

tion to bees and their management. Having had some correspondence with the late Mr. T. Woodbury, (the Langstroth of British bee-keepers,) who was a large contributor to the bee columns of the *Journal of Horticulture*, his first attempts were made with the Woodbury hive, but in consequence of having seen some letters in the *Times* newspaper, he was induced to make an attempt with the Stewarton hives also, and from that time he has continued to work both systems. He was at this time residing at Beckenham in Kent, and as there were but few persons pursuing the science of apiculture, he was left, in a great measure, to find out by experiment how to manipulate bees and how to manage an apiary. However, by dint of patience

hives, Stewartons, etc. In course of time he discarded the majority of these, and fixed on a modification of the Woodbury and Stewarton, to which he gave the name of "The Cowan Hive." A full description, with several illustrations of this hive will be found in Cowan's *Guide Book*. Notwithstanding the numerous forms which the frame hive has assumed, the Cowan hive still maintains its place, and a considerable number of them is annually sold by the various dealers. He has also given much attention, for many years, to queen-rearing. He has found that by stimulating queens to their full laying power, their prolificness is well-nigh exhausted in two years, and as the aim of bee-keepers is



MR. T. W. COWAN.

and perseverance, he obtained a complete mastery over the bees, and gained a considerable amount of practical knowledge of the science to which he is so devoted.

In the year 1870 he removed to Horsham, Sussex, where he had greater facilities for practising bee-keeping on a larger scale and of extending his experiments. Here he kept his stocks in lofts over his stables, so that he might be able, at all times, and in all weathers, to examine and manipulate his bees. At the same time he kept several stocks in bee-houses and on separate stands in the open. By this means he had an excellent opportunity of comparing the different systems of bee-keeping. His hives, too, were very heterogeneous—skeps, frame hives, cheese boxes, Addey's hive, German

to obtain large quantities of honey, he maintains the necessity of superseding queens at the end of two years, and of substituting young ones in their place. He has also tried all races of foreign queens, and has pointed out the utility of selecting the best strains and the advantages, as well as the disadvantages, of the various crosses. With all other practical bee-keepers, he strongly insists on the desirability of getting the stocks strong in spring, and on the advantages of judiciously spreading brood.

At the first show of the B. B. K. A. at the Crystal Palace, in 1874, Mr. Cowan exhibited upwards of 700 lbs. of super honey, taken from twelve stocks. The following year he was able to show 120 lbs. in two supers from one hive,