HOW TO CAN FRUIT AND SAVE YOUR SUGAR.

I presume all know that there are several kinds of sugars. Cane sugar, grape sugar or glucose, and milk sugar are the principal varieties. Of these, cane sugar stands pre-eminent for its sweetening properties, being rated at 100, while grape sugar is only rated at 40. In other words, it takes two and one-half pounds of grape sugar to equal one pound of cane sugar. I presume, however, that your readers do not all know, what is known to every chemist, that when cane sugar and fruit are boiled together the acid of the fruit causes a chemical change in the sugar to take place, which changes the sugar to grape sugar.

I do not suppose they intend to throw away six pounds of sugar out of every ten they use in the preparation of fruit. Yet such is the fact. They have, as a result of the boiling, ten pounds of glucose, which is only equal to four pounds of sugar; and besides this loss the fruit has, to a great extent, lost its true flavour, and is, of course, inferior in quality to that sweetened with cane sugar. How can fruit be sweetened with cane sugar without making this change and loss of flavour? As that is the principal object of this paper I will answer the question.

First, cook your fruit until it is "done;" then, if you have time, let it get cold, and then add your sugar, mixing it well; let it stand an hour or more. The sugar by that time will be absorbed by the fruit. You will then have saved all your sugar and preserved the flavour of the fruit at the same time. If you have not time to wait add your sugar when the fruit is only partially cool, and you will only lose 5 or 6 per cent. of the sugar.

In the making of preserves there are two ways to avoid the loss of sugar. One is to use only glucose and fruit in equal parts, as it is much cheaper to buy glucose than to make it of the higher priced cane-sugar. Another way is to cook your fruit as before described, then add one-half a pound of sugar to the pound of fruit and seal up in cans, or steam the fruit when practicable, lay it in the cans and fill up with hot syrup made so as to contain the proper proportion of sugar, and seal. You will then save nearly all the sugar. Preserves made in this way will ferment unless sealed in air-tight cans.

In the ordinary canning of fruit no sugar should be used, as a part of it turns to glucose while hot, and if the fruit in the can ferments through some imperfection in the process, as frequently happens, your sugar is lost entirely. Open your cans an hour or more before meal time, add your sugar, mix it well and let it stand; the sugar will thoroughly permeate the fruit by that time and no sugar is lost.

I suppose everybody uses glass cans to a greater or less extent. A good many years ago a lady taught me how to fill a cold glass can with boiling fruit without the danger of breakage. I have seen the plan tried often enough to have entire faith in it.

Place in the empty can a spoon that is long enough to reach from the bottom to the top of the can, pour in your boiling fruit, remove the spoon and seal. The can will not break. Please do not ask me to explain the philosophy of it, as I dislike very much to plead ignorance, so I hope you will ask some of the knowing ones in your vicinity and let me know the explanation.—*Correspondence of Indiana Farmer.*
