

OTTAWA, July 14, 1903.

THOS. MACFARLANE, Esq., F.R.S.C., &c.,
Chief Analyst, Inland Revenue Department.

SIR,—I have the honour to hand you herewith a detailed statement of the analysis of 100 samples of canned vegetables. These may be classified as follows:—

| Canned peas | Samples. |
|-------------------|-----------|
| | 27 |
| " corn | 28 |
| " tomatoes | 14 |
| " beans | 20 |
| " carrots | 1 |
| " beets | 3 |
| " cabbage | 1 |
| " asparagus | 1 |
| " mushrooms | 1 |
| " pumpkin | 2 |
| " squash | 2 |
| | <hr/> 100 |

All of these samples were examined for chemical preservatives, but no substances of this nature were detected.

With two exceptions, all the samples were found to be in good condition. The exceptions were samples of corn, one of them (No. 21290) being but slightly decomposed, the other (No. 23135) being quite rotten and offensive.

In addition to the examination just indicated, the samples of peas were submitted to a test for copper.

Copper is stated to be normally present, in traces, in some peas. (Bull. 13, part 8, Department of Agriculture, Washington, 1893). I have determined the degree of accuracy obtainable by the method I used [electrolytic deposition on platinum (sulphuric acidulation) and subsequent solution and colorimetric valuation of the separated copper] and find that less than 60 parts per million can easily be detected, although the quantitative statement on points than this must be accepted with caution, and is best denoted as 'traces'.

Such traces have been found in two samples, No. 17862 and 21716. I have no evidence to show that these traces mean any intentional addition of copper for purposes of intensifying colour. A sample of French peas gave 60 parts of copper per million.

I may add that the question of the wholesomeness of peas greened with copper, is yet unsettled, but the general weight of opinion in English-speaking countries is adverse to the practice.

I have the honour to be, sir,

Your obedient servant,

A. MCGILL.