

PRACTICAL BEE-KEEPING.

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PAPER II.

RACES OF BEES.

SCIENTISTS and naturalists tell us of many varieties of honey-gathering bees, but I will only write of those kept by practical apiarists to-day. Students of the structural anatomy and the family history of the bee are referred to Cook's "Manual of the Apiary," and other works.

BLACK BEES.

There is no bee indigenous to the American continent but the Black or Brown bee which originally came from Germany is so very widely diffused as to be the common bee of the country. The Black or Brown bee varies in color due presumably to difference in climate and surroundings. Some apiarists claim to have a race of large brown bees, but these are I think the ordinary bee bred in localities favorably situated to assist the bee-keeper's efforts in breeding from selected stock. The Black was the only bee cultivated in this country until the importation of the Italians, and their several good qualities have enabled them still to maintain a hold as favorites with many. They especially excel in capping comb honey and no other race except the Carniolans cap honey as nicely.

THE ITALIAN BEE.

The Italian, or, as our English friends call it, the Ligurian, is the bee found in the majority of apiaries on this continent to-day. It was first imported from Italy and thus derived its name, being supposed by many to be a native of that sunny clime. On this point I differ, for from personal observation and otherwise I infer that the bee indigenous to Italy was a black or brown. Look at the native bees in all the countries contiguous to Italy and you will find them dark. On the east of the Adriatic Sea are the Carniolans; Austria, Germany, France, the Dalmatian coast, and even Sicily at the south-west point of Italy all have dark bees. The country is, as it were, surrounded by dark bees. I believe that the original light-colored

racess came from Palestine and Syria. Parts of Egypt, Cyprus and some of the islands in the Grecian Archipelago have a bright race of bees, springing undoubtedly from admixture with the Palestine bees brought there by coasting traders in honey and wax of ancient times. All the bees of Palestine and Syria are a yellow race without any black blood, and were imported into Italy in similar manner to Cyprus and the hardy and vigorous Syrians crowded out the dark native. On the cessation of this trade in-and-in breeding was practised probably for hundreds of years, and this has produced the Italians of to-day and make them appear to be a fixed race, modified by climate, pasture and surroundings.

The distinguishing features of the Italian workers are the three yellow bands on the abdomen, visible when the bee is comfortably filled with honey. These three bands are viewed as a test of purity. But I have bred them so bright by selection of the lightest color that four yellow bands were visible on every bee in the hive, and an occasional one would show the fifth. At bee-keepers' conventions I have shown Syrians with five and six bands. Thus by careful selection of bright blood the Italians can be bred back to what I deem their origin—the Syrians—in so far as color is concerned.

ALBINO BEES.

This selection of bright-colored strains and in-and-in breeding therefrom is no doubt the origin of the so-called "Albinos," which may be looked upon merely as a bright strain of Italians. The Italians are more energetic than the common bee, and have become favored for their beauty and docility, and more particularly for their excellent honey-gathering qualities. It is urged as an objection by some that Italians will not work in supers as readily as the ordinary blacks, but with our improved methods of procuring comb honey this objection and others are overcome.