ative display of produce, but as a means of bringing together representative samples of the best honey the country produces the small exhibit is preferable. The cost of sending the latter to exhibitions is very small and would not act as a deterrent upon anybody wishing to exhibit. In this way the complaint as to the costliness of exhibiting would completely disappear.

"STINGLESS" BEES

On another page we print an article by Mr. Sladen on "Stingless Bees." Of great interest, and one that most bee-keepers will recognize as being most plausible, is Mr. Sladen's suggestion that the stinging instinct of the bee is really composed of two distinct protective acts. The loss of the sting means death to the bee, and it is not inconceivable that the complete or partial dropping of the stinging character in some races marks a distinct advance in the evolutionary process. The buzz of the angry bee is sufficient for practical purposes as a means of protection, and there is no reason why, in the course of nature, a self-destructive character like that of "inserting the sting" should not disappear.

We cordially endorse Mr. Sladen's opinion that Canada may prove a very suitable country for the establishment of mating stations, and is likely to provide a good, if not the best, breeding ground for any artificial variety of bee, whether its special characteristic be "stinglessness," honey-production, disease-resistance, non-swarming, or mere beauty."

INHERITANCE OF FECUNDITY

In the case of bees the question of improvement is complicated by the fact that, generally speaking, the character to be modified is not directly inherited by the queen. For instance, it is not in the queen that improvement in these characters is sought, but in the workers, who, however, play no direct part in the perpetuation of the race. Perhaps, therefore, for all practical purposes, the question of fecundity is of greater importance to the bee-keeper than the other characters that have recently been brought under discussion in this connection. The prolific queen produces a larger army of workers, which gather, other things being equal, a proportionately larger harvest.

The question of fecundity, then, is one that deserves deep consideration in this discussion of improvement, and any enquiry into the manner in which the mechanism of the inheritance of fecundity acts is of great importance in the intelligent study of the genetics of the honey-bee. Such an enquiry has been made by Dr. Raymond Pearl, of the Maine Agricultural Experiment Station, who has described, in an interesting paper read before the recent Eugenics Congress in London, England, the results obtained by him in his investigations regarding fecundity in the domestic fowls. These results in some respects are novel and unexpected, and they furnish for the first time, a clue as the precise manner in which the character of fecundity is inherited. The following brief summary will indicate the points of importance in Dr. Pearl's paper.

1. Fecundity is obviously a character depending upon the interaction of several factors or groups of factors.

2. Different *breeds* and *strains* differ widely in their laying capacity.

3. These differences in fecundity are inherited in accordance with the simple Mendelian scheme.

4. Departures from the normal of egg production are accounted for by the presence or absence of corresponding factors.

5. The factor for the abnormal pro-