LABORATORY

OF THE

INLAND REVENUE DEPARTMENT

OTTAWA, CANADA.

BULLETIN No. 183.

TEA.

OTTAWA, July 6, 1909.

W. J. GERALD, Esq., Deputy Minister of Inland Revenue.

Sir,-I have the honour to submit to you, herewith, a report upon 222 samples

of Teas, collected throughout Canada, in April of the present year.

Tea has been examined on three former occasions, under the Adulteration of Food Act. In April 1891, a collection of 58 samples was made, and submitted for analysis to the late Professor Kenrick of Winnipeg. His report will be found in Bulletin No. 24 published in June, 1891. None of the samples were declared to be adulterated, although about 6 per cent are classified as "doubtful." Professor Kenrick's report is valuable mainly on account of certain investigatory work contained in it. Thus, he has demonstrated that the so-called domestic method of infusing tea, while less fully removing the total soluble matters than is the case with ordinary laboratory methods, yields fairly constant and comparable results, if carried out according to a definite modus; and extracts the Theine with much greater relative completeness than the Tannin, a matter which is of importance in the household. The following figures are instructive and important :--

| | LABORATORY METHODS OF EXTRACTION. | | | | DOMESTIC METHOD OF EXTRACTION (KENRICK.) | | | |
|---|-----------------------------------|----------------------|--------------|----------------|--|----------------------|--------------|--------------|
| | No. of samples. | Total Extractive. | Theine. | Tannin. | No. of samples. | Total Extractive. | Theine. | Tannin |
| Black teas(averages). Green teas(averages) | 44 | 31·89 39·92 | 2·47 2·14 | 13·33 19·47 | 23 | 23 56 31·39 | 2·73 2·46 | 5·29 9·49 |

NOTE.—The results given under Laboratory Methods are quoted from Hassall, Battershall, Bell, Dragendorff and others.

A second examination was made in 1904, when 73 samples collected throughout Canada, were found to be genuine teas. This report forms Bulletin No. 99.

A third collection was made in August, 1907, comprising 89 samples, of which 82 were pronounced genuine and 7 samples "doubtful." (See Bulletin No. 130).

4565-11