

Want and Exchange Column

Advertisements for this column will be received at the rate of 35 cents for 25 words, each additional word one cent. Payments strictly in advance, as the amounts are too small to permit of book-keeping. Write copy of ad. on a separate sheet from any other matter, and on one side of the paper only. Say plainly how many times ad. is to be inserted. Matter must reach us not later than the 23rd of each month.

FOR SALE—First-class apiary of 120 colonies, with all supplies. Write for particulars to J. B. HALL, Box 595, Woodstock, Ont.

WANTED—Comb or Extracted Honey. State probable quantity, quality, how put up, etc. FOSTER & HOLTERMANN, Limited, Brantford, Ont.

FOR SALE—40 winter packing cases for holding two hives; also 24 double-walled, for single colonies, complete with frames; made of best pine; will sell less than cost of lumber. Comb Honey wanted. G. A. DEADMAN, Brussels, Ont.

HOTEL ACCOMMODATION

ALBION HOTEL, TORONTO—Rates \$1.00 and \$1.50 per day. MRS. JOHN HOLDERNESS, Proprietress.

icans have done much toward a scientific study of the bee, but what this nation lacks on that side has been more than made up in practical appliances and methods. The source to which every bee-keeper should go for a knowledge of the habits of the bee is not a book written by any of the men that I have named, nor of any other man, but the one place to study the habits is beside a bee hive. First-hand information, properly obtained, is worth more than any amount of second-hand facts, and here, as everywhere, we can profitably follow the advice of the celebrated naturalist, Agassiz, "Study Nature, not Books."

The study of the behavior of animals is not easy. I am well aware that many persons think that they could not want an easier task than to study the habits of the bee, but there are difficulties which

make such work very trying and unsatisfactory.

In the first place, it is often hard to see just what a bee is doing. Let us take as an example what happens when we shake the bees from a frame in front of the hive entrance. In a short time a few bees nearest the entrance turn their heads toward the opening and begin to fan their wings; others soon do the same, and before long almost every bee is fanning as if its very life depended on it. Gradually they begin to move toward the entrance and enter the hive. Every bee-keeper has seen this repeatedly, especially when hiving a swarm, but how many could tell what is going on among the bees? This action has been referred to as the "joyful hum" of the bees, as expressive of their pleasure at finding again the hive in which they belong. Others have said that the noise of those nearest the hive is heard by the bees farther away, and they know where the colony is located. Whether bees can hear or not is a question which need not be discussed here, but these conclusions are inaccurate because the observations are incomplete. If you will carefully notice this particular action at the next opportunity you will see that the abdomen is raised to an angle of about forty-five degrees, and that the last segment is bent down, exposing a light yellow strip between it and the next anterior segment. On this yellow area there appears a glistening drop of some fluid, and when the bee begins to fan a very peculiar odor is easily detected, even by the human nose. Bees are, as is well known, governed largely by scent, and this particular action consists in the fanning back of the odor produced by this liquid. The difficulty in earlier observations was that the whole attitude and action was not observed, and consequently the conclusions were incorrect. It is not so much because this is hard to see, but because the observers were satisfied with a partial observation, that we long remained ignorant

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