

average percentage of loss among the special reporters during the past winter is only 8½ per cent. By referring to the statistics of a year ago, we find that the loss was 9 per cent. We expected to see a smaller percentage for this year. The only losses, with few exceptions, that occurred during last winter, of any account, were from over-breeding and consequent starvation. If we eliminate this cause of mortality, the percentage will probably be very low. The average loss in the vicinity of the reporters, we find to be 14 1/6 per cent. Last year at this time it was 17 per cent.

Perhaps it will be interesting, right here, to compare the average losses of the three preceding winters, since we began the department of statistics. The special reporters' loss during the winter of 1887 was 16 per cent; during 1888, 9 per cent; during the winter of 1889, 8½ per cent. The locality losses for the winter of 1887 were 33 per cent; for 1888, 17 per cent; 1889, 14 1/6 per cent. It is to the credit of the books, periodicals, and progressive apiculture, that the winter losses have been decreasing."

LITTLE CONVENIENCES IN THE APIARY.

The Review for June is devoted to this special subject, and amongst some of the things mentioned are the following:

PITTING SWARMS.

E. E. Hasty, Richards, O., refers to this subject:

"And what is the most comfortable comfort I have, do I hear somebody asking? It is those little pits in the ground (usually have a dozen or more of them) into which swarms of bees in their baskets can be chucked and covered with a few shovel-fulls of earth until matters cool down a little. The main use of these pits is to retain second swarms until they can be returned to the hive with tolerable certainty of remaining. I usually hold them in durance two days. Another important use is to solve those awful messes of half a dozen swarms combined in one, which sometimes swarm. Scoop seven or eight pounds of bees in a basket, and pit them before they have time to get out. Keep on doing the same until you have them all. At eventide, or in the cool of next morning they can be hived with deliberation if not with comfort on frames of young brood."

ROBBER CLOTHS.

Dr. C. C. Diller, mentions among other things, "robber cloths" as extremely handy to have around the apiary:

"If you have never tried one, you hardly know what a comfort it is to have one or more robber-cloths to use at a time when you must work, but when robbers are so bad that you can't work. I'll tell you how to make one: Take a piece of common cotton cloth or sheeting twelve or fifteen inches longer and wider than your hive, and four pieces of lath about as long as your hive. Lay the edge of the cloth that is twelve or fifteen inches longer than the hive on one of the laths, so that the cloth shall project alike at each end, and lay another lath directly

over it. Drive 1½ or 1¼ inch wire nails through both lath at intervals of perhaps three inches, and clinch. Serve the opposite edge in the same way and your robber-cloth is complete. Suppose you want to take frames from one hive and put in another. After you have taken out the frames, grasp the robber-cloth by the lath at one side, and by a single fling with one hand throw it over the hive. Your hive is instantly covered bee tight, with no possibility that it is not properly adjusted at some point, and the hive in which you are putting the frames having been covered with a robber-cloth, is quickly and easily uncovered and covered in the same way. Sometimes I have wanted to take out the frames of a hive to get a queen or for some other purpose, when I did not want robbers to have a chance to trouble much. By using two robber-cloths, one on each side, I could have the top of the hive covered, all but just the space where I was working."

COAL ASHES FOR THE BEEYARD.

J. A. Green, Dayton, Ill., advocates the use of coal ashes, and says:

"The whole surface of the ground is covered so deeply with coal ashes, slack coal, etc., that the ground between the hives is almost like a pavement. But few weeds struggle through this, and these are easily kept down. The ground is always dry, never muddy, and tools cannot well get out of sight as they do so easily in grass."

INTRODUCING QUEENS.

If I had a valuable queen that I wanted to introduce to a colony of bees, I would open the hive that had the queen to be superseded, and remove the queen, close up the hive, and let the bees get quiet and flying; say half an hour after the queen was removed, pick up the hive and carry it a rod or more away to a new stand. This will draw the old workers away from the hive, which can unite with a hive near by, or go to a hive and comb of brood on the old stand. The queen can now be introduced with a Peet cage, or some cage that has the entrance closed with the "Good" candy.

Another way to introduce queens that is the least trouble, if we should happen to go away from home for that purpose, is this: Open the hive, remove the queen to be superseded, put back the frames, blow smoke between the frames, so as to drive the bees down to the bottom of the hive; now place the cage between two of the central brood-combs near the top of the hive, the entrance to the cage to be stopped with bee-candy. Now blow smoke on the queen and cage, and close the hive, which should not be disturbed for 3 or 4 days, and if no honey is coming in, the hive should not be opened for a week. If the bees keep on building cells after the queen is introduced, it is a pretty good sign that the queen is being neglected; if such is the case, the combs of brood should be exchanged for combs with no unsealed larvæ, which will bring the workers "to time."—J. A. GREEN.

* * Please send us the names of your neighbors who keep bees, that we may forward copies of the BEE JOURNAL to them. A postal card and five minutes time will do it.