give such an account of themselves that it would take half-a-dozen unnatur- productions (called queens) to equal.

Do not think I am desirous of being accredited with laying anything new before my readers. What I have to say is not new, but is the result of thirty or forty years of study and careful observations of such men as G. M. Doolittle, Dr C C. Miller, Henry Alley, and many other advanced apiculturists on both sides of the Atlantic. No one has a right to put forward as new methods with which he has experimented and made slight modifications of, but should give full credit to the originator of the idea, and I wish it to be clearly understood that although I have somewhat modified and altered the methods adopted by other bee-keepers, yet the ideas are not mine. Indeed, it is hard to say with whom they did originate, and as Mr. Doolittle says: "I cannot give credit to all from whom I have gained knowledge, as there is scarcely a writer on apiculture from whom I have not gained light, and, in, fact, it is the many littles of the past that makes the much of the present."

Undoubtedly, the very worst method of rearing queens is the "let alone" method The bee-keeper, if he wants first-class queens, must take some portion of the work into his own hands and superintend the operations carried on by the bees within the hive. Take a hive that has just swarmed, for instance; on examination we find several cells in various stages, some just capped, others only partly completed. Then comes the important question, "What was the age of the larvae when the first royal food was given the young grub?" The chances are it was too old for good results, for although bees build rudimentary cells prior to swarming, I never saw a queen lay an egg in one yet, and I should require to see her do it before I would state in print that she does so. The next question is, Do bees place eggs in embryo queen cells? They may, but I am more inclined to the view that it is the young grubs that are placed therein by the bees. Has it ever been recorded that these empty embryo queen-cells are the identical cells which are used eventually for raising queens? I think not. Often have I seen cells started prior to swarming, and have certainly seen these same cells still empty after the queen-cells on the other parts of the combs have been sealed. I am, therefore of opinion that though in a few cases eggs and larvae may be transferred to these empty embryo cells, yet in the majority of cases the cells are built round the young larvae, and in practically every case round larvae over thirty-six hours old. Anyway, when the swarming fever takes possession of the bees it is accompanied by a complete mania for building queen-cells, and after careful examination of many stocks about to supersede the reigning queen I have found queen-cells built over larvae of different ages. It therefore follows that cells built over the oldest larvae will be the first to hatch out, and if the bees determine to throw no second swarm this half-formed insect becomes the mother of the colony. But if a second swarm comes off. the next hatching queen becomes mother. This second swarm should therefore always be returned; otherwise the colony is practically worthless for that season, and in any case the chances are that the most perfect queens, i.e., those started from the youngest larvae, and the last to hatch out, are always those destroyed. The theory of the survival of the fittest is thus in almost every case reversed. This is so vital a point that I must be forgiven for dwelling upon it, for, although bees at swarming time will, if left alone, raise the finest of queens, yet in nearly every instance an inferior queen is the one that eventually reigns.