

LABORATORY
OF THE
INLAND REVENUE DEPARTMENT
OTTAWA, CANADA.

BULLETIN No. 234

SWEET SPIRIT OF NITRE

OTTAWA, February 15, 1912.

W. J. GERALD, Esq.,

Deputy Minister of Inland Revenue.

SIR,—I have the honour to report upon a collection of seventy-four (74) samples of sweet spirit of nitre purchased throughout Canada in October last.

Dunglison (Medical Dictionary, 23rd Edition) describes this drug as 'refrigerant, diuretic, antispasmodic and diaphoretic, and largely employed as an ingredient of fever mixtures.'

The National Dispensatory, 5th Edition, p. 1499, says of the drug: 'In febrile conditions it is much used to promote critical sweating, which it properly does by abating the morbid activity of the heart, and tension of the arteries. As a diuretic it is commonly employed to relieve strangury produced by calculi; in all painful affections of the urinary apparatus, whether occasioned by calculi or inflammatory disorders, and in the various affections of the kidneys in which congestion of those organs and diminished secretion of urine occurs.'

I quote these authorities in order to emphasize the importance of this drug. It follows naturally that pharmacists who supply the article, are greatly to be blamed when sweet spirit of nitre, as furnished to physicians and to the public, is not of standard quality.

The British Pharmacopœia requires that, when fresh, it should contain 2½ per cent by weight of ethyl nitrite; and that it should never contain less than 1½ per cent of ethyl nitrite.

The United States Pharmacopœia (eighth revision) requires a minimum of 4 per cent of ethyl nitrite.

Sweet spirit of nitre deteriorates on keeping; and the British Pharmacopœia (1898) instructs that, 'the spirit of nitrous ether be kept in well closed vessels, preferably in a cool dark place, and in small bottles.'

This drug was inspected in 1908, and, the results of analysis are reported in Bulletin No. 167. At that time I took occasion to remark: 'It is well known that this preparation gradually loses its strength on keeping. The fact is expressly stated in the pharmacopœias. It follows that druggists should take proper precautions to enable