PRACTICAL BEE-KEEPING.

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PAPER VII.-CONTINUED.

SPRING MANAGEMENT.

SPRING DWINDLING,

HERE are many causes which tend to depopulate a colony after coming out of winter quarters, this depopulation being technically known as "spring dwindling." Poor stores or an unsuitable winter repository causing dysentery is more frequently the main factor. To this we may attribute the weakness of colonies from losses by death during confinement. Bees put into cellar and clamp in bad shape are fairly sure to give trouble in spring, if they exist until then. Too many old bees in a hive is another When old bees resume active cause. operations in spring their tenure of life is brief and if the weather is chilly and cold they disappear very rapidly.

If the colony had an old and failing queen which did not brood well in the fall, or failed to lay or deposited eggs sparingly on the approach of spring, such a colony will dwindle unless carefully looked after.

If fed very late in the fall so that the cluster is broken and the bees are too active when cold weather sets in, is another cause of dwindling. The longer the cluster is formed before the necessity of putting into quarters arises the more compact will be the cluster and the better the prospect for the ensuing spring.

Unfavorable weather is oftimes the cause of dwindling, and the bee-keeper must watch this particularly. If bees are taken from winter quarters too early, at the first appearance of sunshine they leave the hive for a purifying flight. Large numbers will become chilled and be unable to return to the hive. Occasionally on a bright day in early spring a black cloud will obsoure the face of the sun, shutting off the warm rays, and at such times the bees will drop to the ground and are casily chilled. I have known colonies to become almost depopulated One | in three days in similar, weather. spring a few years ago the flat country

near Beeton was flooded by the spring rains, the soft maple was yielding pollen in abundance, and the bees were working on it. On successive days black clouds crossed the sun and the bees dropped on the water, from which they could be gathered in quarts. That was the worst year for spring dwindling in my experience, between 200 and 300 colonies shrinking one-half in four days.

Colonies coming out of the repository with large quantities of brood are liable during a cold spell to • dwindle, from chilling of the brood.

Apart from the matters of old queens and unfavorable weather, it will thus be seen that wintering adversely is the main cause of this dwindling. Mr. S. Corneil, of Lindsay, in an issue of the CANADIAN BEE JOURNAL, says he believes spring dwindling is caused by the air in the hive being made foul by the breath of the bees while they are confined during winter. From this cause they get sick, and if they do not have dysentery, become so run down in health that they are not in that robust condition necessary to carry them through the hard work of spring. Let the hives at all times be surrounded by "air as pure as it blows on the hill tops," and let the ventilation of the hive be such that there will be a constant change of air without draft perceptible to the bees, and without reducing the temperature of the cluster below 70 °."

REMEDIES.

Don't set out your colonies until natural pollen can be gathered. I usually set my bees out about the first appearance of pollen on the black willows. To this I will refer again in this chapter.

Remove all combs from the hive that the cluster cannot cover, contract and cover up warmly. Bees so arranged can carry on brood-rearing, otherwise they will perhaps "swarm out," as their inability to keep up the necessary heat to brooding would discourage them.

In cool weather put on an entrance