FORESTRY

WHAT A WINDBREAK WILL DO

From time to time "The Farming World" has called attention to the many advantages to be derived from planting windbreaks, and has pointed out how essential they are for the protection of stock and crops in this northern climate. Our neighbours to the south have of late become very strongly impressed with the same idea, and being an enterprising and practical people, they are living up to their belief by making plantations of trees adapted for the purpose in most of the progressive states.

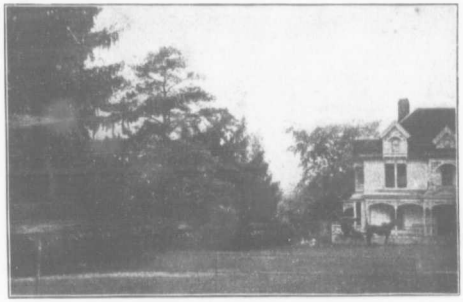
In a recent issue of "The Breeder's Gazette," Mr. Wing in referring to the effect of trees on climate says, "When I was a boy the climate of the part of Ohio where I live, was notably different from what it is now. Then there were great oak forests all around me. One could seldom look more than half a mile until his vision was stopped by a dark wall of forest. Under the oaks were smaller trees and under them hazel brush. These timber masses checked the winds of winter, and made the weather quite mild compared with what it is now. The thermometer may have indicated nearly as great a degree of cold, but when one went out in the morning, the wind was subdued and snow flakes came lazily down and lodged where they fell. No shovelling out of drifted roads in those days! The stock was mostly out of doors and I can well remember how in the shelter of the woods the great fat red steers used to get up lazily and come to the corn as we handed it them.

Now all this is changed. There is little timber left and what there is of the old oak woods is slowly dying. The winter winds blow strong and fierce and snow drifts into the roads, till it must be shovelled away, and such of animal life as is out in the cruel blasts suffers immensely and loses thrift. Again, when I was a lad it used to be one of my duties in September and October to feed peaches to the pigs. Now we scramble for every little runty seedling, and the pigs never get one. Apples are uncertain now; in those days the orchards were "breaking" nearly every year and the cellars gave out a goodly smell from the fruit stored within them.

What does the wind do? Supposing behind a shelter belt the wind is blowing two miles an hour. Go out a little way and you will find it blowing four miles an hour. Did you ever stop to think, that while the thermometer will mark no difference, it is really twice as cold there! That is, the wind will take away twice as much of your body heat or the body heat of your horse or cow where it is blowing at the rate of four miles an hour as where it is blowing but two miles. May be I am making too modest a statement here. Some investigators claim that the ability of wind to cool things increases with the square of its velocity. Certain it is, that the force of wind to deliver power to a mill, for example, increases according to the cube of its velocity. Then a wind blowing eight miles an hour takes out four times as much heat from the cattle and orchard trees, and when it blows sixteen miles it is eight times as cold practically, and so on. You never thought of that probably, and if you did, it never occurred to you that there was anything that you could do about it. But there is something to be done. The forests are gone, and on the whole it is well. We needed the land, though we might have saved more trees. The old forests, however, were not really well placed. As a general thing, they did not shelter economically. But why not begin planting trees to take their place? Why not put out shelter belts that will break the winds of winter and some day make good timber for use on the farm. Some object, that it takes too long and costs too much; others say, "I don't want to bother with such things, I have more work than I can do now." This last one speaks truly, too truly, and the trees are not for him. There is a class of farmers who have more land than executive ability, and the cold winds will forever blow about their ears. But the majority of men have learned to manage so that they have command of their work and leisure enough, if only the thing to be done is practicable.

Does it take too long? For answer our illustration shows a windbreak plant planted by Mr. Guy of Madison Coy., O., about twenty-eight years ago. It is mainly composed of Norway spruce. The trees now average about forty feet high. They have been set a little too close together, and some of the lower branches have died, but it is a very effective windbreak for all that. These trees when planted were very small indeed. They have cost nothing but protection except that for a few years at first, they were cultivated and the weeds kept away from them. Another case; Mr. Patrick planted a windbreak in 1890. He got trees about six inches high, all of Norway and white spruce, and cultivated them carefully at first. Both sorts have grown well; the white spruces being thicker in foliage and more beautiful. This windbreak is already doing splendid service. This year there are few apples anywhere, but both Mr. Guy and Mr. Patrick have them behind their windbreaks. Mr. Patrick has set two or three rows about about twelve feet apart breaking joints. That is doubtless the best plan, but some day, even then, the trees will be too close. For a shelter belt merely, the mixture of White and Norway spruce is first rate. The Norways grow a little faster than the Whites. These trees cost but little to buy, though one may as well save a little time and get trees about two feet high unless he likes to hoe and care for seedlings.

Sometimes it is urged that these trees would "sap the land" and interfere with the crops. Crops are directly dependent upon the moisture supplied from the soil, and only about one year in fifty is there quite enough. Winds rob land of moisture immensely. A wind of ten miles an hour dries out land twice as fast as a wind of five miles an hour. This is not theory, it is established fact. True, for a little way on each side the trees injure the crop, but take the whole field over, and they help it immensely."



A GOOD WINDBREAK

VALUE OF WOOD LOT INCREASED

In the cutting down of small trees farmers often rob themselves of large profits later on. "Arborculture" tells of an incident in Virginia. Ten years ago about 64,000 young hickory trees were cut down to provide hickory hoops for about 13,000 apple barrels. The barrel hoops were sold for about $400. If the trees had been allowed to grow they would have been big enough in a few years for cutting up into carriage spokes, and would have produced at the present price of $35 per thousand spokes worth more than $800.