## LABORATORY

OF THE

## INLAND REVENUE DEPARTMENT

OTTAWA, CANADA

## BULLETIN No. 181

## ARSENIC, AS AN IMPURITY IN DRUGS.

OTTAWA, June 8, 1909.

W. J. GERALD, E-q., Deputy Minister of Inland Revenue.

Sir,—In the year 1900 there occurred in Manchester, England, a large number of cases of arsenical poisoning. It was discovered that the poison was present in beer which had been made from commercial glucose. Other sources of arsenic in beer were found in malt which had been dried in kilns to which gases from pyritous coal had access. Further research showed that decided traces of arsenic occurred in many chemical products whose manufacture involved the use of sulphuric acid; it being already known that crude sulphuric acid (oil of vitriol) is usually contaminated with arsenic.

For the information of this Department there were examined at that time a number of samples of drugs, as found on the Canadian market, for the purpose of ascertaining whether any of these contained distinct traces of arsenic. While most samples were practically free from the poison, it was found that arsenic was distinctly present in certain sulphates, and particularly in phosphate of soda. The amounts were not so large as to be alarming; but were sufficient to make it impossible to regard these drugs as meeting pharmacopoeal requirements.

The present bulletin contains a report upon 448 samples of sulphate of magnesia, sulphate of soda and phosphate of soda, three drugs which are as likely as any to contain arsenic as an impurity. It is satisfactory to find that on the total of 448 samples, 336