

bee has been, and still is, a question in which every apiarist and queen-breeder is interested in, notwithstanding that some claim they care nothing for bees only for their honey-gathering qualities. It is but natural to the most of us to want something nice, or that which is the best; hence the labor and enthusiasm of the past in trying to make the Italian bee the standard of excellence, or "Apis Americana." Inthus trying, most of those who were interested have claimed that the Italian bee was a pure race, while some of our best writers have claimed that the Italian bee was only a variety or thoroughbred bee, the same as the variety of sheep called Merino, or that variety of cattle called Devon; or with swine, the Berkshire variety. Those who belong to the part claiming that the Italian race of bees is pure, have lived to see the progeny of queens imported direct from Italy vary all the way from a worker whose outlines regarding yellow bands were so slim that they were scarcely discernable, to those best specimens which show the three yellow bands so clearly and distinctly that no one need make a mistake; while the same breed in this country has so deteriorated that it shows no bands at all, or has so far advanced over the bees as imported from Italy that the first four segments of the abdomen are one solid yellow, with the fifth segment showing as much yellow, on the best specimens, as is usually seen on the third segment of the imported stock. It seems to me that this should be sufficient to prove to any one that the Italian bee is not a pure race but only a variety. To those who have watched this improvement as to color in the Italian bee, and fully taken it in, the words of Capt. Balstien, uttered in the sixties, come home in great force, where he writes from the native home of these bees and says:—"No snow clad Alps or Chinese walls have kept the different races of bees from intermingling in Italy." [I quote from memory, not having time to hunt it up.] and also the words of "Father Langstroth," which were written about the same time:—"There is every reason to believe that the Italian bee is itself a hybrid." Those familiar with our earlier literature also remember of the experiments made in crossing the black or German bee with the Silvery Egyptian, by which the fourth or fifth cross along that line brought forth a bee which no man could tell from the Italian. The fact that the Italian has been improved as to color, without in any way crossing them with any other race or variety, also shows that they are only a thoroughbred. If we take the German bee in its purity we find the queens and drones so constant in color that out of hundreds of specimens not

one can be found having the least variation in color, so that in these bees we have queens which will duplicate themselves as to color every time. Without my taking time to describe the queens of the Italian variety, all who are at all conversant with them know that they vary from queens as black as any black queen ever seen, to those whose abdomen is a handsome orange yellow clear to the extreme tip. If these bees were pure, why this extreme variation as to color of the queens and drones; for the drones vary fully as much as the queens. The most constant color in all yellow bees is found in the Cyprians, the queens of this race nearly or quite duplicating themselves every time, so that if there is a pure race of yellow bees I should say that such was to be found in the Cyprians, hence I would name the Egyptian, German and Cyprian bees as the original races as far as I am acquainted with bees. Taking this view of the matter, (which view I am confident will be proved during future generations to be the right one,) our question will read:—"Can Italian bees have more than three yellow bands?" To which I answer yes. They can not only have three bands, but they can have six in a few years, if the improvement as to color should continue as great during the next ten years as it has during the past decade. Not only can they show what is termed six yellow bands, but the abdomen can become a solid yellow its entire length, the same as some of the best specimens of queens and drones now do. There is nothing impossible with any animal or vegetable that is hybrid, or that will "sport." But the question naturally arises, are these yellow bees as good for honey gathering as the darker Italians? Where properly bred, I can see no difference in favor of either along this line. Admitting both to be alike as to honey gathering qualities, we find the reason why the yellow bees are so eagerly sought, in the thought expressed in the beginning of this article, that "most of us want something nice," and beauty is a thing to be desired, where we can have it without lessening other valuable qualities. Some seem to think that these yellow bees have been bred in and in more than any other bees, but this is, I think, a mistake. There were plenty of four banded bees as early as 1871 in an apiary near me. These bees were crossed with other four banded bees from a piaries in the west, and these in turn crossed with very yellow Italians in the south-west; and so the crossing of the yellowest bees in the United States has been kept up, till we have to-day bees in the New World whose abdomens are three-fourths a solid yellow, and yet so far as I can see they are just as good honey gatherers as those bees formerly