

we will call A, to the stand of another strong colony, and putting this last in a new place. When A swarms again, set the swarm in place of A and set A in place of another strong colony. Continue this as many times as A swarms and each time you will have a good swarm having a queen of A's stock. As a rule any swarm after the first and especially after the second, is likely to be a weakling, but in this case they are not weak, for when the depleted hive is set on the stand of a strong colony all the field bees of the strong colony enter the depleted hive, strengthening it.

Even if you have only two colonies, and both in box hives, you can do something. Have the two hives sitting close together in spring. About the first of May move B, the poorer colony to a place 8 or 10 feet away. The field force of B will return to the old place and join A, the better colony, making it swarm first. Each time A swarms set the swarm in place of A, and set A in place of B, setting B in a new place. Begin now keeping tally of what each colony yields this season.

Marengo, Ill.

IMPROVEMENT IN BEES BY SELECTION AND LINE BREEDING

Indexed

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The improvement in bees by selection in breeding is claiming the attention of wide awake and progressive bee-keepers. Perhaps no branch of our beloved pursuit is more fascinating or offers greater inducements to the up-to-date bee-keeper than the improvement of bees by careful selection and judicious breeding along chosen lines. Viewing the subject from the standpoint of the practical bee-keeper the development of an improved strain of bees is not a difficult matter. It is true that we cannot mate our queens with drones with the

same degree of certainty that surrounds the breeding of other domestic animals, and yet the queen-breeder who is able to control the flight of drones within a radius of three miles can mate his queens with sufficient accuracy to enable him to establish fixed characteristics, such as gentleness, industry, and uniformity of markings, all of which are indications of well bred stock.

While perhaps all will agree as to the desirability of improvement in bees, there is a diversity of opinion as to the best method of accomplishing the desired result. For more than a quarter century the writer has been devoting his best energies to the improvement of bees and bee-keeping methods; while we do not claim to have the best bees in the world, we believe we have made some progress along the line of establishing uniform traits that by persistent effort have become fixed to such an extent as to be transmitted to future posterity.

It may be interesting to some to know how we have developed and maintained a strain of bees that are noted for uniformity of habits as well as uniformity of markings which are indications of well bred stock. It is one thing to find a queen whose bees possess traits of a highly desirable nature, and quite another thing to find one that will unerringly transmit those traits. The object of this article is to tell the readers of this journal how, and to what extent we have been successful along this line.

Line Breeding

When we laid the foundation for our present strain of bees we procured queens from some of the most noted queen-breeders in the country. These were carefully tested in our apiary and from the lot we selected a breeding queen. This particular queen was chosen because her bees were very gentle and industrious as well as being beautifully and uniformly marked.

Besides, this queen duplicated herself a thing that not many queens do. This queen was mated with many queens and drones, and every colony with abundance of bees by stimulative feeding produced thousands of others were in the neighborhood. All the colonies in the vicinity were young queens with certainty, and we set the yard with a particular breeder every queen in the colony was descended by a young original breeder, and to their half brot

Not being able to find that would duplicate that progeny with an uncertainty the old one of both queens and drones lived. As our colonies were marked ever on the alert that displayed some particular, colonies were marked and closer observation of traits continuous, that queen of queens and drones

Thus by beginning individual having the we wished to develop by practising a breeding we have a strain of bees of marking and habit scarcely be accomplished selection and

Having thus laid a strain of bees that form traits we have about introducing n undo the work of yonally introduce n