


We wish them a pleasant voyage and hope that the object of their trip may indeed prove of value in the future history of Canada's honey trade.

CHESHIRE'S "BEES AND BEE-KEEPING"

 OUR humblest apologies are due, and are hereby presented to, the gifted author of the invaluable book above mentioned, for this apparently tardy notice of the volume; but it came to hand just as our short, busy season for active operations in the apiary was commencing. It was impossible to give it proper attention at the moment. It must await a rainy day, or a lull of business. Not until the linden failed, did either wet weather or leisure serve our purpose, and when at length the task was begun, it was found to be, though highly agreeable, anything but easy. The perusal of this opens up a new world of wonders even to one who has been working among bees for a quarter of a century. We knew before that the bee was a highly and singularly organized insect, but were not prepared for the marvels of contrivance, wise adaptation, and effective mechanism presented in these pages. Dr. Johnson is said to have remarked that "no doubt God Almighty might have created a more delicious fruit than the strawberry, but it is quite certain he never did." So in rising from the perusal of these astonishing delineations in word and picture, one is ready to exclaim, "God Almighty might, no doubt, have created a more wonderful insect than the honey-bee, but it is quite certain he never did." Mr. Cheshire at the close of his dissertation on a single organ, the bee's eye, quotes, to concur in it, the language of a predecessor in the field of research, Swammerdam, who says:—"I cannot refrain from confessing, to the glory of the immense, incomprehensible Architect, that I have but imperfectly described and represented this small organ; for to represent it to the life in full perfection, far exceeds the utmost efforts of human knowledge." Only the first volume of this great work has been given to the public as yet. It is wholly scientific, and is chiefly devoted to microscopic investigations, with illustrative plates and wood cuts. The author is evidently an accomplished microscopist, but while his work can only

be fully understood to be appreciated by fellow scientists, no intelligent bee-keeper can read it without profit. There are eight full page steel plates, and 71 wood engravings. With their help, the verbal descriptions are, in many cases, made both simple and interesting to the ordinary reader. These illustrations exhibit the anatomy of the bee magnified from 5 to 400 times. They well repay careful study. Mr. Cheshire has a genius for word painting, and there is a charm about his descriptions that all must feel who read these pages with any care. In the midst of so much that is interesting, it is almost invidious to specify particular portions of the book, but the chapter on general structure, particularly that part relating to the circulation of the blood; the chapter on the nerve system in which the mental inferiority of the queen to the worker is clearly shown; the explanation of the methods in which worker and royal larvæ are fed; the brilliant exposition of the tongue apparatus; the chapter on the antennæ and eyes; the dissertation on wings and flight; buzzing and humming; secretion of wax and bee architecture; and last, but not least, the graphic account of the complex machinery by which the sting is worked, have attracted our special attention. The concluding portion of the work is devoted to bees and flowers; bees as fertilizers, florists, and fruit producers; and the information it contains ought to be widely disseminated as an antidote to those ignorant prejudices which in certain parts of the world have led to lawsuits against bee-keepers. The production of honey is shown to be but a fraction of the results of the bees' useful labors for man. This tiny helper has performed services in the realms of horticulture and pomology, the value and importance of which are incalculable.

Like all scientific works this volume is not merely to be read but studied. A single perusal dazes with amazement at the vast variety of objects comprised within the body of a bee. As you take up the several parts, and investigate them in detail and in their relations to each other, you get a more distinct view of things, and begin to comprehend the mechanism which at first only filled you with astonishment. It is highly gratifying to discover the intents and uses