BARRELS.

One page 114 C.B.J. for May, the president is given credit for a paragraph on barrels which he might not care to own. I happen to remember discovering this error when revising the report, but unfortunately the report as revised goes to the government for publication in bulletin form, while the Canadian Bee Journal uses a copy of the original unrevised.

It was myself, not the president, who had used weathered barrels, and learned by bitter experience more about the cooper trade in one short season than the average bee-keeper will ever know. To start at the beginning, honey absorbs moisture from anything at all moist with which it comes in contact. The natural and common idea is that barrels are at all loose honey put in them will soon soak up the staves and make all tight. One would be tempted to keep them in a damp place so they would keep tight and not soak up too much honey. Now, the very opposite is the case. My first experience with barrels was, I think, in 1903, when I had some with honey at an outyard and left them in a small frame house that heated up terribly during the day. At the next visit honey was oozing out through every crack between staves and head pieces. The insides of the hoops were smeared with honey so they would not drive. Well—I have had many scanter experiences; but I got them all up.

Barrels for honey should be kept in a dry place, and if next the roof so as to be heated by the sun and more thoroughly dried, so much the better. Then when filled with honey, the same rule applies. Some advise placing in cellar after filled. This is a very pleasant way out of present difficulty, because dampness will soon soak up the surface of the staves and stop small leaks; but if they are then shipped and left standing in the sun on some platform, or in a hot, dry warehouse, this is all undone, and the leaks develop when they are beyond the shipper's control.

The time to stop leaks in barrels is before they are filled. They require careful handling from the first. If left standing on end in a shower of rain the heads and stave ends soak up and attempt to swell. The hoops hold them in place and the consequent pressure crushes the wood so that when dry again the shape of the staves is spoiled and it is difficult to draw them together by driving. After being thoroughly dried we go over every hoop in turn. The first hoop is taken off, set on an anvil or any smooth iron and all the punch points flattened down with a hammer so the hoop will drive easily. It is replaced on the barrel and driven as tight as possible with a steel hoop driver which has a soft iron handle the same shape as that of a cold chisel. This tool weighs about a pound and is driven by a steel hammer weighing about three and a half pounds. An ordinary carpenter's hammer is not heavy enough. I have never burst a hoop yet, though I have started the rivets on a few. The next hoop and all the others in turn are treated in the same way. Next examine the whole surface of the barrel for openings. Plug all holes except the bung-hole. Cracks crosswise of staves can be closed by laying on a piece of cotton and covering with tin nailed down well. Mark with a pencil any spaces where the staves do not come tight together at the end, remove the end hoop and loosen the others so these cracks will spread enough to slip in strips of cotton or flags; then drive the hoops down tight again. If this coopering has been done any length of time before filling drive every hoop the last thing before the barrel is put under the extractor, and there should be no trouble about leaking. The tamping with twine and