

Another reason why the inspection of Inland Revenue Inspectors is almost entirely barren of practical results is that the detection of fraud and imposture by the Government, carries with it no penalties of any serious consequence to the offenders. Trifling fines may be, and sometimes are, inflicted under the Foods Adulteration Act, but in most cases the punishment consists of the publication of the name of the offender in an official bulletin which is seen by a very few people.

In a bulletin issued by the Department of Agriculture in January, 1907, we find the statement: "For some time past the trade of pure maple sugar and syrup has been seriously interfered with, by the sale of mixtures of maple syrup and sugar, with other sugars or other ingredients, and by making and selling these mixtures as pure maple products. *This is a clear case of adulteration, even though the mixtures contain only harmless or less digestible ingredients.* (The italics are ours). This adulteration in one sense of the word is a legitimate business providing the goods described are plainly marked Compound or Adulterated, or as containing other than the pure maple products, but they must be so marked to clearly indicate to the purchasers just what they are buying."

Another paragraph in the same bulletin reads:

"Until quite recently the only adulteration that could be detected in maple sugar and syrup was that of glucose or artificial flavors. The Department (Inland Revenue) have now, however, discovered other processes by which the presence of cane or beet sugars can be detected."

Technically sugar made from cane, beet root, or maple sap is "cane sugar" or sucrose.

"Glucose," "grape" or "starch" sugar may be made by boiling starch in twice its weight of water, acidulated with one per cent. of sulphuric acid. Its sweetening power is much less than that of cane sugar, one part of cane sugar being equal to  $2\frac{1}{2}$  parts of glucose in sweetness. It is not so soluble in water, but in alcohol much more so than cane sugar.

In the old days a good deal of glucose was used in the manufacture of bogus maple syrup and sugar, and much is still used, although the low prices of cane and beet sugars, syrups and molasses in the past few years had made the use of glucose in place of the other adulterants less profitable than formerly.

In 1910, however, the Department of Inland Revenue does not seem to have found its newly discovered methods for detecting adulteration by cane and beet sugar to be altogether satisfactory; for we find Mr. A. McGill, the Chief Analyst, saying: "It is certain that *although many genuine samples of Syrup are of such a character as to admit of their dilution with Cane Sugar Syrup, and still fall within such limits as to pass for genuine,* the great majority of fraudulent samples