

LABORATORY
OF THE
INLAND REVENUE DEPARTMENT
OTTAWA, CANADA.

BULLETIN No 178.

SPIRIT OF CAMPHOR (SPIRITUS CAMPHORÆ)

OTTAWA, March 26, 1899.

WM. HUMSWORTH, Esq.,
Acting Deputy Minister of Inland Revenue.

SIR,—I beg to hand you herewith a report upon seventy-four (74) samples of spirit of camphor, purchased throughout Canada in January of this year.

The collection was made in consequence of some complaints to the effect that this article was offered with so weak a spirit strength as to make it useless for the purposes to which it is applied by physicians and the public.

The present examination has regard solely to the spirit-strength of the alcohol used. It is intended, in the course of the coming year, to make another collection, in which the content of camphor, and the nature of the alcohol employed as a solvent will be determined.

The British Pharmacopœia prescribes spiritus rectificatus (90 per cent. alcohol) as the proper solvent for preparation of spirit of camphor. This spirit has a specific gravity 0·834; and the resulting spirit of camphor is required to have a specific gravity varying between 0·843 and 0·847. There is an increase of volume of approximately 10 per cent. on dissolving camphor in alcohol, according to pharmacopœal directions for preparation of spirit of camphor. Allowance being made for this increase of volume, the finished spirit of camphor represents an alcoholic solution containing practically 81 per cent. by volume of alcohol.

Reasonable allowance being made for loss of alcohol due to evaporation during manufacture and the opening of bottles in dispensing, I have considered it right to pass all samples showing over 75 per cent. by volume of alcohol. This amount of alcohol is sufficient to retain in solution the whole of the camphor used in the manufacture of pharmacopœal spirit of camphor.

Twelve samples show less than 75 per cent. of alcohol. Of this number eight (8) samples contain above 70 per cent. and may be regarded rather as doubtful, than as actually adulterated, in the sense of having been made with less spirit than the pharmacopœia requires. Four (4) samples, are distinctly too low in spirit, and must be regarded as adulterated under the Act. These are:—

No. 36810	containing	54·08	per cent	Alcohol.
" 36812	"	56·72	"	"
" 937	"	58·60	"	"
" 22903	"	60·84	"	"