## SWARMING OF BEES.

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BEES being only semi-domesticated, we can never implicitly rely on them to do the same thing under the same circumstances. This is particularly true with regard to the swarming impulse.

The causes of swarming are generally conceded to be—(I) Natural and hereditary impulse; (2) heat and lack of ventilation; (3) over-crowding of space for brood-rearing and storage of honey; (4) age of the queen; (5) excessive proportion of young bees in comparison to eggs and young larvæ.

Commenting on these in the order named the following statements may be made:—

Although swarming is the natural impulse for increase, yet many hives, often the best and strongest in our apiaries, go through the entire season without showing the least tendency to swarm. Now, if we could only find out an unfailing reason for this our problem of prevention would soon be solved, but so far our success has only been partial. With regard to the hereditary trait, we know from experience that Carniolan bees, for instance, will swarm themselves weak; that Blacks will often do their best in the same direction; and that Italians, though generally admitted to be a great improvement in this respect, still land us a long way from our goal. But, apart from the race of bees, it is generally conceded that individual strains show the swarming impulse less than others.

With regard to heat and lack of ventilation, the apiarist and not the bees is to blame.

Concerning overcrowding of space, we know that when a successful business man's house becomes too small for his needs he is apt to turn it over to his son and build a more suitable one for himself, so why be surprised if the bees do the same?

The older the queen the more liable she is to lead off a swarm.

Beekeepers are fairly agreed that if newly hatched bees, having strong nursing instincts, find their recently evacuated cells largely clogged with honey and pollen, resulting in less accommodation for eggs and larvæ, the swarming impulse is almost bound to develop immediately.