

honey, extracting for instance, by feeding sugar syrup wholesale. But such process is not necessary; it should be condemned.

Why should the last mentioned plan be condemned, and why should sugar-feeding for stimulation of brood-rearing be condemned? For this reason: though it is right in our eyes, it never can be in the eyes of the world, our customers. Not a few people believe that bees make honey, even in winter. To see a man feeding syrup and taking honey simultaneously would cause any an observer to draw the natural conclusion that the bees were making honey out of the syrup, and he would report. The apiarist might argue that night-fall, the motion of the eyes of the observer would decide the date. The same would be true of wholesale feeding for stimulative purposes; hence I say, let all who feed to make apiarian work easier, or who feed to get their colonies ready for the harvest, feed with diluted honey else not at all.

The only legitimate use of sugar in honey-producing apiary is to get the bees through the winter or through a season of dearth till the flowers come again. Even this sort of feeding seldom comes to the bee-keeper except when he brings it about by his system of management. It does sometimes come ultimately, but the visit can be made in one.

As to feeding to produce bees, or in brood-rearing, that is another thing. I think it perfectly legitimate for a bee-keeper to turn sugar or any other sweet into bees, but let that be done in bees avoid trying to harvest honey-crop in the same apiary where he is following such practice of feeding in a wholesale way. It would most surely create a cloud otherwise.

It behooves every writer upon this subject to see to it that he leaves the

impression upon the reader's mind always that the sugar-feeding is done of a necessity and that it is never done at a time or in a manner as to contaminate the honey-crop. This rule, I regret to say, is too seldom followed. It should be followed even at the expense of tiresome monotony to the bee-keeping reader, since we can never know when the other reader will take up the piece of writing, read it (mis)interpret it and parade it in clothing of his own make.

Let me close this with this exhortation: If we must at any time feed sugar syrup to our bees, and if we feel that we must tell about it in the papers, let us see that we make clear to the dullest reader that this sugar is fed to the bees at a time when honey is not being harvested and in such amount that the bees will use it up as food to live upon till the flowers come from which they can get food for themselves and honey for their owner. Such a course is possible, and seems to me imperative.—Allen Lathem, in American Bee-Keeper.

#### HONEY VINEGAR.

Ordinarily the process of vinegar-making consists of two distinct steps. In the first, sugar in some form is by fermentation, changed into alcohol. In the second, this alcohol is by a similar fermentation changed into acetic acid. The alcohol fermentation must always precede the acetic, and should be allowed to become complete before the acetic fermentation begins. They may be carried on together, but it is usually at both the expense of time and quality, as the presence of acetic acid in even a small quantity greatly retards the alcoholic fermentation and sometimes a degenerative fermentation sets in and spoils the entire product.

Accordingly, your barrel should be one that has never contained vinegar.