Hollands Gin.—Fifteen samples have been fully examined and a sixteenth sample has been partly analyzed by Mr. Tourchot. Of the 6 "case" samples of gin, all gave a distinct reaction for furfurol. Three of the "draught" samples gave this reaction distinctly, but 5 contained no furfurol, and 1 (No. 9974) gave the reaction but faintly. An artificial gin, made with essence and silent spirit reduced, gave no reaction for furfurol. It would therefore appear that genuine Hollands contains furfurol, and, by inference, such samples of gin as do not give the reaction are probably factitious, and made from silent spirit, by addition of essence of juniper. Seven of the samples approximate very closely to proof strength. The highest content in alcohol is 57·36 per cent (volume)—*i.e.*, one-half per cent over proof. The lowest in alcohol is No. 10676, containing 42·18 per cent alcohol by volume, or about 26 under proof strength. All of them give opalescence on dilution, but in 3 of them the opalescence is but slight. A genuine Hollands gin should give no residue on drying at 100° C, other than that due to matter dissolved from the cask or vessel in which it has been stored. In the case of the artificial gin the residue found is chiefly glycerine, the sample being made from the following formula:—

Alcohol (about 10 below proof)	1,600c.
Hollands' gin essence	1c.
Glycerine	4c.

The highest residue found in any of the regularly collected samples is less than 1 gramme per litre; and with the exceptions of No. 9358, in which it reaches 0·948 grammes, and No. 10696 in which it is 0·342, gramme per litre, the amount is practically insignificant, as far as suggesting the intentional addition of solid matter. Even in the cases excepted, it is not impossible that the solids found may be derived from the cask. It will be noticed that the highest residues are always found in the draught samples.

Old Tom Gin.—This seems to be essentially a sweetened gin, containing oil of juniper and sugar. None of the samples gave any reaction for furfurol, and I interpret this to mean that they are manufactured from patent still spirits. These gins seem to bear the same relation to Hollands that rye whiskey bears to Scotch or Irish pot-still whiskey. The residue in Booth's gin amounts to about 29 grammes per litre, or nearly 3 per cent. It consists almost wholly of sugar. A draught gin, No. 10485, imitates Booth's gin pretty closely, except in spirit strength. The sample made in the laboratory from the following formula:—

Alcohol (about 10 below proof)	1,600c.
Old Tom Gin Essence	1c.
Glycerine	5c.

gives a very low residue as compared with the other samples. The presence of so much sugar in solution greatly lowers the apparent alcohol strength. In No. 10485, for example, the strength indicated by the original gravity is only 33·23 per cent (volume), while the true strength is 41·04 per cent.

I have the honour to be, Sir,

Your obedient servant,

A. McGILL,

Assistant Analyst.