and were just beginning to die of starvation. The average was 4106 to the pound. While these bees were all near the starvation limit, yet there was considerable variation in weight. Mr. White chloroformed these bees. After they recovered from the stupor, he fed ten bees all they would take, and then weighed them. These weighed 15 milligrams per bee more than the others, or 3626 bees to the pound. The result of Mr. White's weights were a surprise to me and so I thought I would verify their accuracy. I weighed 20 bees that were caught from the hives. They were then carried in my pocket for two or three hours in a cage while walking about. These bees weighed 108 milligrams per bee, or at the rate of 4222 to the pound. Another lot of the same number, taken after they had sipped all they would, were chloroformed, and weighed at once. These weighed 123 milligrams per bee, or at the rate of 3781 to the pound. So, friend Root I think your old average, 4000 bees to the pound, is more nearly correct for our bees than is your more recent estimate. I feel very certain that our bees will average 4000 to the lb. and I think that, when full fed, they will hardly reach more than 3330. You will note that when starved, they reach only 4225 to the lb; Our bees are a cross between the Syrian and the Carniolan. There may be a trace of Italian and German blood, and doubtless is. I had always thought that the Syrian race seemed large, and visitors often say "Your bees seem very large;" yet I had not supposed there could be so much difference. Of what race were the bees you weighed?—A. J. Cook in Gleanings.

Golden Rod.

ALLOW me to say that golden rod is our best fall honey plant in Western New York. The fall honey we depend upon is buckwheat, golden rod, asters and Michaelmas daisy (called Micklemas), and they bloom in the order named. Golden Rod always yields the most of any, the weather being favorable. It begins to bloom about Sept. 1, and lasts about four weeks. It always yields well when the weather is favorable, and bees fairly swarm upon it at all times of the day. I think that were the days as long, and the weather as favorable as it usually is in clover or bass-wood harvest, we would get as much honey from it in the same time. The honey is a nice golden color (also the pollen), and quite heavy, but I think that it granulates quite easily when uncapped in the cells or extracted. It is our main dependence for winter stores. It is very abundant, and very hardy, yet never troubling cultivated fields.—G. H. Ashby in A. B. J.

Good Stores and Protection Tell the Story of Successful Out-Door Wintering.

IN any discussion of the subject of outdoor wintering, Vermont should, I am sure, have a voice. All over the state, but more especially in the Champlain valley bees are wintered out of doors. Whether those who inaugurated this system did so with a full knowledge of all the advantages to be obtained with light hives and cellar wintering, I know not, but the fact remains that scores of bee-keepers here practice this method with scarce a desire for a change.

It may be that, as Mr. Elwood said recently in the Review, our valley is favorably situated, the cold being tempered by warm breezes from the lower Hudson region, but an examination of the metlorological observations of the signal station at Burlington would convince many that this effect is not too apparent.

But there are other reasons beyond the control of the average bee-keeper, why our bees winter so successfully.

The character of the honey used for winter stores is generally of the best, as so little fall honey or honey dew is obtained that the major part of the winter stores, if of honey, must be of the white honey crop. This same lack of autumn forage also renders late breeding light and frees the combs of much surplus pollen. It is no rare occurrence to find no brood of any kind in the hives by the first of October.

Winter flights are very desirable at a proper time, but may be injurious. A good flight during December is always beneficial, but one between January 10th and the middle of February is often extremely injurious as breeding is induced; and should no flights occur until after the first of April, as often happens, dysentry may be the result.

If spring protection is of sufficient importance to repay all the trouble of providing, packing, and cases for large apiaries like Mr. Heddon's, then should we who winter in chaff hives, congratulate ourselves upon having obtained this protection without an hours extra labor.

The increased consumption of stores in outdoor wintering is, I am quite sure, not as apparent at the opening of clover bloom as on the first of April; as honey is, I contend, consumed in much larger quantities at this season by colonies wintered in the cellar than by those wintered in the open air.