

at that time, but it was generally conceded that the Cyprian and Mt. Lebanon were the better bees for the honey apiary and that the main objection to them was their vicious stinging propensity. The objections raised against the Italian bees were, that the queens stop breeding too early in the fall, and the stocks for that reason are going to wintering with too many old bees to come out in the spring weak. 2nd, that the Italians are very liable to spring dwindling, and 3rd, that they are of a great swarming propensity. In addition to this I have found here in Oregon that they are poor judges of the changes of weather and will exhaust their stores imprudently in rearing a large amount of brood regardless of weather, taking their chances on the weather being favorable for the gathering of stores.

As the public mind after fair trial would not settle on any variety as the best, the matter remained "in statu quo" and as the Italian bee was at that time the most gentle bee known and already widely introduced, she remained "pro tem" the favorite with American beekeepers who preferred a gentle bee to a vicious one. In the meantime the public mind was drawn toward cross-breeding and the opinion became prevalent that by judicious cross-breeding, in the course of time a cross or strain of bees might be obtained which would unite in one all the good points of the different races minus their faults. This new yet-to-be-obtained bee was at the time in the papers spoken of as the "coming bee" and some fast American beekeepers, went in the hastiness of their enthusiasm as far as to christening this "coming bee," the "Apis Americana" most probably to secure ownership beforehand, when the distinguished honor of christening such a wonderful bee of bee-perfection might perhaps with more propriety and respect be left to such reverend bee-men as the Rev. Dr. Drierzon and Rev. Mr. Langstroth our German and American fathers of progressive apiculture, if those men will be still among the living when the first queen of that perfect strain of bees ever does emerge from her royal cell.

It could not be worth while for me to argue here with Dr. Thom or any other enthusiast of the Italian or any other variety of bees, the matter of the privilege of a different opinion in our age of mental freedom, especially in an unsettled matter. The reason why I prefer the Mt. Lebanon bee to all others thus far is because a Mt. Lebanon colony of bees with young prolific queen of the previous season is the least apt to swarm that season and most surplus honey can be expected if in large hives like my Oregon Chest beehive, which is a combination of the Langs-

troth with the Quinby, having the suspended Langstroth slat, and the surplus honey arrangement of the Quinby hive.

The Carniolan queens imported from Mr. Benton I have but for cross-breeding with the Mt. Lebanon, and I have now most promising crosses. The only objection I have to the Carniolan bees is the great swarming propensity which they share with the Cyprians and Italians. I have found the Carniolans all that Mr. Benton recommends them and discovered two good points—to wit, that they will leave the hive less in bad weather than any other bees, and that they show more activity late in the fall when other bees are very drowsy, than any other bees.

With regard to Mr. Benton, with whom I have had dealings for the last two years, and whom I have found a most honorable and reliable dealer and pleasant man, I have to say that it is my humble opinion, (which however I do not wish to force on any man), that Mr. Benton deserves not only the most liberal patronage of all able beekeepers, who wish to procure pure queens for cross-breeding, but also an annual subsidy of all such beekeepers who can afford it, as his business is very expensive, and he is laboring under great disadvantages for the advancement of apiculture in unhealthy countries where his life and health are at stake.

GUST MURHARD.

Portland, Oregon, July 26th, 1886.

An Essay read before the Wellington Bee-keepers Association held in Fergus, August 14th, 1886.

PREPARATION FOR WINTER.

WHERE we down in a southern latitude, little, if anything, need be said of "preparation for winter." But living where we do in an atmosphere moving the mercury from ten above to twenty below zero for some seventy-five or ninety days in the year, this question is of no small importance. There can be no doubt, however, that successful wintering of bees often depends very largely on due preparation for it. And this preparation begins when summer is yet with us in all her glory—from August 1st to August 15th.

During this period brood-rearing is a prime essential. The bees now active in the hive will have disappeared before the advent of real cold. Hence the bees which are to pass through the winter and nurse the brood in early spring must now be reared. In order to this there should be ample stores in the hive or coming in from natural or artificial supply. As in case a small quantity of food is stored up and none coming in, brood-rearing will be seriously retarded.