

Jones mounts his "young bees for winter" horse, and off they all go on a canter. But we, slower coaches, on *terra firma*, can only cry out "hold on gentlemen, not so fast!" We catch the horses by the tails and call out "whoa!" We are quite willing, men and brethren, that your steeds should have considerable motion and just a little locomotion, but we object to their running away with the cart and spilling the honey and dumping the rider off. Take your time, gentlemen, and let all the other horses also get into line, and then by careful driving with every horse in his place the cargo will be safe and nobody hurt.

There is truth in the pollen theory; there is truth in the hibernation theory; there is truth in the high temperature theory; there is truth in the young bees for winter theory, and every wise apiarist in wintering his bees will only consider each and every one of them and give to each and every one of them its proper weight and place. But to build any one of them up into a big hobby horse and place any one of them as the "be all and end all" of wintering conditions, is like the Hydropathist making water the Alpha and Omega of all medication—the panacea for all human ailments. In both cases we have "one-ideaism," pure and simple. In Therapeutics the "Water Cure" bears the same relation to Hygieo-Therapy that the pollen theory or hibernation bears to the wintering department of bee-culture. Water is an excellent remedial agent no doubt, but is only one of several agents equally important, such as air, diet, exercise, etc. Pollen, hibernation, temperature, young bees, are all of them important factors as entering into the wintering problem; but no one of them is of such importance as to overshadow other agents equally essential. Neither the *presence* nor *absence* of pollen is indispensable to successful wintering if the other conditions are favorable. Neither the *presence* nor *absence* of hibernation is indispensable to successful wintering, the other conditions being all right. (I hear Mr. Clarke replying "if the other conditions are all right the hibernation will naturally follow. But hold! *Quod erat demonstrandum*.) Furthermore bees can be wintered successfully at 40° of temperature or 80° of temperature *outside* the hive if the conditions *within* the hive are right. So also can old bees as well as young bees be wintered successfully, though I confess I prefer the young bees. Perhaps it is not quite fair to place brother Jones on this hobby-horse, but we all know what a great stickler he is for "plenty of young bees" to go into winter quarters.

Now, we come to the winter management, and please bear in mind I do not intend to include much manipulation in the word management as

used here. Of course winter manipulation sometimes becomes absolutely necessary, as to dislodge vermin, ascertain condition of dubious stores, treat disease, etc. But by far the most important part of winter management (provided the bees have plenty of stores) is management of the repository or rather the *temperature* of the repository. Are your bees in the cellar? No doubt most of you winter in the cellar. If so, they ought to be in an apartment by themselves, partitioned off, *under the kitchen stove*. So that they will not be disturbed every time you take a light into the cellar. The partition serves other useful purposes besides excluding the light. Of course if the partition is not there you cannot now put up a permanent one without disturbing the bees too much, but you can put up a temporary one of blankets or something of that sort to serve this season. Assuming that your bees have plenty of stores, the next thing now to do is to ascertain if they are quiet, for up to the present and for five or six weeks ahead they ought to be very quiet. If they are not quiet, proceed at once to make them quiet. This, in nineteen cases out of twenty, can be done by regulating the temperature. If they are uneasy they are almost sure to be too hot or too cold. If you have not a thermometer in with your bees put one in at once. Or what is better, put two in of different manufacture and then you can come near enough to the true temperature by taking the mean difference between the two. If you find the temperature to be below 40°, cold is the cause of the trouble, and proceed at once and quietly to make the apartment warmer. If you find the temperature to be above 45° that is probably the cause of the uneasiness and the temperature of the apartment ought to be reduced. How best to increase or diminish the temperature will of course depend on the particular circumstances of each case. In my own cellar I have a stove in the main department outside the bee department, which is partitioned off under the kitchen part of the house. By means of a large button-hole in the door of the bee department I can reach through and get hold of one of the glasses and ascertain the temperature without going in at all. The temperature of the bee department is of course ordinarily higher than that of the main department of the cellar, which can be regulated at any time, as to lowering, by communication with the outside colder atmosphere. If I find the temperature in the bee department too high I can easily reduce it by communication with the cellar department, the air of which is of course supposed to be kept quite pure: if I find it too low I fire up in the cellar department and can thus raise the temperature