

## CLEANING BUMBLE-BEES.

Recently, when looking over some back numbers of the CAN. ENT. I came across Mr. Sladen's article on page 116 of vol. XLV, 1913, entitled "Bumble-Bees and Wasps Wanted," and noticed that in the second paragraph he says that "crushed tissue paper should be placed in the cyanide jar to absorb moisture which would otherwise mat and spoil the bees." As I have had some experience in the matter I thought perhaps a cure for this trouble might be of sufficient interest to warrant publication. Several years ago I visited a peach orchard in full bloom, and swarming with bumble-bees. I caught a nice lot of them and took them home, and when I came to pin them out I found that they were all as wet as the traditional "drowned rat," and apparently ruined. I decided to experiment with them; they couldn't be made to look any worse any way and perhaps might be bettered. I took a good-sized bottle with a wide mouth, filled it about half full of water, dumped the bees into it, corked it tightly, and shook it violently for several minutes. I then poured off the water and poured in more and shook again, repeating the process until the water seemed perfectly clean. I then spread the bees out on blotting paper and left them for a few minutes to get rid of the excess of the water, then put them back into the bottle and covered them with denatured alcohol, letting them stand until I thought the alcohol had had time to unite with the water, (perhaps 15 minutes) and then removed them again to fresh blotters to get rid of most of the alcohol, after which I again returned them to the bottle and flooded them with gasoline. After a few minutes in this bath they were again placed on blotting paper, and in a few minutes the gasoline all evaporated, and the bees were as fresh and clean as though never wet; cleaner in fact, for often fresh specimens are badly daubed with honey on the face and head. Possibly the last bath might not have been necessary, but it made them dry quicker. The same process would, I think, be equally successful in cleaning moths which have been drowned in sap buckets, only, of course, they should not be shaken in a bottle, but floated on a pan of water and moved around carefully to get rid of the sugar, just as the bees are freed of the regurgitated honey which is the cause of their being wet and sticky. E. J. SMITH, Sherborn, Mass.