

voted to the hive with all its late affixes, etc., the success (of bee-keeping) would be greatly improved."

An interesting article on Carniolans is that by L. Stachelhausen in the *Api.*, but it cannot be said that the writer is prejudiced in their favor. The first Carniolan queen imported into Germany had no sign of yellow blood, and he avers that the Carniolan bee proper is nothing else than a variation of the so-called German. North Germany has a bee allied to the Carniolans, only more black, good breeders, raise drones all the time and frequent swarmers; Southern Germany has a brown bee, slow in breeding and swarming. Mr. S. argues that by admixture with other races and by a line of management pursued for a century the distinctive qualities of the Carniolans and Germans have become fixed—that they are like the Bostonians, "victims of culture."

A "fixed race" of bees Mr. Stachelhausen thinks cannot be had by crossing two different races, because in a couple of generations the markings of one will disappear. He believes the Italian to be a cross between an Egyptian and a black, but not a fixed race yet. An Italian can by selection be bred to a more yellow color, or in the other direction to a darker. This, he concludes, is proof enough that the Italian is no fixed race, but a cross of two races that may be more than one thousand years old.

Swarming out in the spring is the result of the absence of a sufficient quantity of young bees to keep company with the queen when a general flight of the workers takes place. Finding herself so nearly deserted, the queen becomes excited and takes wing with the workers and the excited colony may return to their home and they may not; in the latter contingency, it is a case of "swarming out." A queen and drone guard at entrance will prevent the queen taking wing and the cause is removed.—G. W. Demaree in *Apiculturist*.

A virgin queen, says A. L. Swinson in Friend Alley's journal, is one of the most satisfactory methods of introducing

new stock, attended with comparatively little risk and danger of loss. A breeder would not sell his *best* queen for probably \$20, but would sell a selected virgin daughter from said queen for less than a dollar, that would, mated to an Italian drone in purchaser's apiary, produce in some instances better drones than would the unpurchasable mother queen.

Before closing up for winter be well assured that every hive contains a fertile queen. We fear that many will be found queenless. There seems to have been a mania among the bees for changing their queens, and in many cases they have been unable to provide a successor, owing to the unfavorable season, no doubt. People who fail in life generally become morose, and dissatisfied with all around them. Just so with the bees. When confined to their hives during the summer months by cold and rainy weather, and unable to store food for the winter's supply; aware that a screw is loose somewhere; restless, unhappy and morose; the blame is often laid at the door of the poor queen, and sentence of death is passed. The foreign races are said to change queens oftener than the English bees, but of late English and foreign races alike have been practising this amusement to a greater extent than we ever experienced before, so abnormal has the season of '88 proved.—B. B. 7.

For the Canadian Bee Journal.

FEEDING IN FALL.

FROM the letter by Mr. John F. Gates in last issue of JOURNAL and comments by the editor, I infer that both have slightly misapprehended my position on fall feeding and late breeding.

In feeding inside the hive I do not pour the feed over the frames and bees, thus besmearing the latter, but pour it in the back part of the hive, touching only the back frame, and perhaps a few bees. Nor would I think of pouring feed into a hive through which it could leak out. The fact is, I see that all my fast-bottom hives are made bottom-tight, filling in any crevices or worm holes with putty where the feed descends inside, and giving it a good coat of paint. There will, therefore, be no leakage or even soakage.

As to raising a lot of young bees "late in the