

From Many Sources

Bees and Horticulture.

Extract from a paper by J. M. Hambaugh, read before the San Diego Co., Horticultural society at Escondido, Cal.

But few problems have caused more disagreement and been, by some, more difficult to solve, than the proper relations which the bees sustain to horticulture. Some fruit growers seem to think that the honey bee are detrimental to fruit, while others contend that they are not only a benefit to growing fruit, but are essential to its full development and general prosperity.

Lately some of our most progressive fruit growers have come out squarely on the side of the bees. Mr. Charles A. Green, editor of the Fruit Grower, published in Rochester, N. Y., after mentioning the experiments made by Professor Waite of the agricultural department at Washington, which conclusively proved that to many kinds of fruit trees the bees are absolutely necessary for fertilization, remarks thus; "The fruit growers of the country are greatly indebted to Professor Waite for the discovery he has made. The lesson is that the fruit growers must become interested in bees, and I do not doubt that within a few years it will be a rare thing to find a fruit grower who does not keep honey bees, the prime object being to employ the bees in carrying pollen from one blossom to another, from the fields of small fruits, as well as the larger fruits.

The great Creator in his infinite wisdom created male and female, not in the animal kingdom alone, but in the vegetable kingdom as well; and in the pro-creative power that another earth might be replenished and amply provided with the seeds of man, He has adopted means and agencies in the realm of animal life to more effectually and perfectly convey the agencies of plant life to the pro-creative ones.

Most of you are acquainted with the elements of botany and know the structure of flowers. The reproductive functions consist of stamens and pistils, male

and female organs. The pollen or fertilizing dust, is produced by the stamens, and must reach the pistil or the blossom is barren. It is also essential that there should be some intermingling or cross-breeding between the different flowers of one plant or tree, and also between the different blossoms of several trees of the same kind, for in many cases barrenness would follow a too close in and in breeding.

It is here that the wondrous wisdom of the Infinite Being is displayed. A tempting feast is prepared in the shining goblet of each tiny bloom, and the honey-gathering insects lured by the tempting feast as they flit from bloom to bloom and scatter the fertilizing dust from the stamens to the pistils, and nature, mode of fertilization is complete. The king of all insects in this wondrous work is the honey bee, which was evidently the prime object of its creation, and its gathering and storage of honey secondary in importance. It then becomes a question of momentous consideration that all should know that the bees are valuable to the fruit grower and apiarist alike, and that the pomologist who poisons or otherwise destroys the bees, is surely killing the goose that lays the golden egg.—American Bee Keeper.

BEEES IN THE ORCHARD

—By HERBERT J. RUMSEY, Boronia, Barber's Creek, N. S. W.

No orchard is complete without a few swarms of bees. The fallacy of bees being injurious to fruit is nearly exploded, and it is generally admitted that they will not, because they cannot pierce the skin of fruit to obtain the juices, although if it is punctured by other insects they will be all there for a share of the spoils. The sexual arrangements of most fruits are said to be such that the pollen from another tree of the same class is much more likely to set healthy fruit than that from the same tree. In fact it is said that the Bartlett Pear is not self-fertile, large orchards having been planted which would not bear fruit even when masses of flowers were present, until other varieties of pears were planted among them for pollination, after which the trouble was at an end. Although many trees were present in these cases, they were as one, having all been produced by budding or grafting from one original tree, and not by seed. Such being the case then, we require to have facilities for carrying the pollen from one tree to