

LABORATORY
OF THE
INLAND REVENUE DEPARTMENT
OTTAWA, CANADA.

BULLETIN No. 221.

ARSENIC AS AN IMPURITY IN DRUGS

(EFFERVESCENT PHOSPHATE OF SODA).

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Deputy Minister of Inland Revenue.

OTTAWA, December 10, 1910.

SIR,—Since the historic case of Arsenical beer (Manchester, Eng., 1900), where it was found that the malt used had become contaminated with dangerous amounts of arsenic through having been dried in the fumes from pyritous coal; while glucose used as an adjunct in beer manufacture contained arsenic from sulphuric acid, used in hydrolysis of starch,—many investigations of drugs have been made, specially directed towards determinations of their content of arsenic.

There is no question of intentional adulteration in this matter, but arsenic is so widely distributed in nature, and especially so in the materials employed in the manufacture of sulphuric acid—which latter is, in its turn, a principal agent in many chemical manufactures that, unless special precautions are taken, more than negligible traces of arsenic may occur in very many drugs.

Bulletin 181 of this Department, contains the results of work upon 448 samples (Sulphates of magnesia and soda, and phosphate of soda) examined in June, 1909.—Below is a synopsis of results:—

	ARSENIC.				Total. Samples.
	None.	Less than one-half milligram per hundred grams.	Less than one milli- gram per hundred grams.	More than one milli- gram per hundred grams.	
Sulphate of magnesia.	120	26	4	0	150
Sulphate of soda.	99	35	10	6	150
Phosphate of soda.	117	25	6	0	148
	336	86	20	6	448