------------------|-------|----|-------------------------|------------------------------|
| Dec. 26 | Ground Ginger | 2402 | D. Bouchard, St. Anne des Monts. | 1 lb. | 35 |                         | Gagnon & Gar-ent, Quebec.    |
| " 26    | "             | 2409 | N. Pelletier, jr., Cap Chat.     | 1 "   | 35 | W. E. Ewing, Mon-treal. |                              |
| " 27    | "             | 2413 | Felix Landri, Cap Chat.          | 1 "   | 35 |                         | S. H. Ewing & Son, Montreal. |
| " 29    | "             | 2423 | Paul Savard, Matane.             | 1 "   | 35 |                         | Whitehead & Turner, Que.     |
| " 30    | "             | 2428 | Ed. Ouillet, Rivière Blanche.    | 1 "   | 35 | Unknown                 |                              |
| 1914.   |               |      |                                  |       |    |                         |                              |
| Jan. 10 | "             | 2435 | C. Banville, St. Flavie.         | 1 "   | 35 |                         | J. B. Dupuis, Quebec.        |
| " 15    | "             | 2460 | H. Page, R. du Loup.             | 1 "   | 30 | Unknown                 |                              |
| " 15    | "             | 2463 | J. S. Proulx, R. du Loup.        | 1 "   | 40 |                         | Unknown                      |
| " 15    | "             | 2468 | J. L. Drolet, R. du Loup.        | 1 "   | 40 |                         | J. B. Reneaud, Quebec.       |

## GROUND GINGER.

| Inspector's Report.<br>(Is not an expression<br>of Opinion.) | Results of Analysis. |        |                |        |                           |                              | Microscopical Exam-<br>ination. | No. of Sample. | Remarks and<br>Opinion of the<br>Chief Analyst. |
|--|----------------------|--------|----------------|--------|---------------------------|------------------------------|---------------------------------|----------------|---|
|  | Moisture.            | Ash.   |                |        | Cold Water<br>Extractive. |                              |                                 |                |   |
|  |                      | Total. | Water Soluble. | Ratio. | Normal.                   | Calculated to<br>dry Sample. |                                 |                |   |

Concluded.

|  |       |       |       |      |       |       |   |       |              |
|--|-------|-------|-------|------|-------|-------|---|-------|--------------|
|  | p. c. | p. c. | p. c. |      | p. c. | p. c. |   |       |              |
|  | 7.67  | 4.30  | 2.30  | 0.53 | 13.85 | 15.00 | Ginger tissues & starch only.   | 56011 | Genuine.     |
|  | 6.57  | 2.70  | 0.30  | 0.11 | 13.45 | 14.40 | Consists principally of wheat flour coloured with turmeric, and about 25% of unidentified foreign material. Contains no ginger. | 56012 | Adulterated. |
|  | 7.85  | 4.80  | 2.24  | 0.19 | 13.85 | 15.00 | Ginger tissues & starch only.   | 56013 | Genuine.     |
|  | 7.10  | 6.46  | 2.14  | 0.33 | 11.15 | 12.00 | " "   | 56014 |              |
|  | 7.45  | 3.34  | 2.42  | 0.72 | 18.75 | 20.25 | " "   | 56015 | Genuine.     |
|  | 6.77  | 1.96  | 0.49  | 0.20 | 7.15  | 7.70  | About 50% maize starch.   | 56016 | Adulterated. |
|  | 7.50  | 5.84  | 0.72  | 0.12 | 10.60 | 11.45 | About 25% rice starch.  | 56017 | "            |
|  | 7.30  | 3.10  | 1.46  | 0.47 | 15.45 | 16.70 | Ginger tissues and starch only.   | 56018 | Genuine.     |
|  | 7.52  | 3.36  | 1.50  | 0.45 | 12.20 | 13.20 | " "   | 56019 |              |
|  | 7.05  | 3.24  | 0.32  | 0.10 | 6.10  | 6.55  | About 40% rice starch and turmeric.   | 56020 | Adulterated. |

## ALP. PELLETIER, INSPECTOR.

|  |      |      |      |      |       |       |                                    |      |              |
|--|------|------|------|------|-------|-------|------------------------------------|------|--------------|
|  | 8.32 | 4.24 | 2.32 | 0.55 | 13.55 | 14.75 | Ginger tissues and starch only.    | 2402 | Genuine.     |
|  | 7.50 | 2.04 | 0.64 | 0.31 | 11.00 | 11.90 | At least 75% wheat flour. Cayenne. | 2409 | Adulterated. |
|  | 8.25 | 2.98 | 1.18 | 0.50 | 13.20 | 14.35 | Ginger tissues and starch only.    | 2413 | Genuine.     |
|  | 7.85 | 1.94 | 0.80 | 0.41 | 7.75  | 7.35  | About 25% maize starch.            | 2423 | Adulterated. |
|  | 7.75 | 3.74 | 1.44 | 0.39 | 9.40  | 10.00 | Ginger tissues and starch only.    | 2428 |              |
|  | 7.65 | 1.70 | 0.30 | 0.18 | 4.85  | 5.25  | About 25% maize starch.            | 2435 | Adulterated. |
|  | 7.62 | 4.50 | 2.58 | 0.57 | 15.05 | 16.30 | Ginger tissues and starch only.    | 2460 | Genuine.     |
|  | 7.82 | 4.42 | 1.82 | 0.41 | 11.85 | 12.85 | About 20% wheat flour.             | 2463 | Adulterated. |
|  | 8.02 | 3.38 | 2.32 | 0.69 | 18.15 | 19.95 | Ginger tissues and starch only.    | 2468 | Genuine.     |

| Date of Collection. | Nature of Sample. | No. of Sample. | Name and Address of Vendor. | Cost.     |        | Name and Address of Manufacturer or Furnisher, as given by Vendor. |            |
|---------------------|-------------------|----------------|-----------------------------|-----------|--------|--|------------|
|                     |                   |                |                             | Quantity. | Cents. | Manufacturer.  | Furnisher. |

## DISTRICT OF QUEBEC—

| 1914.   |              |      |                             |       |    |       |                                   |
|---------|--------------|------|-----------------------------|-------|----|-------|-----------------------------------|
| Jan. 15 | GroundGinger | 2470 | E. Michaud, R. du Loup.     | 1 lb. | 35 | ..... | Ewing & Son, Montreal.            |
| " 16    | "            | 2474 | Damien & Co.....            | 1 "   | 40 | ..... | Whitehead & Turner, Quebec.       |
| " 16    | "            | 2476 | N. Dobreuil, Fraserville..  | 1 "   | 40 | ..... | T. Langlois, R. du Loup.          |
| " 16    | "            | 2478 | J. B. Michaud, Fraserville, | 1 "   | 40 | ..... | S. H. Ewing, Montreal.            |
| " 16    | "            | 2479 | L. H. Levasseur .....       | 1 "   | 40 | ..... | Pure Gold Mfg. Co., Toronto, Ont. |

## DISTRICT OF THREE RIVERS—

| 1913.   |              |       |                                 |       |    |                               |                                |
|---------|--------------|-------|---------------------------------|-------|----|-------------------------------|--------------------------------|
| Nov. 24 | GroundGinger | 59782 | Alexis Martineau, St. Cleophas. | 1 lb. | 40 | .....                         | Jos. Dufresne, Joliette.       |
| Dec. 4  | "            | 59788 | Jos Mosseau, St. Felix          | 1 "   | 40 | .....                         | " "                            |
| Nov. 22 | "            | 59790 | Wilfrid Bisette, St. Felix      | 1 "   | 40 | .....                         | Chevalier & Pouliot, Joliette. |
| " 24    | "            | 59791 | Leonce Meville, St. Cleophas.   | 1 "   | 35 | Herron Leblanc, Montreal.     | .....                          |
| " 28    | "            | 59793 | J. T. Laferrriere, St. Gabriel. | 1 "   | 30 | .....                         | Chevalier & Pouliot, Joliette. |
| " 29    | "            | 59794 | Ulric Desrochers, St. Gabriel.  | 1 "   | 40 | .....                         | Magnan & Chevalier, Joliette.  |
| Dec. 1  | "            | 59795 | Alfred Lavallee, Berthierville. | 1 "   | 40 | .....                         | Laporte Martin, Montreal.      |
| " 1     | "            | 59796 | Dionis Tellier, Berthier.       | 1 "   | 40 | S. H. Ewing & Sons, Montreal. | .....                          |
| " 1     | "            | 59797 | J. O. Davian, Berthier...       | 1 "   | 40 | Lyman Sons, Montreal.         | .....                          |
| " 1     | "            | 59798 | O. Paquette, Berthierville      | 1 "   | 30 | Kearney Bros., Montreal.      | .....                          |
| " 1     | "            | 59799 | Arthur Caisse, Berthierville.   | 1 "   | 40 | Laporte Martin, Montreal.     | .....                          |
| " 1     | "            | 59800 | Beaudoin Pierre, Berthierville. | 1 "   | 40 | Hadon Hebert, Montreal.       | .....                          |
| " 4     | "            | 60924 | Ernest Asselin, St. Felix.      | 1 "   | 40 | Chevalier & Pouliot Joliette. | .....                          |
| " 4     | "            | 60925 | Arthur Tessier, St. Felix.      | 1 "   | 40 | Unknown.....                  | .....                          |
| " 10    | "            | 60926 | Magnan Bros., Joliette.         | 1 "   | 40 | J. V. Boudrias, Montreal.     | .....                          |

## GROUND GINGER.

| Inspector's Report.<br>(Is not an expression<br>of Opinion.) | Results of Analysis. |        |                |        |                           |                              | Microscopical Exam-<br>ination. | No. of Sample | Remarks and<br>Opinion of the<br>Chief Analyst. |
|--|----------------------|--------|----------------|--------|---------------------------|------------------------------|---------------------------------|---------------|---|
|  | Moisture.            | Ash.   |                |        | Cold Water<br>Extractive. |                              |                                 |               |   |
|  |                      | Total. | Water Soluble. | Ratio. | Normal.                   | Calculated to<br>dry Sample. |                                 |               |   |

Concluded.

|  |       |       |       |      |       |       |                                    |      |          |
|--|-------|-------|-------|------|-------|-------|------------------------------------|------|----------|
|  | p. c. | p. c. | p. c. |      | p. c. | p. c. | Ginger tissues and<br>starch only. | 2470 |          |
|  | 8.10  | 3.42  | 1.48  | 0.43 | 12.50 | 13.60 | " "                                | 2474 |          |
|  | 7.82  | 3.22  | 1.18  | 0.37 | 12.10 | 13.10 | " "                                | 2476 | Genuine. |
|  | 8.20  | 3.64  | 2.14  | 0.59 | 15.10 | 16.45 | " "                                | 2478 | "        |
|  | 7.62  | 3.54  | 2.46  | 0.69 | 16.90 | 18.30 | " "                                | 2479 | "        |
|  | 8.37  | 3.78  | 2.30  | 0.61 | 15.50 | 16.90 | " "                                |      |          |

DR. V. P. LAVALLE, INSPECTOR.

|  |      |      |      |      |       |       |  |       |              |
|--|------|------|------|------|-------|-------|--|-------|--------------|
|  | 7.90 | 4.40 | 2.12 | 0.48 | 14.55 | 15.75 | Ginger tissues and<br>starch only.   | 59782 | Genuine.     |
|  | 7.30 | 2.26 | 1.56 | 0.69 | 13.10 | 14.15 | About 50 p.c. maize and<br>wheat flour.  | 59788 | Adulterated  |
|  | 7.00 | 3.76 | 1.88 | 0.50 | 11.35 | 12.20 | Ginger tissues and<br>starch only.   | 59790 |              |
|  | 7.22 | 5.62 | 1.12 | 0.20 | 15.86 | 17.00 | " "  | 59791 | Genuine.     |
|  | 7.02 | 3.80 | 1.88 | 0.50 | 11.25 | 12.10 | " "  | 59793 |              |
|  | 7.47 | 4.98 | 1.26 | 0.25 | 16.35 | 17.70 | " "  | 59794 | Genuine.     |
|  | 7.22 | 4.28 | 2.62 | 0.61 | 14.60 | 15.70 | " "  | 59795 | "            |
|  | 7.67 | 2.82 | 1.26 | 0.45 | 11.75 | 12.75 | " "  | 59796 |              |
|  | 8.00 | 5.54 | 2.00 | 0.36 | 11.85 | 12.90 | " "  | 59797 |              |
|  | 7.40 | 4.10 | 2.62 | 0.64 | 16.40 | 17.70 | " "  | 59798 | Genuine.     |
|  | 7.67 | 4.40 | 2.32 | 0.53 | 13.70 | 14.85 | " "  | 59799 | "            |
|  | 7.47 | 3.24 | 1.40 | 0.43 | 12.95 | 14.00 | About 25 p.c. maize and<br>wheat flour.  | 59800 | Adulterated. |
|  | 7.50 | 4.24 | 2.00 | 0.47 | 12.25 | 13.25 | Ginger tissues and<br>starch only.   | 60924 |              |
|  | 5.52 | 9.16 | 8.34 | 0.91 | 14.86 | 15.65 | At least 75 p.c. foreign<br>matter, consisting of<br>wheat flour, olive<br>stones and cayenne.<br>Ash, consists princi-<br>pally of alkaline car-<br>bonate. | 60925 | Adulterated. |
|  | 7.15 | 4.80 | 2.20 | 0.46 | 13.65 | 14.70 | Ginger tissues and<br>starch only.   | 60926 | Genuine.     |

## BULLETIN No. 286—

| Date of Collection. | Nature of Sample. | No. of Sample. | Name and Address of Vendor. | Cost.     |        | Name and Address of Manufacturer or Furnisher, as given by Vendor. |            |
|---------------------|-------------------|----------------|-----------------------------|-----------|--------|--|------------|
|                     |                   |                |                             | Quantity. | Cents. | Manufacturer.  | Furnisher. |

## DISTRICT OF EASTERN TOWNSHIPS—

| 1913. |    |               |   |        |    |                                       |                                   |
|-------|----|---------------|---|--------|----|---------------------------------------|-----------------------------------|
| Dec.  | 4  | Ground Ginger | 2222 P. Boissonneault, St. Maurice de Thetford. | 14 oz. | 25 | Unknown                               | Unknown                           |
| "     | 9  | "             | 2223 T. Roberge, Sherbrooke.                    | 1 lb.  | 35 | "                                     | "                                 |
| "     | 10 | "             | 2224 P. Thibault, Victoriaville                 | 1 "    | 30 | Herron, Leblanc, Ltd., Montreal.      |                                   |
| "     | 11 | "             | 2225 Johnston Bros., Lennoxville.               | 3 pkg. | 24 | "                                     | "                                 |
| "     | 15 | "             | 2226 Pinaud & Freres, Drummondville.            | 1 lb.  | 40 |                                       |                                   |
| "     | 15 | "             | 2227 W. E. Lewis, Knowlton.                     | 3 pkg. | 30 | The Pure Gold Mfg. Co., Toronto, Ont. |                                   |
| "     | 15 | "             | 2228 L. H. Fibus, Knowlton                      | 3 "    | 30 | S. H. Ewing & Sons, Montreal.         |                                   |
| "     | 16 | "             | 2229 D. L. G. Lavigne, Lawrenceville.           | 1 pkg. |    |                                       | Hudon, Hebert & Cie., Montreal.   |
| "     | 16 | "             | 2230 N. Hamel, Magog.                           | 1 lb.  | 40 | Nat. Coffee & Spice Co., Montreal.    |                                   |
| "     | 17 | "             | 2231 Hubert & Jolin, Waterloo, P. Q.            | 1 "    | 35 | Unknown                               | Unknown                           |
| "     | 17 | "             | 2232 R. W. Bradford, Granby.                    | 1 "    | 30 | "                                     | "                                 |
| 1914. |    |               |   |        |    |                                       |                                   |
| Jan.  | 13 | "             | 2233 Dallaire & Veilleux, St. Joseph Be.        | 3 pkg. | 30 | The Brodie Mfg. Co., Montreal.        |                                   |
| "     | 15 | "             | 2234 J. Rancourt, St. Victor de Tring.          | 1 lb.  | 22 | Unknown                               | Unknown                           |
| "     | 15 | "             | 2235 Roberge & Fils, St. Evariste.              | 1 "    | 40 |                                       | Whitehead & Turner, Quebec        |
| "     | 20 | "             | 2236 N. Prefontaine, Marieville                 | 1 "    | 25 |                                       | L. Chaput fils et Cie., Montreal. |

## DISTRICT OF MONTREAL—

|      |    |               |  |        |    |  |                              |
|------|----|---------------|--|--------|----|--|------------------------------|
| Jan. | 13 | Ground Ginger | 58077 Longeway & Lewis, 320 St. Antoine St., Montreal          | 3 pkg. | 15 |  | S. H. Ewing & Sons, Montreal |
| "    | 13 | "             | 58078 T. Coggins, 319 St. Antoine St., Montreal.               | 1 lb.  | 40 |  | LeBlanc, Ltd.                |
| "    | 13 | "             | 58079 R. H. Fetterley, 305 St. Antoine St., Montreal.          | 1 "    | 40 |  | S. J. Carter.                |
| "    | 15 | "             | 58080 A. Desrochers, 7 Mountain St., Montreal.                 | 1 "    | 40 |  | Herron & Leblanc.            |
| "    | 16 | "             | 58081 Co-Operative Grocery Co., 293 St. Antoine St., Montreal. | 1 "    | 40 |  | "                            |
| "    | 16 | "             | 58082 J. R. Lefebvre, 246 St. Antoine St., Montreal.           | 1 "    | 40 |  | "                            |
| "    | 16 | "             | 58083 E. Rochon, 697 Notre Dame St. West, Montreal.            | 1 "    | 40 |  | Unknown                      |

## GROUND GINGER.

| Inspector's Report.<br>(Is not an expression<br>of Opinion.) | Results of Analysis. |        |                |        |                           |                              | Microscopical Exam-<br>ination. | No. of Sample. | Remarks and<br>Opinion of the<br>Chief Analyst. |
|--|----------------------|--------|----------------|--------|---------------------------|------------------------------|---------------------------------|----------------|---|
|  | Moisture.            | Ash.   |                |        | Cold Water<br>Extractive. |                              |                                 |                |   |
|  |                      | Total. | Water Soluble. | Ratio. | Normal.                   | Calculated to<br>dry Sample. |                                 |                |   |
|  |                      |        |                |        |                           |                              |                                 |                |   |

J. C. ROULEAU, INSPECTOR.

| p. c. | p. c. | p. c. |      | p. c. | p. c. |                                       |      |                 |
|-------|-------|-------|------|-------|-------|---------------------------------------|------|-----------------|
| 7.37  | 5.58  | 2.86  | 0.51 | 10.50 | 11.35 | Ginger tissues and starch only.       | 2222 |                 |
| 7.20  | 2.28  | 1.52  | 0.67 | 13.60 | 14.65 | About 10 p.c. wheat and maize starch. | 2223 | Adulterated. 13 |
| 7.27  | 2.32  | 1.46  | 0.63 | 12.80 | 13.80 | About 25 p.c. maize and wheat flour.  | 2224 | " 14            |
| 6.67  | 3.22  | 1.30  | 0.40 | 13.85 | 14.85 | About 50 p.c. wheat flour.            | 2225 | " 15            |
| 7.27  | 3.48  | 1.46  | 0.42 | 13.35 | 14.40 | About 50 p.c. maize and wheat flour.  | 2226 | " 16            |
| 8.07  | 3.46  | 2.36  | 0.68 | 17.35 | 18.90 | Ginger tissues and starch only.       | 2227 | - Genuine 17    |
| 7.57  | 3.58  | 1.68  | 0.47 | 12.50 | 13.50 | " "                                   | 2228 | " 18            |
| 7.35  | 2.30  | 1.50  | 0.65 | 13.65 | 14.75 | About 40% maize and wheat flour.      | 2229 | Adulterated.    |
| 7.07  | 3.76  | 1.70  | 0.45 | 13.70 | 14.75 | Ginger tissues and starch only.       | 2230 | Genuine.        |
| 7.77  | 3.46  | 1.54  | 0.45 | 12.55 | 13.60 | " "                                   | 2231 |                 |
| 7.06  | 2.08  | 1.44  | 0.69 | 13.20 | 14.20 | About 40% maize and wheat flour.      | 2232 | Adulterated. 18 |
| 7.47  | 6.92  | 2.18  | 0.32 | 11.40 | 12.30 | Ginger tissues and starch only.       | 2233 |                 |
| 7.55  | 4.26  | 2.48  | 0.58 | 16.20 | 17.50 | " "                                   | 2234 | Genuine.        |
| 8.17  | 3.02  | 1.44  | 0.48 | 14.40 | 15.70 | " "                                   | 2235 | "               |
| 7.40  | 5.60  | 2.52  | 0.45 | 13.55 | 14.65 | " "                                   | 2236 | "               |

D. J. KEARNEY, INSPECTOR.

|      |      |      |      |       |       |                                   |       |                 |
|------|------|------|------|-------|-------|-----------------------------------|-------|-----------------|
| 7.37 | 4.00 | 1.86 | 0.46 | 15.40 | 16.60 | Ginger tissues and starch only.   | 58077 | Genuine.        |
| 7.47 | 3.08 | 1.54 | 0.50 | 13.45 | 14.55 | About 10% wheat and maize starch. | 58078 | Adulterated. 19 |
| 7.25 | 4.24 | 2.32 | 0.55 | 16.35 | 17.65 | Ginger tissues and starch only.   | 58079 | Genuine.        |
| 7.70 | 2.10 | 1.42 | 0.68 | 13.45 | 14.55 | About 10% wheat and maize starch. | 58080 | Adulterated. 20 |
| 8.05 | 3.42 | 2.46 | 0.72 | 18.10 | 19.90 | Ginger tissues and starch only.   | 58081 | Genuine.        |
| 7.87 | 4.62 | 1.80 | 0.39 | 14.60 | 15.85 | " "                               | 58082 | "               |
| 7.70 | 3.06 | 1.56 | 0.51 | 13.30 | 14.40 | About 10% wheat and maize starch. | 58083 | Adulterated. 21 |

| Date of Collection.             | Nature of Sample. | No. of Sample. | Name and Address of Vendor.                            | Cost.     |        | Name and Address of Manufacturer or Furnisher, as given by Vendor. |                      |
|---------------------------------|-------------------|----------------|--|-----------|--------|--|----------------------|
|                                 |                   |                |  | Quantity. | Cents. | Manufacturer.  | Furnisher.           |
| <b>DISTRICT OF MONTREAL—</b>    |                   |                |  |           |        |  |                      |
| 1913.                           |                   |                |  |           |        |  |                      |
| Jan. 20                         | Ground Ginger     | 58084          | Archambault Frères, 747 Notre Dame St. West, Montreal. | 14 oz.    | 35     |  | Herron & Leblanc.    |
| " 20                            | "                 | 58085          | U. Bousquet, 892 Dame St. West, Montreal.              | 1 lb.     | 35     |  | "                    |
| " 20                            | "                 | 58086          | Geo. Rolland, 973 Dame St. West, Montreal.             | 1 "       | 40     |  | Lahue & Cloutier.    |
| " 20                            | "                 | 58087          | J. A. Doré, 1286 Notre Dame St. West, Montreal.        | 14 oz.    | 35     |  | Hudon, Hebert & Cie. |
| " 21                            | "                 | 58088          | Robitaille & Gauthier, 21 Craig St. West, Montreal.    | 1 lb.     | 40     |  | J. V. Boudrias, Ltd. |
| " 23                            | "                 | 58089          | J. Clement, 70 Vinet St., Montreal.                    | 1 "       | 40     |  | Hudon & Orsali.      |
| " 23                            | "                 | 58090          | V. Viau, 39 Vinet St., Montreal.                       | 1 "       | 35     |  | S. H. Ewing & Sons.  |
| " 23                            | "                 | 58091          | H. Legault, 176 Duvernay St., Montreal.                | 1 "       | 40     |  | Herron & Leblanc.    |
| <b>DISTRICT OF VALLEYFIELD—</b> |                   |                |  |           |        |  |                      |
| Dec 15                          | Ground Ginger     | 58545          | J. Boyle, Alexandria, Ont.                             | 1 lb.     | 40     |  |                      |
| " 15                            | "                 | 58546          | P. A. Huot & Son, Alexandria, Ont.                     | 1 "       | 35     |  |                      |
| " 15                            | "                 | 58547          | Augusta Lalonde, Alexandria, Ont.                      | 1 "       | 40     | S. H. Ewing & Sons.  |                      |
| " 29                            | "                 | 58548          | Peter McLaurin, Vankleek Hill, Ont.                    | 1 "       | 30     |  |                      |
| " 29                            | "                 | 58549          | P. T. McLaurin, Vankleek Hill, Ont.                    | 1 "       | 40     |  |                      |
| " 29                            | "                 | 58550          | George Chalouers, Vankleek Hill, Ont.                  | 1 "       | 25     | White Swan S. & C. Co., Ltd.                                       |                      |
| " 29                            | "                 | 58551          | J. C. Prown, Vankleek Hill, Ont.                       | 1 "       | 30     |  |                      |
| " 29                            | "                 | 58552          | John Wilson, Vankleek Hill, Ont.                       | 1 "       | 40     |  |                      |
| " 30                            | "                 | 58553          | D. Seward, Hawkesbury, Ont.                            | 1 "       | 35     |  |                      |
| " 30                            | "                 | 58554          | A. M. Steele, Hawkesbury, Ont.                         | 3 pkgs    | 30     | S. H. Ewing & Sons.  |                      |
| " 30                            | "                 | 58555          | Gilbert & Desjardine, Hawkesbury, Ont.                 | 1 lb.     | 25     |  |                      |
| " 30                            | "                 | 58556          | A. Legault, Hawkesbury, Ont.                           | 1 "       | 38     |  |                      |
| " 30                            | "                 | 58557          | A. Dumoulin, Hawkesbury, Ont.                          | 1 "       | 35     |  |                      |
| " 30                            | "                 | 58558          | A. St. Jules, Hawkesbury, Ont.                         | 1 "       | 35     |  |                      |
| " 30                            | "                 | 58559          | John Lecours, Hawkesbury, Ont.                         | 1 "       | 40     |  |                      |



## GROUND GINGER.

| Inspector's Report.<br>(Is not an expression<br>of Opinion.) | Results of Analysis |        |                |        |                           |                              | Microscopical Exam-<br>ination. | No. of Sample. | Remarks and<br>Opinion of the<br>Chief Analyst. |
|--|---------------------|--------|----------------|--------|---------------------------|------------------------------|---------------------------------|----------------|---|
|  | Moisture.           | Ash.   |                |        | Cold Water<br>Extractive. |                              |                                 |                |   |
|  |                     | Total. | Water Soluble. | Ratio. | Normal.                   | Calculated to<br>dry Sample. |                                 |                |   |

Concluded.

|   |       |       |       |      |       |       |                                     |       |                 |
|---|-------|-------|-------|------|-------|-------|-------------------------------------|-------|-----------------|
| .....   | p. c. | p. c. | p. c. |      | p. c. | p. c. | Ginger tissues and<br>starch only.  | 58084 |                 |
| .....   | 7.50  | 3.30  | 1.62  | 0.49 | 12.65 | 13.65 |                                     |       |                 |
| .....   | 7.52  | 3.24  | 1.28  | 0.40 | 12.95 | 14.00 | About 50% ma.<br>wheat flour        | 58085 | Adulterated. 72 |
| .....   | 7.80  | 3.16  | 1.58  | 0.50 | 12.55 | 13.60 | Ginger<br>starch                    | 58086 |                 |
| After purchase of<br>sample, vendor<br>said it was com-<br>pound. | 6.92  | 6.00  | 2.78  | 0.46 | 13.60 | 14.60 | " "                                 | 58087 | Genuine.        |
| .....   | 7.27  | 3.26  | 2.06  | 0.63 | 16.65 | 17.95 | About 10% wheat flour.              | 58088 | Adulterated. 28 |
| .....   | 7.27  | 2.48  | 1.62  | 0.65 | 14.35 | 15.50 | " 25% "                             | 58089 | " 24            |
| .....   | 7.67  | 4.32  | 2.02  | 0.47 | 12.90 | 14.00 | Ginger tissues and<br>starch only.  | 58090 | Genuine.        |
| .....   | 7.77  | 3.38  | 1.40  | 0.41 | 13.10 | 14.20 | About 50% maize and<br>wheat flour. | 58091 | Adulterated. 76 |

## J. J. COSTIGAN, ACTING INSPECTOR.

|       |      |      |      |      |       |       |  |       |                                   |
|-------|------|------|------|------|-------|-------|--|-------|-----------------------------------|
| ..... | 7.87 | 3.38 | 2.24 | 0.66 | 17.30 | 18.75 | Ginger tissues and<br>starch only.                               | 58545 | Genuine.                          |
| ..... | 7.05 | 4.26 | 3.68 | 0.72 | 17.60 | 18.95 | " "  | 58546 | "                                 |
| ..... | 7.35 | 4.12 | 2.68 | 0.65 | 18.50 | 20.00 | " "  | 58547 | "                                 |
| ..... | 7.57 | 2.64 | 1.74 | 0.66 | 14.90 | 16.15 | About 5% maize starch  | 58548 | Doubtful.                         |
| ..... | 7.80 | 3.32 | 2.32 | 0.70 | 18.35 | 19.90 | Ginger tissues and<br>starch only.                               | 58549 | Genuine.                          |
| ..... | 7.95 | 3.64 | 2.64 | 0.72 | 17.80 | 19.35 | " "  | 58550 | "                                 |
| ..... | 7.52 | 3.94 | 1.66 | 0.42 | 12.00 | 13.00 | " "  | 58551 | "                                 |
| ..... | 8.05 | 5.38 | 3.10 | 0.58 | 13.00 | 14.15 | " "  | 58552 | Genuine.                          |
| ..... | 7.72 | 5.28 | 2.98 | 0.56 | 13.90 | 15.05 | " "  | 58553 | "                                 |
| ..... | 8.22 | 2.82 | 0.82 | 0.29 | 6.60  | 7.20  | " "  | 58554 | Extractive low<br>Adulterated. 28 |
| ..... | 7.82 | 1.36 | 0.56 | 0.41 | 10.20 | 11.05 | At least about 75%<br>wheat flour and for-<br>mulated, L'avenne. | 58555 | Adulterated. 28                   |
| ..... | 7.57 | 2.14 | 1.48 | 0.69 | 13.50 | 14.60 | At least 10% w.<br>maize starch                                  | 58556 | " 29                              |
| ..... | 8.07 | 2.18 | 1.12 | 0.51 | 11.30 | 12.30 | About 15% wheat flour.   | 58557 | "                                 |
| ..... | 7.75 | 3.10 | 1.84 | 0.59 | 15.90 | 17.25 | Ginger tissues and<br>starch only.                               | 58558 | Genuine.                          |
| ..... | 7.90 | 6.02 | 3.18 | 0.53 | 13.85 | 15.00 | " "  | 58559 | "                                 |

| Date of Collection. | Nature of Sample. | No. of Sample. | Name and Address of Vendor. | Cost.     |        | Name and Address of Manufacturer or Furnisher, as given by Vendor. |            |
|---------------------|-------------------|----------------|-----------------------------|-----------|--------|--|------------|
|                     |                   |                |                             | Quantity. | Cents. | Manufacturer.  | Furnisher. |

## DISTRICT OF ARGENTEUIL, TWO MOUNTAINS AND TERREBONE—

| 1913. |    |               |   |       |    |                           |  |
|-------|----|---------------|---|-------|----|---------------------------|--|
| Dec.  | 5  | Ground Ginger | 2322 Wilfrid Mayer, St. Jerome, P. Q.         | 1 lb. | 35 | J. W. Beaudrias, Montreal |  |
| "     | 19 | "             | 2323 G. Cote, St. Agathe des Monts.           | 1 "   | 40 | Chaput et fils            |  |
| "     | 19 | "             | 2325 E. Touchette, St. Agathe des Monts, Que. | 1 "   | 40 | Laporte et Martin         |  |

## DISTRICT OF OTTAWA—

|      |    |               |   |       |    |   |                               |
|------|----|---------------|---|-------|----|---|-------------------------------|
| Dec. | 9  | Ground Ginger | 59244 P. A. Gagne, South Indian.                      | 1 lb. | 35 | Unknown                                 | Litster Co., Toronto, Ont.    |
| "    | 9  | "             | 59245 A. J. Leveille, South Indian.                   | 1 "   | 30 | "                                       | S. H. Ewing & Sons, Montreal. |
| "    | 9  | "             | 59246 W. C. Edwards Co., Rockland.                    | 1 "   | 40 | "                                       | Dalleys, Hamilton.            |
| "    | 10 | "             | 59247 G. F. Hodgins Co., Shawville.                   | 1 "   | 35 | Pure Gold Mfg. Co., Ltd., Toronto, Ont. | Mfrs.                         |
| "    | 10 | "             | 59248 W. A. Hodgins, Shawville.                       | 1 "   | 35 | "                                       | F. J. Castle Co., Ottawa.     |
| "    | 11 | "             | 59249 Geo. Patterson, Wakefield.                      | 1 "   | 35 | "                                       | Provost & Allard, Ottawa.     |
| "    | 11 | "             | 59250 Alex. Maclaren, Wakefield.                      | 1 "   | 30 | Unknown                                 | "                             |
| "    | 16 | "             | 59251 The Civil Service Co-op. Supply Ass'n., Ottawa. | 1 "   | 40 | "                                       | "                             |
| "    | 16 | "             | 59252 R. Clark Cummings, Cummings Bridge.             | 1 "   | 40 | "                                       | S. J. Major, Ltd., Ottawa.    |
| "    | 16 | "             | 59253 Emond Co., Eastview                             | 1 "   | 30 | "                                       | Los. Grant, Ottawa.           |
| "    | 16 | "             | 59254 D. Deguire, Eastview                            | 1 "   | 40 | "                                       | S. J. Major, Ltd., Ottawa.    |
| "    | 16 | "             | 59255 Jos. Durocher, Eastview                         | 1 "   | 30 | "                                       | "                             |
| "    | 17 | "             | 59256 T. W. Collins, Friel St., Ottawa.               | 1 "   | 40 | C. H. Cochran & Co., Ottawa.            | "                             |
| "    | 18 | "             | 59257 D. Sanche, 77 Wall St., Hull, P. Q.             | 1 "   | 25 | J. M. Lowes Co., Toronto, Ont.          | "                             |
| "    | 18 | "             | 59258 M. J. Laverdure, Albert St., Hull, P. Q.        | 1 "   | 40 | Litster Pure Food Co., Toronto, Ont.    | "                             |

## GROUND GINGER.

| Inspector's Report.<br>(Is not an expression<br>of Opinion.) | Results of Analysis |        |                |        |                           |                              | Microscopical Exam-<br>ination. | No. of Sample. | Remarks and<br>Opinion of the<br>Chief Analyst. |
|--|---------------------|--------|----------------|--------|---------------------------|------------------------------|---------------------------------|----------------|---|
|  | Moisture.           | Ash.   |                |        | Cold Water<br>Extractive. |                              |                                 |                |   |
|  |                     | Total. | Water Soluble. | Ratio. | Normal.                   | Calculated to<br>dry Sample. |                                 |                |   |

N. CADIEUX, TEMPORARY INSPECTOR.

|       | p. c. | p. c. | p. c. |      | p. c. | p. c. |                                    |               |
|-------|-------|-------|-------|------|-------|-------|------------------------------------|---------------|
| ..... | 7.87  | 3.18  | 1.62  | 0.51 | 12.60 | 13.65 | Ginger tissues and<br>starch only. | 2322          |
| ..... | 6.42  | 3.20  | 2.33  | 0.72 | 16.25 | 17.30 | " "                                | 2323 Genuine. |
| ..... | 7.60  | 5.40  | 2.90  | 0.54 | 14.35 | 15.50 | " "                                | 2325 "        |

J. A. RICKEY, INSPECTOR.

|       |      |      |      |      |       |       |  |       |                                |
|-------|------|------|------|------|-------|-------|--|-------|--------------------------------|
| ..... | 7.52 | 4.54 | 2.80 | 0.62 | 13.85 | 15.00 | Ginger tissues and<br>starch only.                           | 59244 | Genuine.                       |
| ..... | 7.25 | 2.90 | 0.54 | 0.19 | 6.75  | 7.30  | " "  | 59245 | Extractive low<br>adulterated. |
| ..... | 7.15 | 4.22 | 2.50 | 0.59 | 13.70 | 14.75 | " "  | 59246 | Genuine.                       |
| ..... | 7.50 | 4.02 | 1.92 | 0.48 | 13.35 | 14.45 | " "  | 59247 | "                              |
| ..... | 7.20 | 3.44 | 1.00 | 0.29 | 12.80 | 13.80 | " "  | 59248 |                                |
| ..... | 7.15 | 4.82 | 2.18 | 0.45 | 13.70 | 14.75 | " "  | 59249 | Genuine.                       |
| ..... | 7.22 | 3.64 | 2.62 | 0.72 | 17.80 | 19.20 | " "  | 59250 | "                              |
| ..... | 7.85 | 2.64 | 1.16 | 0.44 | 10.30 | 11.15 | " "  | 59251 |                                |
| ..... | 7.20 | 2.88 | 0.44 | 0.15 | 6.60  | 7.15  | " "  | 59252 | Extractive low<br>Adulterated. |
| ..... | 7.37 | 4.12 | 1.46 | 0.36 | 10.20 | 11.00 | " "  | 59253 |                                |
| ..... | 7.67 | 4.62 | 2.22 | 0.48 | 14.95 | 16.20 | " "  | 59254 | Genuine.                       |
| ..... | 7.75 | 5.36 | 1.76 | 0.33 | 12.65 | 13.75 | " "  | 59255 |                                |
| ..... | 7.80 | 4.34 | 2.22 | 0.51 | 15.60 | 16.90 | " "  | 59256 | Genuine.                       |
| ..... | 6.77 | 2.52 | 0.70 | 0.28 | 11.65 | 12.50 | At least 75% wheat flour<br>and foreign tissues.<br>Cayenne. | 59257 | Adulterated.                   |
| ..... | 7.00 | 6.18 | 2.48 | 0.40 | 15.40 | 16.55 | Ginger tissues and<br>starch only.                           | 59258 | Genuine.                       |

| Date of Collection.   | Nature of Sample. | No. of Sample. | Name and Address of Vendor.                 | Cost.     |        | Name and Address of Manufacturer or Furnisher, as given by Vendor. |                                   |
|-----------------------|-------------------|----------------|---|-----------|--------|--|-----------------------------------|
|                       |                   |                |   | Quantity. | Cents. | Manufacturer.  | Furnisher.                        |
| DISTRICT OF KINGSTON— |                   |                |   |           |        |  |                                   |
| 1913.                 |                   |                |   |           |        |  |                                   |
| Dec. 9                | Ground Ginger     | 61033          | W. H. Milling, Napanee.                     | 1 lb.     | 25     |  | Geo. Robertson & Son, Kingston.   |
| " 9                   | "                 | 61034          | G. W. Boyes, Napanee.                       | 1 "       | 40     |  | J. M. Lowes Co., Toronto.         |
| " 9                   | "                 | 61035          | W. D. Nickle, Napanee.                      | 1 "       | 40     |  | Todhunter & Mitchell, Toronto.    |
| " 9                   | "                 | 61036          | H. C. Hampton, Belleville.                  | 1 "       | 40     |  | Walmsley Co., Belleville.         |
| " 9                   | "                 | 61037          | S. R. Arite, Belleville.                    | 1 "       | 40     |  | J. Sloan Co., Belleville.         |
| " 10                  | "                 | 61038          | W. Brunet, Cobourg.                         | 1 "       | 40     |  | Todhunter & Mitchell, Toronto.    |
| " 10                  | "                 | 61039          | E. Guillet, Cobourg.                        | 1 "       | 40     |  | E. B. Blain, Toronto.             |
| " 10                  | "                 | 61040          | Hoey & Son, Cobourg.                        | 1 "       | 40     |  | Todhunter & Mitchell, Toronto.    |
| " 10                  | "                 | 61041          | W. D. Stephens, Port Hope.                  | 1 "       | 40     |  | " ..                              |
| " 10                  | "                 | 61042          | F. Rosevear, Port Hope.                     | 1 "       | 40     |  | Perkins Ince Co., Peterboro.      |
| " 11                  | Ground Ginger     | 61043          | T. A. Fisher, Lindsay.                      | 1 "       | 40     |  | E. B. Blain, Toronto.             |
| " 11                  | "                 | 61044          | A. L. Campbell, Lindsay.                    | 1 "       | 40     |  | Pure Gold, Toronto.               |
| " 11                  | "                 | 61045          | Adams Bros., Lindsay.                       | 1 "       | 40     |  | J. M. Lowes Co., Toronto.         |
| " 11                  | "                 | 61046          | J. Brown, Lindsay.                          | 1 "       | 40     |  | " ..                              |
| " 11                  | "                 | 61080          | A. Pearson, Peterboro.                      | 1 "       | 40     |  | T. Kinner, Peterboro.             |
| DISTRICT OF TORONTO—  |                   |                |   |           |        |  |                                   |
| Dec. 22               | Ground Ginger     | 57557          | C. Barrett, 964 Bloor st. west, Toronto.    | 1 lb.     | 30     |  | Unknown .....                     |
| " 22                  | "                 | 57558          | J. Kelday, 306 Ossington ave., Toronto.     | 1 "       | 40     |  | Todhunter, Mitchell Co., Toronto. |
| " 22                  | "                 | 57559          | R. Penney, 195 Danforth ave., Toronto.      | 1 "       | 35     |  | Unknown .....                     |
| " 22                  | "                 | 57560          | A. Sullivan, 2035 Yonge st. north, Toronto. | 1 "       | 25     |  | " .....                           |
| " 30                  | "                 | 57561          | W. Howell, 2377 Queen st. east, Toronto.    | 1 "       | 35     |  | " .....                           |
| " 30                  | "                 | 57562          | J. J. Hall, 1628 Queen st. east, Toronto.   | 10 oz.    | 20     |  | F. W. Humphrey, Toronto.          |
| " 31                  | "                 | 57563          | M. Miceli, 28 Arthur st., Toronto.          | 1 lb.     | 35     | Dalton Bros., Toronto.   | Unknown .....                     |
| " 31                  | "                 | 57564          | W. J. Hosken, 120 Arthur st., Toronto.      | 1 "       | 35     | The J. M. Lowes Co., Ltd., Toronto.                                | .....                             |
| " 31                  | "                 | 57565          | Wm. McKenzie, 1427 Yonge st., Toronto.      | 1 "       | 35     |  | Unknown .....                     |
| " 31                  | "                 | 57566          | Wm. Cole, 245 Ave. Road, Toronto.           | 1 "       | 40     |  | " .....                           |

## GROUND GINGER.

| Inspector's Report.<br>(Is not an expression<br>of Opinion.) | Results of Analysis. |        |                |        |                           |                              | Microscopical Exam-<br>ination. | No. of Sample. | Remarks and<br>Opinion of the<br>Chief Analyst. |
|--|----------------------|--------|----------------|--------|---------------------------|------------------------------|---------------------------------|----------------|---|
|  | Moisture.            | Ash.   |                |        | Cold Water<br>Extractive. |                              |                                 |                |   |
|  |                      | Total. | Water Soluble. | Ratio. | Normal.                   | Calculated to<br>dry Sample. |                                 |                |   |

## JAS. HOGAN, INSPECTOR.

|       | p. c. | p. c. | p. c. |      | p. c. | p. c. |                                     |       |              |    |
|-------|-------|-------|-------|------|-------|-------|-------------------------------------|-------|--------------|----|
| ..... | 7.72  | 4.96  | 2.20  | 0.44 | 14.00 | 15.15 | Ginger tissues and<br>starch only.  | 61033 | Genuine.     |    |
| ..... | 7.80  | 4.31  | 2.34  | 0.54 | 14.45 | 15.65 | " "                                 | 61034 | "            |    |
| ..... | 7.82  | 3.62  | 2.36  | 0.67 | 18.05 | 19.55 | " "                                 | 61035 | "            |    |
| ..... | 6.97  | 5.62  | 2.48  | 0.44 | 14.25 | 15.35 | " "                                 | 61036 | "            |    |
| ..... | 7.17  | 5.00  | 2.40  | 0.48 | 14.15 | 15.25 | " "                                 | 61037 | "            |    |
| ..... | 7.35  | 3.62  | 2.30  | 0.65 | 17.80 | 19.45 | " "                                 | 61038 | "            |    |
| ..... | 8.10  | 4.14  | 2.10  | 0.51 | 13.15 | 14.30 | " "                                 | 61039 | "            |    |
| ..... | 7.25  | 3.66  | 2.38  | 0.65 | 17.65 | 19.05 | " "                                 | 61040 | "            |    |
| ..... | 7.50  | 3.38  | 2.20  | 0.65 | 16.50 | 17.85 | " "                                 | 61041 | "            |    |
| ..... | 7.45  | 3.48  | 2.28  | 0.65 | 18.40 | 19.90 | " "                                 | 61042 | "            |    |
| ..... | 7.65  | 3.46  | 2.44  | 0.70 | 18.30 | 19.85 | " "                                 | 61043 | "            |    |
| ..... | 7.75  | 3.50  | 2.54  | 0.73 | 18.40 | 19.95 | " "                                 | 61044 | "            |    |
| ..... | 7.60  | 4.10  | 2.48  | 0.60 | 15.40 | 16.65 | " "                                 | 61045 | "            |    |
| ..... | 7.55  | 2.04  | 1.08  | 0.53 | 9.20  | 10.00 | About 50% maize and<br>wheat flour. | 61046 | Adulterated. | 25 |
| ..... | 7.35  | 6.66  | 3.32  | 0.50 | 13.30 | 14.35 | Ginger tissues & starch<br>only.    | 61080 | Genuine.     |    |

## H. J. DAGER, INSPECTOR.

|                  | p. c. | p. c. | p. c. |      | p. c. | p. c. |                                  |       |          |  |
|------------------|-------|-------|-------|------|-------|-------|----------------------------------|-------|----------|--|
| .....            | 7.80  | 3.84  | 2.90  | 0.75 | 19.20 | 20.80 | Ginger tissues & starch<br>only. | 57557 | Genuine. |  |
| .....            | 8.37  | 5.66  | 2.74  | 0.48 | 14.10 | 15.35 | " "                              | 57558 | "        |  |
| .....            | 8.40  | 3.68  | 2.42  | 0.66 | 17.50 | 19.10 | " "                              | 57559 | "        |  |
| .....            | 8.52  | 4.54  | 2.26  | 0.50 | 15.20 | 16.60 | " "                              | 57560 | "        |  |
| .....            | 8.25  | 3.58  | 2.41  | 0.67 | 16.80 | 18.30 | " "                              | 57561 | "        |  |
| .....            | 7.75  | 3.88  | 2.40  | 0.71 | 15.85 | 17.15 | " "                              | 57562 | "        |  |
| Pure Ginger..... | 8.25  | 4.70  | 2.14  | 0.46 | 13.10 | 14.25 | " "                              | 57563 | "        |  |
| .....            | 8.15  | 4.52  | 2.24  | 0.50 | 14.90 | 16.25 | " "                              | 57564 | "        |  |
| .....            | 7.96  | 3.42  | 2.42  | 0.71 | 16.85 | 18.35 | " "                              | 57565 | "        |  |
| .....            | 7.96  | 3.26  | 2.32  | 0.71 | 16.75 | 18.20 | " "                              | 57566 | "        |  |

| Date of Collection.          | Nature of Sample. | No. of Sample. | Name and Address of Vendor.                      | Cost.     |        | Name and Address of Manufacturer or Furnisher, as given by Vendor. |  |
|------------------------------|-------------------|----------------|--|-----------|--------|--|--|
|                              |                   |                |  | Quantity. | Cents. | Manufacturer.  | Furnisher.                               |
| <b>DISTRICT OF TORONTO—</b>  |                   |                |  |           |        |  |  |
| 1914.                        |                   |                |  |           |        |  |  |
| Jan. 2                       | Ground ginger     | 57567          | J. S. Kyle, Oshawa . . . .                       | 1 lb.     | 35     | Todhunter, Mitchell Co., Toronto.                                  |  |
| " 2                          | "                 | 57568          | Engle Breslin, Oshawa . .                        | 1 "       | 40     |  | Thos. Kinner & Co., Toronto.             |
| " 2                          | "                 | 57569          | J. E. Beaton, " . . . .                          | 1 "       | 40     | Todhunter, Mitchell Co., Toronto.                                  |  |
| " 2                          | "                 | 57570          | S. A. Coulin, " . . . .                          | 1 "       | 40     |  | McDowell & Moma, Oshawa                  |
| " 2                          | "                 | 57571          | C. A. Powell, " . . . .                          | 1 "       | 40     | Todhunter, Mitchell Co., Toronto.                                  |  |
| 1913.                        |                   |                |  |           |        |  |  |
| Dec. 26                      | "                 | 57582          | J. D. Cassil, 2713 Yonge st. north, Toronto.     | 1 "       | 40     |  | Canada Brokerage Co., Ltd., Toronto.     |
| <b>DISTRICT OF HAMILTON—</b> |                   |                |  |           |        |  |  |
| Dec. 2                       | Ground Ginger     | 59865          | Lloyd Bros., Owen Sound                          | 1 lb.     | 35     |  | Dalton Bros., Toronto.                   |
| " 3                          | "                 | 59866          | J. McKibbin, Owen Sound                          | 1 "       | 40     |  | McLaughlin & Sons Co., Ltd.              |
| " 4                          | "                 | 59867          | J. Kerr, Palmerston . . . .                      | 1 "       | 30     |  | Unknown . . . .                          |
| " 5                          | "                 | 59868          | John Hawkins, Guelph . . .                       | 1 "       | 40     |  | " . . . .                                |
| " 5                          | "                 | 59869          | J. C. Hadden, Guelph . . .                       | 1 "       | 40     |  | " . . . .                                |
| " 9                          | "                 | 59870          | MacQueen & Co., Paris . .                        | 1/4 "     | 25     |  | Jas. Lumbers & Co., Toronto.             |
| " 10                         | "                 | 59871          | David Katz, 31 Pearl st., Brantford.             | 1 "       | 25     |  | Unknown . . . .                          |
| " 10                         | "                 | 59872          | L. J. Klinkhamer, 138 Albion st., Brantford.     | 1 "       | 30     |  | Brantford Coffee & Spice Co., Brantford. |
| " 11                         | "                 | 59873          | Strang Bros., 238 Bay st., Hamilton.             | 1/4 "     | 25     |  | Unknown . . . .                          |
| " 11                         | "                 | 59874          | J. Treister, 205 Caroline st., Hamilton.         | 1 "       | 25     |  | F. F. Dalley Co., Ltd., Hamilton.        |
| " 12                         | "                 | 59875          | Eric Jamieson, Wilson & Fairleigh sts., Hamilton | 1 "       | 45     |  | McLarena, Ltd., Hamilton.                |
| " 12                         | "                 | 59876          | Sanderson Bros., 603 Barton st., east, Hamilton. | 1 "       | 40     |  | W. H. Gillard & Co., Hamilton            |
| " 12                         | "                 | 59877          | Post & Stewart, 591 Barton st., east, Hamilton.  | 1 "       | 40     | Young, Windfield & Co., Hamilton                                   |  |
| " 12                         | "                 | 59878          | Geo. Dibden, 482 Wentworth st., north, Hamilton. | 1 "       | 40     |  | G. E. Bristol & Co., Hamilton.           |
| " 12                         | "                 | 59879          | G. E. Baker, 119 Barton st., east, Hamilton.     |           | 30     | Young, Windfield & Co., Hamilton                                   |  |

GROUND GINGER.

| Inspector's Report.<br>(Is not an expression<br>of Opinion.) | Results of Analysis. |        |                |        |                           |                              | Microscopical Exam-<br>ination. | No. of Sample. | Remarks and<br>Opinion of the<br>Chief Analyst. |
|--|----------------------|--------|----------------|--------|---------------------------|------------------------------|---------------------------------|----------------|---|
|  | Moisture.            | Ash.   |                |        | Cold Water<br>Extractive. |                              |                                 |                |   |
|  |                      | Total. | Water Soluble. | Ratio. | Normal.                   | Calculated to<br>dry Sample. |                                 |                |   |

Concluded.

|  | p.c. | p.c. | p.c. |      | p.c.  | p.c.  |                                  |       |          |
|--|------|------|------|------|-------|-------|----------------------------------|-------|----------|
| .....                                  | 7.95 | 3.48 | 2.26 | 0.65 | 16.30 | 17.70 | Ginger tissues & starch<br>only. | 57567 | Genuine. |
| .....                                  | 8.50 | 2.22 | 2.20 | 0.52 | 15.80 | 17.25 | " "                              | 57568 | "        |
| Labelled, Todhun-<br>ter's Pure Ginger | 8.50 | 3.48 | 2.46 | 0.70 | 17.70 | 19.35 | " "                              | 57569 | "        |
| .....                                  | 8.22 | 3.90 | 2.04 | 0.52 | 13.70 | 14.90 | " "                              | 57570 | "        |
| .....                                  | 8.30 | 4.00 | 2.30 | 0.57 | 16.65 | 18.15 | " "                              | 57571 | "        |
| .....                                  | 8.47 | 4.10 | 2.28 | 0.35 | 16.25 | 17.75 | " "                              | 57582 | "        |

H. J. DAGER, ACTING INSPECTOR.

|                    |      |      |      |      |       |       |   |       |              |
|--------------------|------|------|------|------|-------|-------|---|-------|--------------|
| .....              | 6.97 | 1.98 | 1.28 | 0.65 | 10.10 | 10.85 | About 35% maize<br>starch and some<br>wheat starch. | 59865 | Adulterated. |
| .....              | 7.65 | 4.16 | 2.04 | 0.49 | 11.55 | 12.50 | Ginger tissues and<br>starch only.                  | 59866 | "            |
| .....              | 7.42 | 5.16 | 2.74 | 0.53 | 15.70 | 16.95 | " "   | 59867 | Genuine.     |
| .....              | 7.20 | 2.94 | 2.02 | 0.69 | 17.50 | 18.85 | " "   | 59868 | "            |
| .....              | 7.30 | 2.94 | 2.30 | 0.78 | 18.05 | 19.45 | " "   | 59869 | "            |
| Select Ginger..... | 7.35 | 3.42 | 2.16 | 0.64 | 17.25 | 18.65 | " "   | 59870 | "            |
| .....              | 6.90 | 3.32 | 1.70 | 0.51 | 11.60 | 12.45 | About 25% wheat flour                               | 59871 | Adulterated. |
| .....              | 7.37 | 2.96 | 2.02 | 0.68 | 17.25 | 18.65 | Ginger tissues and<br>starch only.                  | 59872 | Genuine.     |
| .....              | 7.42 | 3.38 | 2.38 | 0.70 | 16.30 | 17.60 | " "   | 59873 | "            |
| .....              | 7.25 | 3.50 | 2.00 | 0.57 | 15.80 | 17.65 | " "   | 59874 | "            |
| .....              | 8.10 | 4.18 | 2.00 | 0.48 | 12.10 | 13.15 | " "   | 59875 | "            |
| .....              | 7.80 | 5.08 | 2.58 | 0.51 | 14.30 | 15.50 | " "   | 59876 | Genuine.     |
| .....              | 7.55 | 4.28 | 2.36 | 0.55 | 14.15 | 15.35 | " "   | 59877 | "            |
| .....              | 7.15 | 4.30 | 2.30 | 0.53 | 14.95 | 16.10 | " "   | 59878 | "            |
| .....              | 7.25 | 3.54 | 2.38 | 0.67 | 17.20 | 18.55 | " "   | 59879 | "            |

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350

| Date of Collection. | Nature of Sample. | No. of Sample. | Name and Address of Vendor. | Cost.     |        | Name and Address of Manufacturer or Furnisher, as given by Vendor. |            |
|---------------------|-------------------|----------------|-----------------------------|-----------|--------|--|------------|
|                     |                   |                |                             | Quantity. | Cents. | Manufacturer.  | Furnisher. |

## DISTRICT OF WINDSOR-

| 1913.   |               |       |                                |        |    |                                |  |
|---------|---------------|-------|--------------------------------|--------|----|--------------------------------|--|
| Dec. 12 | Ground Ginger | 53603 | Wm. J. O'Neil, Clinton...      | 1 lb.  | 40 | Todhunter & Mitchell, Toronto. |  |
| " 12    | "             | 53606 | H. Wiltse, Clinton.....        | 1 "    | 40 | White Swan, Toronto.           |  |
| " 9     | "             | 54456 | W. R. Butcher, St. Mary's      | 3 pkgs | 25 | McLarens, Ltd., Hamilton.      |  |
| " 9     | "             | 54458 | Geo. Smith, St. Mary's...      | 1 lb.  | 40 | Gorman, Eckert Co., London.    |  |
| " 9     | "             | 54460 | F. W. Hutton, St. Mary's       | 1 "    | 40 | F. F. Dalley Co., Hamilton.    |  |
| " 9     | "             | 54461 | J. P. Rogers Co., St. Mary's,  | 1 "    | 30 | " "                            |  |
| " 10    | "             | 54467 | A. G. Lloyd, Stratford...      | 1 "    | 40 | Unknown.....                   |  |
| " 10    | "             | 54475 | Walsh Bros., Stratford...      | 1 "    | 40 | Unknown.....                   |  |
| " 10    | "             | 54478 | A. Beattie & Co., Stratford.   | 3 pkgs | 30 | McLarens, Hamilton.            |  |
| " 11    | "             | 54484 | Sproat & Finnegan, Seaforth.   | 1 lb.. | 30 | Gorman, Eckert Co., London.    |  |
| " 11    | "             | 54486 | R. L. Clark, Seaforth....      | 2 "    | 23 | "                              |  |
| " 11    | "             | 54494 | Cardno Bros., Seaforth...      | 1 "    | 40 | "                              |  |
| " 12    | "             | 54498 | J. P. Sheppard & Co., Clinton. | 1 "    | 40 | "                              |  |

## DISTRICT OF MANITOBA-

|        |               |       |  |        |     |  |                                   |
|--------|---------------|-------|--|--------|-----|--|-----------------------------------|
| Dec. 9 | Ground Ginger | 53213 | Campbell Bros. & Wilson, Winnipeg.         | 1 lb.. | Nil |  |                                   |
| " 9    | "             | 53214 | Blue Ribbon, Ltd., Winnipeg.               | 1      | 30  |  |                                   |
| " 9    | "             | 53215 | The White Star Mfg. Co., Winnipeg.         | 1 "    | 14  |  |                                   |
| " 9    | "             | 53216 | Gold Standard Mfg. Co., Winnipeg.          | 1 "    |     |  |                                   |
| " 10   | "             | 53218 | The Jobin, Marrin Co., Ltd., Winnipeg.     | 1 "    | 25  |  |                                   |
| " 11   | "             | 53219 | The Todhunter, Mitchell Co., Winnipeg.     | 1 "    |     |  |                                   |
| " 12   | "             | 53220 | H. Thompson, 577 Sargent ave., Winnipeg.   | 1 "    | 30  |  |                                   |
| " 12   | "             | 53221 | Charles Bros., 465 Sargent ave., Winnipeg. | 1 "    | 49  |  |                                   |
| " 15   | "             | 53222 | Horners Busy Corner, Brandon.              | 1 "    | 40  |  | The Codville Co., Brandon.        |
| " 15   | "             | 53223 | J. F. Price, Brandon....                   | 1 "    | 40  |  |                                   |
| " 16   | "             | 53224 | McDonald & Forman, Brandon.                | 1 "    | 40  |  | Gold Standard Mfg. Co., Winnipeg. |



GROUND GINGER.

| Inspector's Report.<br>(Is not an expression<br>of Opinion.) | Results of Analysis. |        |                |        |                           |                              | Microscopical Exam-<br>ination. | No. of Sample | Remarks and<br>Opinion of the<br>Chief Analyst. |
|--|----------------------|--------|----------------|--------|---------------------------|------------------------------|---------------------------------|---------------|---|
|  | Moisture.            | Ash.   |                |        | Cold Water<br>Extractive. |                              |                                 |               |   |
|  |                      | Total. | Water Soluble. | Ratio. | Normal.                   | Calculated to<br>dry Sample. |                                 |               |   |

JNO. TALBOT, INSPECTOR.

|   | p. c. | p. c. | p. c. |      | p. c. | p. c. |                                    |       |          |
|---|-------|-------|-------|------|-------|-------|------------------------------------|-------|----------|
| .....   | 7.57  | 3.38  | 2.50  | 0.74 | 17.60 | 19.05 | Ginger tissues and<br>starch only. | 53603 | Genuine. |
| .....   | 6.87  | 3.56  | 2.58  | 0.72 | 19.15 | 20.60 | " "                                | 53606 | "        |
| Labelled, McLar-<br>ens' Ginger.                                  | 7.37  | 4.14  | 2.48  | 0.60 | 16.40 | 17.70 | " "                                | 54456 | "        |
| .....   | 6.90  | 3.82  | 2.64  | 0.69 | 17.40 | 18.70 | " "                                | 54458 | "        |
| .....   | 7.12  | 3.52  | 2.06  | 0.58 | 14.80 | 15.95 | " "                                | 54460 | "        |
| .....   | 7.00  | 4.30  | 1.98  | 0.46 | 11.80 | 12.70 | " "                                | 54461 | "        |
| .....   | 6.97  | 3.72  | 2.62  | 0.70 | 17.00 | 18.25 | " "                                | 54467 | Genuine. |
| .....   | 7.00  | 5.20  | 2.90  | 0.56 | 14.90 | 16.05 | " "                                | 54475 | "        |
| Labelled, McLar-<br>ens' Invincible.<br>Ground Jamaica<br>Ginger. | 8.02  | 4.60  | 2.26  | 0.49 | 15.60 | 16.95 | " "                                | 54478 | "        |
| .....   | 7.22  | 4.54  | 2.56  | 0.56 | 15.85 | 17.05 | " "                                | 54484 | "        |
| .....   | 6.95  | 4.02  | 2.41  | 0.61 | 16.40 | 17.65 | " "                                | 54486 | "        |
| .....   | 7.52  | 3.44  | 2.42  | 0.70 | 16.05 | 17.35 | " "                                | 54494 | "        |
| .....   | 7.40  | 4.90  | 2.88  | 0.53 | 16.45 | 17.75 | " "                                | 54498 | "        |

A. C. LARIVIERE, INSPECTOR.

|                    | p. c. | p. c. | p. c. |      | p. c. | p. c. |                                  |       |          |
|--------------------|-------|-------|-------|------|-------|-------|----------------------------------|-------|----------|
| Royal Shield Brand | 7.42  | 7.04  | 3.28  | 0.47 | 16.40 | 17.70 | Ginger tissues & starch<br>only. | 53213 | Genuine. |
| Blue Ribbon "      | 7.72  | 3.84  | 2.28  | 0.60 | 15.50 | 16.80 | " "                              | 53214 | "        |
| .....              | 7.77  | 5.28  | 2.50  | 0.47 | 16.25 | 17.60 | " "                              | 53215 | "        |
| .....              | 8.15  | 5.56  | 2.92  | 0.52 | 16.55 | 18.05 | " "                              | 53216 | "        |
| Challenge Ginger.  | 7.92  | 3.66  | 2.40  | 0.65 | 17.20 | 18.65 | " "                              | 53218 | "        |
| .....              | 7.90  | 3.98  | 2.00  | 0.50 | 13.90 | 15.10 | " "                              | 53219 | "        |
| .....              | 7.75  | 4.14  | 2.22  | 0.53 | 14.95 | 16.20 | " "                              | 53220 | "        |
| .....              | 7.22  | 5.74  | 2.82  | 0.49 | 15.75 | 17.00 | " "                              | 53221 | "        |
| .....              | 7.75  | 4.32  | 2.32  | 0.54 | 15.20 | 16.50 | " "                              | 53222 | "        |
| .....              | 8.12  | 3.68  | 2.56  | 0.71 | 18.90 | 20.55 | " "                              | 53223 | "        |
| .....              | 7.95  | 4.92  | 2.13  | 0.44 | 14.70 | 16.00 | " "                              | 53224 | "        |

## BULLETIN No. 286—

| Date of Collection. | Nature of Sample. | No. of Sample. | Name and Address of Vendor. | Cost.     |        | Name and Address of Manufacturer or Furnisher, as given by Vendor. |            |
|---------------------|-------------------|----------------|-----------------------------|-----------|--------|--|------------|
|                     |                   |                |                             | Quantity. | Cents. | Manufacturer.  | Furnisher. |

## DISTRICT OF MANITOBA—

| 1913. |    |               |  |        |    |       |                                   |
|-------|----|---------------|--|--------|----|-------|-----------------------------------|
| Dec.  | 16 | Ground Ginger | 53225 Sutherland & Robertson, Brandon.     | 1 lb.. | 40 | ..... | .....                             |
| "     | 18 | "             | 53226 J. Donnelly, Norwood Grove.          | 1 "    | 40 | ..... | Campbell Bro. & Wilson, Winnipeg. |
| "     | 19 | "             | 53227 W. J. Kennedy, Norwood Grove.        | 1 "    | 40 | ..... | .....                             |
| "     | 19 | "             | 53280 E. S. Harvey, Portage ave., Winnipeg | 3/4 "  | 30 | ..... | .....                             |

## DISTRICT OF ALBERTA—

|      |    |               |  |         |    |                                     |              |
|------|----|---------------|--|---------|----|-------------------------------------|--------------|
| Dec. | 1  | Ground Ginger | 51845 Hallier & Aldridge, Edmonton.        | 3 tins. | 30 | White Star M'fg. Co., Winnipeg.     | .....        |
| "    | 1  | "             | 51846 J. H. Morris & Co., Edmonton.        | 1 lb..  | 40 | .....                               | .....        |
| "    | 2  | "             | 51847 The Acme Co., Edmonton               | 3 tins. | 30 | Gorman, Eckhart & Co., London, Ont. | .....        |
| "    | 2  | "             | 51848 A. Macdonald & Co., Edmonton.        | 3 "     | 20 | White Star M'fg. Co., Winnipeg.     | .....        |
| "    | 2  | "             | 51849 Revillon, wholesale, Edmonton.       | 3 "     | 20 | Gorman, Eckhart & Co., London, Ont. | .....        |
| "    | 3  | "             | 51850 Hudson Bay Co., Edmonton.            | 3 "     | 30 | .....                               | Vendors..... |
| "    | 4  | "             | 51851 Montgomery & West, Wetaskiwin.       | 3 "     | 30 | Georgeson & Co., Calgary.           | .....        |
| "    | 4  | "             | 51852 Abousaify & Murray, Wetaskiwin.      | 3 "     | 30 | " "                                 | .....        |
| "    | 5  | "             | 51853 F. E. McLeod, Lacombe.               | 1 lb..  | 35 | A. Macdonald & Co., Edmonton.       | .....        |
| "    | 11 | "             | 51854 S. G. Freeze, Calgary...             | 3 tins. | 25 | Georgeson & Co., Calgary.           | .....        |
| "    | 11 | "             | 51855 Hudson Bay Co., Calgary              | 3 "     | 25 | .....                               | Vendors..... |
| "    | 12 | "             | 51856 Pryce-Jones, (Canada) Ltd., Calgary. | 3 "     | 30 | Imperial Spice Co., Hamilton.       | .....        |
| "    | 12 | "             | 51857 John Irwin & Co., Calgary.           | 1 lb..  | 40 | Georgeson & Co., Calgary.           | .....        |
| "    | 12 | "             | 51858 J. A. Nolan, Calgary....             | 3 tins. | 30 | " "                                 | .....        |
| "    | 13 | "             | 51859 Georgeson & Co., Calgary             | 3 "     | 30 | Vendors.....                        | .....        |

## GROUND GINGER.

| Inspector's Report.<br>(Is not an expression<br>of Opinion.) | Results of Analysis. |        |                |        |                           |                              | Microscopical Exam-<br>ination. | No. of Sample. | Remarks and<br>Opinion of the<br>Chief Analyst. |
|--|----------------------|--------|----------------|--------|---------------------------|------------------------------|---------------------------------|----------------|---|
|  | Moisture.            | Ash.   |                |        | Cold Water<br>Extractive. |                              |                                 |                |   |
|  |                      | Total. | Water Soluble. | Ratio. | Normal.                   | Calculated to<br>dry Sample. |                                 |                |   |

Concluded.

|                  | p.c. | p.c. | p.c. |      | p.c.  | p.c.  |                                  |       |          |
|------------------|------|------|------|------|-------|-------|----------------------------------|-------|----------|
| .....            | 8.22 | 5.08 | 2.48 | 0.49 | 15.05 | 16.40 | Ginger tissues & starch<br>only. | 53225 | Genuine. |
| RoyalShieldBrand | 8.02 | 3.84 | 2.26 | 0.59 | 15.30 | 16.60 | .....                            | 53226 | "        |
| .....            | 8.17 | 3.98 | 2.08 | 0.52 | 14.00 | 15.25 | .....                            | 53227 | "        |
| .....            | 8.12 | 4.00 | 2.00 | 0.50 | 14.05 | 15.30 | .....                            | 53280 | "        |

A. W. R. MARKLEY, INSPECTOR.

|       |      |      |      |      |       |       |                                    |       |          |
|-------|------|------|------|------|-------|-------|------------------------------------|-------|----------|
| ..... | 8.15 | 6.88 | 2.60 | 0.38 | 15.20 | 16.55 | Ginger tissues and<br>starch only. | 51845 | Genuine. |
| ..... | 7.32 | 5.88 | 2.54 | 0.43 | 16.60 | 17.90 | " "                                | 51846 | "        |
| ..... | 9.42 | 5.04 | 2.76 | 0.55 | 16.30 | 17.95 | " "                                | 51847 | "        |
| ..... | 8.60 | 6.78 | 2.54 | 0.38 | 15.30 | 16.75 | " "                                | 51848 | "        |
| ..... | 9.12 | 5.06 | 2.46 | 0.49 | 15.00 | 16.50 | " "                                | 51849 | "        |
| ..... | 8.65 | 4.90 | 2.52 | 0.52 | 15.35 | 16.80 | " "                                | 51850 | "        |
| ..... | 9.17 | 4.70 | 2.08 | 0.41 | 16.55 | 18.20 | " "                                | 51851 | "        |
| ..... | 9.52 | 6.62 | 2.88 | 0.44 | 15.40 | 17.00 | " "                                | 51852 | "        |
| ..... | 7.32 | 5.84 | 1.84 | 0.32 | 14.90 | 16.05 | " "                                | 51853 | "        |
| ..... | 7.40 | 5.24 | 2.14 | 0.41 | 16.10 | 17.40 | " "                                | 51854 | "        |
| ..... | 6.85 | 3.74 | 2.50 | 0.67 | 16.65 | 17.85 | " "                                | 51855 | "        |
| ..... | 7.42 | 3.42 | 2.04 | 0.60 | 16.25 | 17.50 | " "                                | 51856 | "        |
| ..... | 7.05 | 5.22 | 2.96 | 0.57 | 16.85 | 18.25 | " "                                | 51857 | "        |
| ..... | 6.95 | 4.86 | 2.20 | 0.45 | 16.70 | 17.95 | " "                                | 51858 | "        |
| ..... | 7.25 | 5.16 | 2.46 | 0.48 | 16.30 | 17.55 | " "                                | 51859 | "        |

| Date of Collection. | Nature of Sample. | No. of Sample. | Name and Address of Vendor. | Cost.     |        | Name and Address of Manufacturer or Furnisher, as by Vendor. |            |
|---------------------|-------------------|----------------|-----------------------------|-----------|--------|--|------------|
|                     |                   |                |                             | Quantity. | Cents. | Manufacturer.  | Furnisher. |

## DISTRICT OF ROCKY MOUNTAINS-

| 1913. |    |               |       |  |    |  |  |
|-------|----|---------------|-------|--|----|--|--|
| Dec.  | 2  | Ground Ginger | 50001 | R. G. Ritchie, Cascade, 1 B.C.                 | 40 | Empress Mfg Co., Vancouver.              |  |
| "     | 4  | "             | 50008 | N. L. McInnes & Co., 3 tins, Grand Forks, B.C. | 45 | Kelly, Douglas & Co., Vancouver.         |  |
| "     | 4  | "             | 50017 | McKim & LeRoy, Grand Forks, B.C.               | 40 | Georgeson & Co., Calgary.                |  |
| "     | 15 | "             | 50020 | Trail Grocery Co., Trail, 1 lb. B.C.           | 35 | Empress Mfg. Co., Vancouver.             |  |
| "     | 15 | "             | 50026 | T. Lauriente & Son, Trail, 3 tins B.C.         | 40 | W. H. Malkin & Co., Vancouver.           |  |
| "     | 17 | "             | 50032 | Agnew & Co., Rossland, 1 lb. B.C.              | 35 | Kelly, Douglas & Co., Vancouver.         |  |
| 1914. |    |               |       |  |    |  |  |
| Jan.  | 3  | "             | 50047 | Star Grocery, Nelson, B.C.                     | 50 | W. A. Jameson, Victoria, B.C.            |  |
| "     | 3  | "             | 50049 | Hudson's Bay Co., Nelson, B.C.                 | 40 | Wm. Braid & Co., Vancouver.              |  |
| "     | 7  | "             | 50058 | R. B. Bell, Salmo, B.C.                        | 40 | W. A. Jameson & Co., Victoria, B.C.      |  |
| "     | 7  | "             | 50061 | Salmo Trading Co., Salmo, B.C.                 | 45 | W. H. Malkin & Co., Vancouver.           |  |
| "     | 23 | "             | 50066 | S. A. Speers, Creston, B.C.                    | 40 | Wm. Braid & Co., Vancouver.              |  |
| "     | 25 | "             | 50071 | Creston Mercantile Co., Creston, B.C.          | 40 | Cranbrook Jobbers Ltd., Cranbrook, B.C.  |  |
| "     | 23 | "             | 50072 | Creston Mercantile Co., Creston, B.C.          | 30 | W. A. Jameson Coffee Co., Victoria, B.C. |  |

## DISTRICT OF VICTORIA-

| 1913. |    |               |       |  |       |    |  |
|-------|----|---------------|-------|--|-------|----|--|
| Dec.  | 9  | Ground Ginger | 57701 | Windsor Grocery Co., 817 Govt. St., Victoria, B.C.             | 1 lb. | 50 | Pioneer Coffee & Spice Mills, Victoria, B.C. |
| "     | 9  | "             | 57712 | Copas & Young, 633 Fort St., Victoria, B.C.                    | 1 "   | 40 | Wm. Braid & Co., Vancouver, B.C.             |
| "     | 11 | "             | 57717 | The West End Grocery Co., Ltd., 1002 Govt. St., Victoria, B.C. | 1 "   | 40 | R. P. Rithet & Co., Ltd., Victoria, B.C.     |
| "     | 11 | "             | 57723 | Acton Bros., 1317 Douglas St., Victoria, B.C.                  | 1 "   | 40 | Empress Mfg. Co., Vancouver.                 |
| "     | 11 | "             | 57724 | " " " "  | 1 "   | 50 | E. R. Durkee & Co., New York, U.S.A.         |
| "     | 12 | "             | 57733 | Dixie H. Ross & Co., 1317 Govt. St., Victoria, B.C.            | 1 "   | 40 | Wm. Braid & Co., Vancouver, B.C.             |

## GROUND GINGER.

| Inspector - Report.<br>(Is not an expression<br>of Opinion.) | Results of Analysis. |        |                |        |                           |                             | Microscopical Examination. | No. of Sample. | Remarks and<br>Opinion of the<br>Chief Analyst. |
|--|----------------------|--------|----------------|--------|---------------------------|-----------------------------|----------------------------|----------------|---|
|  | Moisture.            | Ash.   |                |        | Cold Water<br>Extractive. |                             |                            |                |   |
|  |                      | Total. | Water Soluble. | Ratio. | Normal.                   | Calculated to<br>dry Sample |                            |                |   |

## THOS. PARKER, INSPECTOR.

|                              | p. c. | p. c. | p. c. |      | p. c. | p. c. |   |       |          |
|------------------------------|-------|-------|-------|------|-------|-------|---|-------|----------|
| .....                        | 7.32  | 4.66  | 2.30  | 0.49 | 15.65 | 16.81 | Ginger tissues and<br>starch only.                                      | 50001 | Genuine. |
| Nabob Brand.....             | 9.00  | 4.66  | 2.56  | 0.55 | 16.10 | 17.40 | " "   | 50008 | "        |
| Taxedo Brand ...             | 6.62  | 8.20  | 2.72  | 0.33 | 15.65 | 16.72 | Ginger tissues and<br>starch only. Ash con-<br>tains a large p. c lime. | 50017 | "        |
| .....                        | 8.07  | 4.46  | 2.50  | 0.56 | 16.85 | 18.30 | Ginger tissues and<br>starch only.                                      | 50020 | "        |
| Victoria Cross<br>Brand..... | 9.40  | 5.02  | 2.24  | 0.45 | 15.00 | 16.55 | " "   | 50026 | "        |
| Columbia Brand..             | 7.55  | 5.46  | 2.76  | 0.51 | 14.60 | 15.80 | " "   | 50032 | "        |
| .....                        | 7.52  | 4.88  | 2.28  | 0.47 | 14.35 | 15.50 | " "   | 50047 | "        |
| .....                        | 8.22  | 4.84  | 2.30  | 0.48 | 15.35 | 16.75 | " "   | 50049 | "        |
| .....                        | 6.90  | 4.76  | 2.36  | 0.50 | 13.20 | 14.05 | " "   | 50058 | "        |
| Victoria Cross<br>Brand..... | 10.50 | 5.06  | 2.08  | 0.41 | 14.05 | 15.70 | " "   | 50061 | "        |
| .....                        | 8.47  | 4.64  | 1.92  | 0.42 | 15.25 | 16.65 | " "   | 50066 | "        |
| Regal Brand.....             | 9.67  | 6.52  | 2.66  | 0.41 | 14.20 | 15.70 | " "   | 50071 | "        |
| Victoria Brand...            | 9.65  | 5.34  | 2.44  | 0.46 | 13.35 | 14.75 | " "   | 50072 | "        |

## D. O'SULLIVAN, INSPECTOR.

| .....             | 8.50  | 5.34 | 2.18 | 0.41 | 13.50 | 14.75 | Ginger tissues and<br>starch only. | 57701 | Genuine. |
|-------------------|-------|------|------|------|-------|-------|------------------------------------|-------|----------|
| .....             | 7.92  | 5.06 | 2.56 | 0.50 | 14.80 | 16.05 | " "                                | 57712 | "        |
| .....             | 8.05  | 4.72 | 2.48 | 0.53 | 12.45 | 13.55 | " "                                | 57717 | "        |
| .....             | 8.20  | 4.80 | 2.52 | 0.53 | 16.70 | 18.15 | " "                                | 57723 | Genuine. |
| Gauntlet Brand... | 10.37 | 4.40 | 2.00 | 0.45 | 12.85 | 14.30 | " "                                | 57724 | "        |
| .....             | 7.75  | 5.44 | 2.42 | 0.45 | 14.50 | 15.70 | " "                                | 57733 | "        |

## BULLETIN No. 286—

| Date of Collection.   | Nature of Sample. | No. of Sample. | Name and Address of Vendor.                                    | Cost.     |        | Name and Address of Manufacturer or Furnisher, as given by Vendor. |  |
|-----------------------|-------------------|----------------|--|-----------|--------|--|--|
|                       |                   |                |  | Quantity. | Cents. | Manufacturer.  | Furnisher.                                 |
| DISTRICT OF VICTORIA— |                   |                |  |           |        |  |  |
| 1913.                 |                   |                |  |           |        |  |  |
| Dec. 12               | Ground Ginger     | 57742          | James Adam, 1023 Cook St., Victoria, B.C.                      | 1 lb.     | 40     | Kelly Douglas & Co., Vancouver, B.C.                               |  |
| " 16                  | "                 | 57750          | H. O. Kirkham, 741 Fort Victoria, B.C.                         | 3 "       | 40     |  | Kelly Douglas & Co., Ltd., Vancouver, B.C. |
| " 16                  | "                 | 57751          | " " "  | 1 "       | 30     |  | " "  |
| " 17                  | "                 | 57755          | Henry W. Driver, 856 Yate St., Victoria, B.C.                  | 1 "       | 30     |  | W. A. Jameson Coffee Co., Victoria, B.C.   |
| " 18                  | "                 | 57762          | Fenerty Bros., Oak Bay Jct., Victoria, B.C.                    | 1 "       | 40     | W. A. Jameson Coffee Co., Victoria, B.C.                           |  |
| " 31                  | "                 | 57764          | The W. A. Jameson Coffee Co., Victoria, B.C.                   | 1 "       | 25     |  | G. S. Dunn & Co., Hamilton, Ont.           |
| " 31                  | "                 | 57766          | Pioneer Coffee and Spice Mills, Victoria, B.C.                 | 1 "       | 25     | Vendors.....   |  |
| " 31                  | "                 | 57770          | C. G. Adams Co., Ltd., Douglas & Johnston Sts., Victoria, B.C. | 3 tins.   | 30     |  | S. Lieser & Co., Ltd., Victoria, B.C.      |
| 1914.                 |                   |                |  |           |        |  |  |
| Jan. 2                | "                 | 57771          | E. B. Jones, 1800 Cook, St. Victoria, B.C.                     | 3 "       | 30     | Empress Mfg. Co., Ltd., Vancouver, B.C.                            |  |

## GROUND GINGER.

| Inspector's Report.<br>(Is not an expression<br>of Opinion.) | Results of Analysis |        |                |        |                           |                              | Microscopical Exam-<br>ination. | No. of Sample | Remarks and<br>Opinion of the<br>Chief Analyst. |
|--|---------------------|--------|----------------|--------|---------------------------|------------------------------|---------------------------------|---------------|---|
|  | Moisture.           | Ash.   |                |        | Cold Water<br>Extractive. |                              |                                 |               |   |
|  |                     | Total. | Water Soluble. | Ratio. | Normal.                   | Calculated to<br>dry Sample. |                                 |               |   |

*Continued.*

|                              | p. c. | p. c. | p. c. | p. c. | p. c. | p. c. |                                    |       |          |
|------------------------------|-------|-------|-------|-------|-------|-------|------------------------------------|-------|----------|
| .....                        | 8.25  | 3.80  | 2.08  | 0.55  | 16.35 | 16.70 | Ginger tissues and<br>starch only. | 57742 | Genuine. |
| .....                        | 8.30  | 5.10  | 2.48  | 0.49  | 15.65 | 17.05 | " "                                | 57750 | "        |
| Nabob Brand, ...             | 11.10 | 4.26  | 2.42  | 0.57  | 16.00 | 18.00 | " "                                | 57751 | "        |
| Victoria Brand ...           | 9.60  | 5.74  | 2.64  | 0.46  | 13.70 | 15.15 | " "                                | 57755 | "        |
| .....                        | 8.57  | 4.26  | 2.56  | 0.60  | 16.30 | 17.85 | " "                                | 57762 | "        |
| Cochin Ginger ...            | 7.95  | 5.66  | 2.42  | 0.43  | 14.00 | 15.20 | " "                                | 57764 | "        |
| Star Brand...                | 8.12  | 3.70  | 2.36  | 0.63  | 17.25 | 18.80 | " "                                | 57766 | "        |
| Lord Roberts<br>Brand. Pure. | 9.30  | 3.76  | 2.32  | 0.62  | 16.10 | 17.75 | " "                                | 57770 | "        |
| Empress Brand...             | 9.90  | 4.80  | 2.36  | 0.49  | 15.20 | 16.85 | " "                                | 57771 | "        |

