

From Bees.

CARNIOLANS.

THE bees of Carniola are noted for their great gentleness. They only rarely resent any manipulation, and need very little smoke to subjugate them. It might be thought they were lacking in pronounced qualities, but on the other hand, they show decided traits peculiar to themselves and accompanied by distinctive markings, and are therefore as justly entitled as any bees found in Europe to be called an established race.

The typical, select Carniolan queen has a deep copper or bronze-colored abdomen, thorax thickly set with gray fuzz, large, strong wings and a large stout-looking body. Carniolan queens are larger on the average than those of any other race, having especially broad abdomens. Some queens are quite dark even attaining with age shining jet color. Such queens though themselves resembling queens of the common race, do not produce bees in any way inferior to other Carniolan queens. Also pure Carniolan queens are occasionally met with which are as yellow as Italians. Yet they invariably produce workers and drones which are distinctively Carniolan. In all parts of Carniola some queens are found which produce bees having the first segment of the abdomen somewhat rusty red in color, and they are as often seen among the finest, most prolific queens as among those of any other grade. Nevertheless variation in color and qualities is less with Carniolans in their native land than with Italians in Italy. Yellow workers are not found in Carniola while black bees—native, too, and not imported, exist in Italy. The remarkable size and general bronze color of Carniolan queens, in contrast with the greyness of their progeny make it easy to find them on the combs. They are exceedingly prolific, and herein lies one of the very valuable qualities of this race.

The drones are veritable 'gray-coats,' and stout, active fellows having especially large wings.

Carniolan workers are silver-gray in color, large-bodied and strong-winged. The thick fuzz of the abdomen is disposed in light-colored bands and as dark drab is the ground color of the bee the effect is a decidedly ringed appearance. The following are the good qualities of the Carniolans: 1. The race is a prolific, well established one. 2. The workers are gentler than any other bees. 3. They submit more readily than other bees upon the application of a small amount of smoke. 4. They are excellent comb-builders and their sealed combs are of snowy whiteness. 5. They gather very little propolis. 6. Colonies in a normal condition are vigorous defenders of

their hives. The workers are the largest bees of the species *Apis mellifica*, and their individual strength is greater than that of other honey-bees. 7. Carniolans cluster very compactly and quietly and winter remarkably well. 8. Queens, workers and drones are more beautiful than those of common bees.

Their faults are, so far as I know: 1. When made queenless they are thrown into great excitement and neglect at first to defend their hives well. 2. They are slightly more disposed during honey-dearths to rob than are Italians, though far less troublesome in this respect than blacks or Italians crossed with blacks.

Some might be disposed to bring up as a grave fault the disposition which Carniolans frequently show to cast numerous swarms. I believe this disposition in any race depends almost entirely upon the prolificness of the queens, in fact is, with all races, greater in proportion as the queens are prolific. Prolificness in queens is the bee-keeper's corner stone. Swarming is Nature's escape for the surplus strength of the stock, and the bee-master has but to direct this force. Whoever cannot do this is not a master in the art. This, to some, seemingly 'bad trait' is referable therefore to one of the most indispensable qualities; prolificness of queens, and is implied and properly included under the 7th point above.

It has been objected by people who claimed to have some knowledge of bee-keeping and even to know a good deal about foreign races, that 'they could not tell Carniolans from common bees.' Such persons will find there is still something for them to learn. Meanwhile let an esteemed colleague give his testimony. Rev E. T. Abbott says in the 'Busy Bee,' St. Joseph, Mo.: 'As to beauty we think Carniolans the equal of any of the yellow races. A number of writers have said that they could not be told from the black bees only by an expert. This is not true of the ones we have seen. There is very nearly as much difference between them and 'blacks' as there is between them and the Italians, and we think any child twelve years old would be made to see this as soon as its attention was called to it.'

Even if this objection were sustainable it could not be regarded as a very grave fault. Color is quite a secondary matter as compared with qualities, and as regards the latter I am quite satisfied Carniolans are superior to all other European races of bees.

FRANK BENTON.

Munich, Germany, Jan. 20, 1886.

Hutchinson & Taylor, (Rogersville, Genesee Co., Mich. for the former and Lapeer, Lapeer Co., Mich., for the latter) have entered into partnership for the sale of foundation, bees, etc., and have issued a four page circular.