

covers if you have any, and don't rot. Bees don't nibble it, and is only about half the price of oilcloth. One ply is plenty thick enough. Don't use rubberoid paper as the bees will nibble it.—F. W. Penberthy in The Australian Bee Bulletin.

After some debate the clause prohibiting anyone from becoming a member who locates nearer than three miles to a bee-keeper already a member, provided they propose to engage solely in the apicultural business, was retained.—Idaho State Convention.

CARNIOLAN CROSSES

I consider the introduction of Carniolan blood a benefit to Italians and would prefer such a cross to pure Italian blood, but my own experience and my knowledge of these various races leaves in my mind not the slightest doubt but that far better results can be obtained through using pure Cyprians on the female side and Pure Carniolans on the male side, for I am sure this cross gives both theoretically and practically, the greatest combination of energy, hardiness, wing power, tongue reach and prolificness that can be obtained from any of these races, and with these qualities a fair degree of gentleness is obtained through the Carniolan males.—Prof. Frank Benton in the Rocky Mountain Bee Journal.

A SWARM INDICATOR

While looking over the colonies, I noticed that nearly all of the old queen-cell stubs, where bees were making preparation to swarm, were occupied by an egg or a larva. In short, practically all were so toward the centre of the brood nest. When artificial cells are placed near the

center any queen at once lays in them. I am inclined to believe that a stick, laid on top of the frames—I mean between the top bars over the center—at the beginning of swarming time, will make a very good indicator, if not an accurate thermometer, as to when the swarming fever sets in. An opening could be made in the end of the hive where it could be thrust in between the frames. In this way the combs could be spread a little to give slightly more room. The stick need be only about 4 inches long. It can be made secure and the hole closed with a suitable wooden button. About four queen-cell cups can be stuck securely to the under side of this stick near the inner end. This will, I believe, make a sufficient indicator so that one can pass through the yard in about 25 minutes and ascertain just what colonies will swarm soon, then go right after and shake those that the indicator shows up right, or where the queen has laid in any of the cells.

I have always noticed that queen cells are to be found more numerous where most space is found between the combs in the brood-nest. Making a little space between the central combs thus, certainly makes an ideal place for the bees to cherish and keep the cups, and the queen will lay in them just as soon as the bees want to swarm. A visit to each yard every six days would be sufficient for the operator.—Frank Coverdale in The American Bee Journal.

My bees which were packed in their summer stands, have come through the winter and spring so without any loss. In east White township, out of about 450 colonies that were packed out-doors and in chaff hives, last fall, fully 175 are known to be dead, I dare say they will dwindle to about half the 450. W. H. Kirby, Oshawa, April 28, 1904.