# APIARY.

## HONEY IN PAPER SACKS: THE CANDYING OF HONEY, ETC.

Honey in paper sacks! Who would have believed this possible five or six years ago? Yes, many who may read the above caption may consider this article as belonging to the newspaper canard class. But honey has for several years past really been marketed in paper sacks. Not in its liquid state, however, for that would be something analogous to selling sugar in packages made of wire cloth. Most kinds of honey, upon approach of cold weather, will turn to a semi-solid condition. This change is, in the beekeeper's vernacular, known as candying. Some consumers term it "sugaring." Partly because in this state honey is granular and lumpy, like unrefined sugar, and partly because it is believed that sugar syrup has been added to the honey. This latter is an erroneous idea. Honey is rather inclined not to candy when it is adulterated with sugar syrup or glucose. But it may turn to this semi-solid condition even when such additions have been made to it. However, when one has purchased honey that has candied nice and solid clear through, without being watery, one can be quite positive that it is a pure article.

Why honey candies, is not known. This is something into which the wise ones have not delved yet. For this reason, it is not always possible to get honey to candy when wanted, or to prevent this change; the process is not understood yet.

But why put honey in paper packages at all? Why not market it in tin or glass receptacles? This is a pertinent question. Yes, it is the question on which hangs the reason for putting up honey in paper sacks.

Honey is considered a luxury by the masses; and in a certain sense it is. It costs more than glucose, syrups or other kinds of spreads for bread. These ideas were entertained, too, by a large honey-producer of Colorado. He reasoned that, in order to make beekeeping the most profitable to himself, he would have to dispose of his large crops of sweets direct to consumers. But there were "ifs." If he put up his honey in glass, such as jelly tumblers, Mason fruit cans, or in tin pails, the expense of the packages so increased the price per pound that the masses of working people would not use honey. As the number of well-to-do who could afford to eat honey—the finest sweet in the world—at the increased price was limited, the results sought—the selling of the entire crop direct to consumers—was not accomplished.

About the only way to induce the "common" people to eat his honey was to offer it at a cheaper price. But to sell it cheaper in the receptacles in use meant a reduction in profits, or no profits at all. Finally, this beekeeper conceived the idea of selling in cheaper packages. But what use? He says that he thought of a very thin tin, of wooden boxes, of fibre packages, and some other things, for holding his honey in its candied state. At last he thought of simple paper bags, and the paper honey sack, in its initiative, was invented. The inventor, R. C. Aikin, of Colorado, conferred a great favor upon the poorer classes of people by enabling them to use honey regularly—the most healthful sweet known.

As ordinary paper bags are not made to hold liquid, Mr. Aikin had to experiment still further. He first ordered a bag made of heavier and stronger paper. Then he conceived the idea of coating such on the inside with beeswax or paraffine, to prevent the honey, before it has solidified, from oozing out.

Previous to the invention of his paper honey-containers, he had used tin pails for retail honey. He says, in substance, of the comparative expense of the two kinds of packages: "The tin cost me, on four to seven-pound packages, about a cent and a half a pound. Lately, the price has advanced, so it now costs two cents a pound. I can pack in paper sack for approximately a tenth the cost of tin, for equally large packages. Let me illustrate this by figures. The first order for bags cost me, f. o. b., L——, Colorado, $45.06, and was enough to hold 23,000 pounds of honey, and a little more, while, at the same time, three-pound lard pails, to hold this amount, would have cost me $450 and upward. For glass receptacles, the cost would have been between five and six hundred dollars."

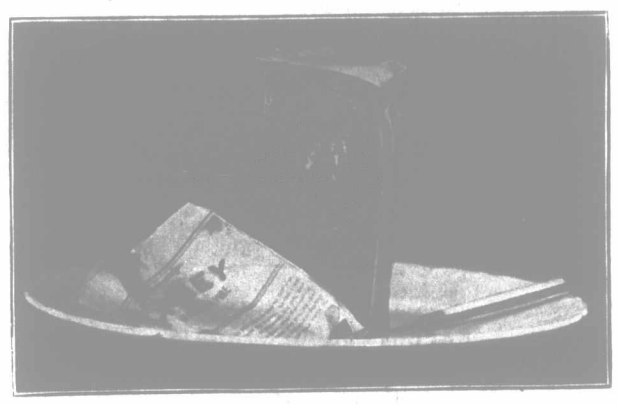
The paper packages are much more convenient, too, than glass or tin ones. Mostly on account of this, and also for the cheapness, the inventor, several years past, was unable to supply the demand for honey in this form. Of course, other beekeepers of the West now use paper honey-containers. Eastern honey, from white clover and basswood, does not candy so readily nor as solidly as does that which the bees gather from the alfalfa of the irrigated regions of the Western States. This is much to be regretted, but, until the process of candying is better understood, it cannot be helped.

The Western beekeepers who produce honey on a large scale to "paper" it, remove the honey from the comb with a honey extractor. The cappings must, of course, first be shaved off with a knife especially made for this purpose. Then the combs are put into reels or pockets in the machine, and whirled around at considerable speed. This centrifugal force throws the honey out of the cells. It is then drawn out of the honey extractor through a faucet at the bottom, and stored in tanks holding several tons of the sweet liquid. The combs are returned to the bees to be refilled by them.


Ten-pound Bag of Honey.

As has already been said, alfalfa honey candies readily. After it has been stored in the tanks for a month or more, it will lose its clear, transparent appearance and commence to get cloudy. This is an indication that the candying process has commenced. Then the mass is stirred to produce a finer grain, and to cause the solidifying process to go on evenly. If the honey is not stirred, it may candy in streaks, parts of it remaining semi-liquid.

Before the honey becomes so solid that it will not run, it is put into the paper receptacles. These are then placed close together in trays for

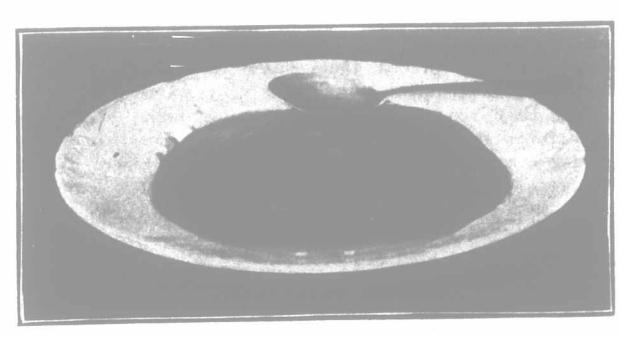


Sack of Candied Honey Cut Open.

the candying process to continue. When the honey is solid, like lard or butter in winter, the tops of the bags are folded down and sealed with starch, paste, or some other adhesive. Now they are ready to be marketed.

The bags are made of various sizes, some to hold one or two, and others to hold five pounds of honey. Even ten-pound ones are made. As honey is hygroscopic—that is, absorbs atmospheric moisture readily—the sacks must not be kept in damp places. Otherwise, the honey will become soft and sticky, and its flavor will also be impaired.

To the housewives, these sacks of semi-solid honey are very convenient. With a knife, the paper is slit open in several places from top to bottom, and is peeled off. As the bags are paraffined, they will not stick to the honey, but come off nice and clean. And now there is on the plate a chunk or brick of honey from which can be cut off about the amount that will be used for one meal. After it has been "mushed" up with a spoon, it spreads like lard or butter.



Mushed Candied Honey.

On the table, the convenience of candied over liquid honey continues. The children do not daub their clothes or the table with it; nor will the "old man" get it in his whiskers. Well do I remember how I, in my childhood days, used to stuff up the holes in bread with crumbs to prevent the "strained" honey or maple syrup from running through and making my hands sticky. Candied honey would have solved this problem more easily.

As honey is inclined to reliquefy upon the approach of warm weather, the paper sacks, for many localities, are not suited for the summer trade. This need not hinder one from getting honey in a package that costs practically nothing, for sacks can be purchased in spring, and the contents emptied and kept in stone jars. Of course, one cannot eat candied honey during the several summer months.

As an experiment, to ascertain the nutritive value, a certain professor of Europe subsisted mainly on white bread (ordinary wheat bread, as is common in this country, is termed "white bread" in some European countries) and honey for a period of six months. During this time he was not idle nor half starved, but exercised as usual, and was well nourished. The professor used—consumed—from one-third to one-half pound of candied honey daily. He found the solidified (candied) article better than the liquid.

Though honey in its candied form is more convenient, and can be purchased cheaper, too, since, as has been shown, it can be put up in very cheap containers, and it also appears to be better as a food, there are some who do not like it in this form. They prefer it liquid. Their wish can be gratified, and yet they can purchase the candied article in its cheap packages.

As has already been said, upon the approach of real warm weather, candied honey is inclined to rechange to its original or liquid condition. Acting on this principle, the housekeepers can, by the application of heat, slowly reliquefy solidified honey in the coldest weather. If kept in a fairly warm place, it will not recandy soon, or perhaps not at all.

Great care must be taken, when reliquefying candied honey, not to overheat it. There is a certain point, about 140 degrees F., above which honey cannot be heated without injuring its flavor. If the contents of several paper sacks are put into a stone jar, or other receptacle, and put on the back part of a cook stove, where the heat does not go too high, the honey will be melted in several days, and retain its flavor unimpaired.

Wis. F. A. STROHSCHEIN.

# THE FARM BULLETIN.

## OXFORD COUNTY, ONT., NOTES.

Shortness of feed is the general complaint. A number of farmers have sold stock at a sacrifice. A great many hogs were rushed on the market that were not fit to kill. Hog buyers sent some lots home that would not be accepted at the factory. A few farmers killed their little pigs out of the way. The crop of hogs will probably be short next summer. But some of the best farmers are keeping on in the even tenor of their way, believing that the price of live hogs will be all right next summer. A while ago the price was down to $4.75, which don't pay, with shorts at $25 per ton; but we hope that the bottom has been reached. Last week the buyers were paying $5, but they did not get many; there are not many in the country. The shortness of feed may teach us a lesson in economy in feeding. The straw is good; our cattle don't leave anything but the binder twine. We give a little hay once a day, and cut straw and pulped roots twice a day, with a little grain for the milking cows and fattening cattle. Cattle seem to be heartier and have a better appetite when they only get as much as they can eat up clean. We feed our idle horses wheat straw and a little chop. We think it is a healthier food for idle horses than hay. Our cheese factory has closed down. We got 12¼c. for October make. The stringency in the money market has hurt the cheese business a good deal. I understand that the rate of exchange has gone up enough to come to 24c. per box more than formerly, and the banks won't advance money on any cheese in storage.

Hay is not so dear at it was; selling now about $15. Oats, also, have taken a drop. Butter was retailing here as high as 35c. per lb., but it has taken a slight drop now since the cheese factories have closed down, and it may not be as high again for a long time. We have snow, but no sleighing. There is very little wood to haul now; the majority burn coal. Times have changed very much on the farms. We were nearly all sending all our milk to the cheese factory and buying butter. Fancy, farmers buying butter. Tempus Mutantis et Tempera Mutanter. D. L.