

duction of eggs is sex-limited, and is transmitted by the male parent, and not by the female.

6. There is a definite and clear-cut segregation of high fecundity from low fecundity.

These results on fecundity in fowls may serve as a guide to pursuing similar investigations in the same character in bees. Great differences exist in different strains of bees, and a knowledge of the manner in which this particular character is inherited will undoubtedly indicate to bee-keepers a way by which they may eliminate from their yards the non-productive strains.

A BEEKEEPING NOVEL.

Mr. Tickner Edwardes, the well-known English writer on bee lore, has just written a novel in which the principal characters are bee-keepers, the scene being in a south of England village. This author's "Lore of the Honey Bee" is one of the most charming works in bee literature we have read and we look forward with much interest to receiving Mr. Edwardes' new book.

"STINGLESS" BEES

Canadian Queens for England

BY F. W. L. SLADEN.

My attention has been drawn to a paragraph in a Canadian newspaper stating that Mr. Burrows, of Loughton, Essex, England, has succeeded in producing a stingless bee by crossing an Italian queen with a Cyprian drone. I have not seen Mr. Burrows' original statement, but "stingless" bees, in the sense that they do not use their stings on human beings, are common in the East and there seems to be no reason why they should not be acclimatized in

Britain or in any other bee-keeping country.

When investigating the bees of India in 1897 I paid a visit to the apiary of native bees kept at the jail at Darjeeling (altitude 7,000 feet), in the Eastern Himalayas. These bees were always handled without the use of either smoke or veil. I myself examined a hive in this way, and I did it roughly, to see if it was possible to get the bees to sting, but it was not. An angry swarm gathered around my hat and head, and after I had left the hive twenty or thirty bees followed me wherever I went, but I gradually got rid of them by dodging behind bushes.

It would seem that stinging, which is really an act of defence, depends upon two characters, which may be inherited separately, (1) the "flying to" the molester and (2) the insertion of the sting into him. In our Western bees both of these characters are present, the former one in a modified degree. The Himalaya bees possess only the first. They only threaten to sting.

Some years ago some pure Cyprian queens from Cyprus were introduced into my apiary in England. Their workers threatened a good deal, but were little inclined to use their stings. But the workers produced by their daughters, which, of course, were mated by drones of the English black bee, not only threatened, but used their stings freely, unless they were skilfully handled. As a rule, the half-breeds produced by crossing two different races are more inclined to sting than either race, but there may be exceptions. For this reason one would hardly expect Italians crossed by Cyprians to produce stingless qualities. If Mr. Burrows has obtained a practically stingless bee from such a cross he is to be congratulated, because it is known to be a good honey gatherer in most parts of the world, while the Himalaya bee is probably much inferior in this respect.