

THE BEES.

Bees may be compared to minute "dry batteries." Each is "charged" with so much vital energy which, when expended, cannot be replaced. This should be used in profitable labor, such as gathering nectar, secreting food for larvae or wax for comb, and so on. In the working season bees expend their portion of energy and wear out in a few weeks. Those which emerge in autumn, after the season's work is over, are expected to conserve their energy for the spring brood-rearing, expending as little as possible in maintaining colony temperature during winter. Young bees, with their full "charge" of energy are, therefore, most desirable in autumn, and there should be plenty of them to divide the responsibility of retaining favorable cluster conditions during the winter. The queen should also be young and vigorous to insure rapid development of colony strength in spring.



View of O.A.C. apiary giving prominence to single cases. These are more expensive and their use is largely a matter of preference.

THE STORES.

As bees do not discharge the refuse from the digestion of food, except in night, this is retained in the intestines during the cold months of winter. With this in view it is easy to see the importance of supplying the colony in winter with stores containing the smallest percentage possible of indigestible matter. The quality of honey well ripened is considered a good winter store; unfortunately, we are not always sure what has been stored in the brood-chamber during the autumn months. Sometimes bees gather from sources which do not give the best of stores. They may gather it during the cool weather, when they are not able to ripen it properly, and a degree of fermentation may result. Such stores as this are liable to cause dysentery in the winter. Sometimes these inferior honeys granulate readily in the brood-chamber during winter, and this granulated honey is sure death to the colony. If, on the other hand, we give each colony ten pounds or more of syrup made from pure sugar rather late in the fall, we are sure of the kind of stores they have next the cluster, and know that, so far as food is concerned, the colony will winter successfully.