do not keep hogs, sheep, cattle, horses and poultry. All these seem necessary to use up the products of the farm and to make the occupation safe and certain. The addition of the apiary is just as important as the keeping of any of the varieties of stock mentioned, and the farm is hardly complete without it." If the above is the truth—and I believe it is—the question arises why is it that not one farmer in 20 keeps even one colony of bees to secure the honey allowed to go to waste from not having the bees to gather it? Is it not just as bad to let this honey secreted by the abundant flora of the farm go to waste, as it would be to allow a field of pasture to thus waste for want of stock to consume it? I believe it so to be, yet how eagerly we see the farmer gathering every ear of grain, securing stock enough to consume the grass from his pasture, and husbanding all the products accruing from the farm except the honey, which is allowed to go to waste as far as he is concerned. Each farmer might keep bees enough at least to supply his own table with this luscious sweet, but there are very few who do it. The reason of all this neglect, in my opinion, is that farmers as a class are not willing to bestow upon the bees the time they require; hence a failure is almost certain. These failures being known in the neighborhood, others are deterred from making a trial.

How patiently we see the average farmer care for his stock, feeding his cows three times a day for seven months out of the year, and milking the same twice a day for nearly ten months, getting little more for his butter and milk than he could have got for the produce the cow consumed if it had been disposed of in the shape of hay and grain sold or pasture rented. But let this same person buy a swarm of bees which is capable of giving as good as, if not greater returns than a cow, if given the same care and attention, and ten chances to one he will put it in some out of the-way place, not go near it once a month, let it go into winter quarters with little or no prospect of its surviving, and then declare bee-keeping does not pay. Others who have a little more thought regarding them will partially attend to their wants till the hurry of harvest comes on, and then, just when the bees need the most care, neglect them entirely, allowing swarms to go to the woods and the bees to lie idle for want of surplus receptacles in which to store the honey which is being secreted plentifully at the time. But no matter how much the hurry or how great the pressure of business, the hogs are fed, and the cows are milked, while the poor bees are left to care for themselves. I wish we might see a new era dawning among our farmers regarding this branch of rural industry, seeing it placed where it should be upon an equal footing with any other branch of farming. To show the possibilities of bee keeping where as thoroughly conducted as most farmers conduct the raising of grain, stock, etc., I will mention the case of Mrs. S. J. Axtell, Roseville, Ill., who secured 39,000 pounds of honey the past season from 170 colonies of bees, which netted her upwards of $5,000; that being an average of nearly $30 per colony. Where is the dairy of 170 cows that will give that amount of clear profit. Then dear reader, if you have any desire toward bee-keeping, resolve that you will give each colony as much care during the season as you do each of your cows, and see if my words do not prove true, that bee-keeping is one of the most profitable and fascinating of all the different branches of farming.

Borodino, N. Y. G. M. DOOLITTLE.

BEE-HIVES.

THOSE who have been the most interested in the keeping of bees have for years been trying to invent a hive that would be equally well adapted to the cold of our winters and to the heat of midsummers. I saw in the RURAL a short time ago an article upon the subject of bee-hives, which was illustrated, but the writer did not touch upon the question of a summer and Winter home for the bees. Many a winter hive has been invented, but, as a general thing, apiarians have given no thought to the comfort of the bees in the long, hot summer days, except by boring a few holes in the hive for ventilation.

I have always thought that the hot rays of the sun in June, and August were unhealthy for the bees in the hive, the heat blistering clear through the wood and making the inner part of the hive so hot that the industrious little fellows cannot work with any degree of comfort. Then, in addition to the sun's heat, there is the animal heat of the bees! What a hot place must the interior of the hive be for so much industry.

Now I am opposed to placing the hives in the shade. The bees need the sunshine upon the outside, but not upon the inside of the hive. They are early risers. They are up, dressed, have breakfast and are at work early when the morning sun glistens upon the dew drops in front of their mansion. In the State of New-York the bee has no time to wait for the sun to warm the damp air beneath the thick branches of some moist, moss-covered apple tree. Therefore I put my bees in what I choose to call my summer-and-winter hive then set them out in God's sunshine to enjoy themselves as they work.

THE APIARY.

Several Inquiries Answered.

EDS. COUNTRY GENTLEMAN—A man writes to me that late one season he fed some bees, in the open air, sixty or seventy pounds of honey, but "could not perceive that the boxes had any more honey in them after the feeding, and cannot imagine whither the honey went." He asks what I can say about it. In reply I will say that if there were many colonies in the yard, the amount carried into a single hive would be very small; and, as it was late in the season, a large share of it was probably stored in the brood combs.

Another correspondent asks as to best size of hive for bees to work in. If he has reference to the size necessary for a brood nest, I should say that 12 by 12 by 14 inches is large enough. The one I use is a trifle smaller, being 11½ by 10 by 18¼ inches, and I would sooner have it smaller than larger. If he has reference to the surplus apartment, I would say that its size should be varied with the season. When the honey harvest first opens it should be smaller, as the season advances and the colony becomes more populous, its capacity should be increased, and as the season draws to a close, it should be contracted.

Another asks why bees do not work so readily in sections placed on the side of the hive as when placed on top. The shape of the frame used has much to do with this. With shallow frames the bees more readily store their honey above while with tall frames they would probably commence work sooner in boxes placed at the side of the brood nest. To another inquirer I will say that basswood, white clover and buckwheat are the principal kinds of honey obtained in this vicinity. The greatest amount is secured from basswood, and the least from buckwheat. Its consistency when gathered depends upon the season.

Another asks how many colonies I have, where I winter them, and if out-of-doors, if I give them any protection. I commenced the winter with eighty-five colonies. Fifty seven colonies were buried in a "clamp," thirteen were put into the