

of the wall space is in window glass, and as the walls are glistening with whitewash, every corner of the stable is light. The floors are of cement. There is a water basin before each cow. But the best feature of the stable, and the one I least expected to see in a stable constructed so many years ago, was a complete ventilating system, installed on the King plan. The King system is not very highly recommended by some of our Canadian authorities on stable construction, but it is the most popular system in vogue in the United States. I enquired of Mr. Baird as to their experience with it.

"We cannot imagine how any system could be more satisfactory than ours," said Mr. Baird. "The air in the stable is as fresh and clean in the coldest weather as it is outside. We have never seen any moisture accumulating on the stable walls, and this is, I believe, the best test of a ventilating system. We are well enough satisfied with it that when we built our new calf barn in recent years, we installed the same system in it."

Light, comfortable stables and an excellent system of ventilation, make it possible to stable the cows continuously through the entire winter without injury to their health. The wisdom of keeping cows confined has been often questioned, but the general thrift of the Baird herd seemed to indicate that they at least have prospered under the system. It is planned to have four or five cows freshen every month in the year in order to maintain a constant supply of butter to meet their special trade.

#### The Calf Barn and Silos.

The new calf barn is a model. At one end is a feed room, and under it a cistern. Soft water is used altogether for the calves and once accustomed to it, they like it just as well as hard water. There is stall room for 23 calves on either side of the feed alley. Practically all of the wall length is in window glass. The walls are constructed of four thicknesses of lumber with tar paper between the two thicknesses on the inside and outside studding, and a dead air space between. A high hip roof gives lots of room above for the storage of straw. Gates between the calf pens allow of a boat being drawn through when the pens are being cleaned. As mentioned before, the King system of ventilation is installed here, too, and the atmosphere is always fresh and dry.

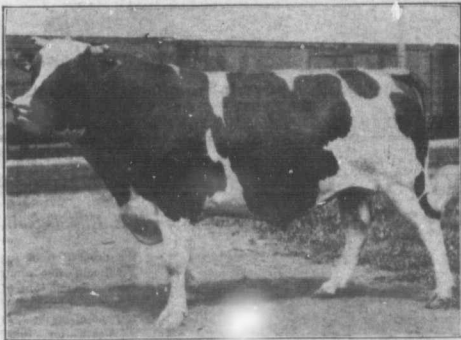
The feature of the Baird homestead that would attract immediate attention from the passerby is the silos. There are three of them in connection with the dairy barn. The largest one is 18 feet in diameter, and it is 56 feet from the floor of the silo to the bottom of the ventilator in the roof. "The corn settles so rapidly in this silo," said Mr. Baird, "that when we reach a certain point in the filling, we will continue filling for a half a day and see practically no progress." This silo, like all of the others, is built with cement walls six inches thick, strongly reinforced and with a continuous doorway. Another silo, if I remember rightly, is 16 x 46 feet, and the "baby" of the trio is 14 x 36 feet. There is a fourth silo in connection with the other set of buildings which I did not visit. The feeding of the ensilage is done very expeditiously. A cart is backed up to the silo,

(Concluded on page 9.)

## The Farm Woodlot

### It Now Has a Peculiar Value

WOODLOTS on the farms can be made an important factor in the relief of the threatened fuel shortage. Farmers and



A Twice Grand Champion at the Canadian National Exhibition.

In both 1916 and 1917 Lakewood Dutchland Hesperoid has been grand champion Holstein bull at Toronto. He was shown this year in perfect condition, which, along with outstanding quality, great substance and proper conformation, made him a comparatively easy winner. Exhibited by W. G. Bailey, Paris, Ontario.

the residents of smaller towns and villages situated within hauling distance of woodlots, should, as a measure of practical patriotism, use wood in preference to coal.

Few farmers realize the value of the crop which can be obtained from their woodlots. If even a small proportion of the attention given to other crops were devoted to the protection and improvement of the "bush," a good financial return could be secured. Aside from its value in affording protection against wind and storms, its importance in the conservation of soil moisture and its aesthetic value, the woodlot has a considerable value for the crops which can be harvested from it every year at a minimum expense. It should have a place on every farm.

Live stock should be excluded as they destroy the natural reproduction, injure the larger trees and pack the soil so that the growth of the trees is retarded. Defective and diseased trees should be removed first; then those of poor form, such as very crooked or very branchy ones which interfere with the growth of better formed neighbors. The trees of the less valuable species such as dogwood, ironwood and hornbeam should then be removed. Every effort should be made to secure natural reproduction, but, if that be impossible, planting will be found profitable.

The tendency has been to encourage the growing of soft-woods suitable for lumber, such as pine, spruce and cedar, but the function of a farmer's woodlot is better fulfilled by producing hardwoods for fuel.

The fuel value of one cord of several of the common kinds of wood is equal to the following

quantities of anthracite coal:

Hickory and hard maple, 1,800 to 2,000 lbs. of coal; white oak, 1,540 to 1,715 lbs. of coal; red oak, black oak and beech, 1,300 to 1,450 lbs. of coal; poplar, chestnut and elm, 940 to 1,050 lbs. of coal; pine, 800 to 925 lbs. of coal.

Therefore, hardwood is worth, to the owner of the woodlot, from \$6.00 to \$9.00 per cord, as compared with coal at \$10 per ton, plus the cost of hauling it out to his farm.

If a yield is to be sustained permanently, it should not exceed the annual growth which, in unmanaged woodlots, probably does not exceed  $\frac{1}{4}$  cord per acre. This production can be considerably increased by careful management. A woodlot may be considered as similar to a savings bank account from which the annual interest, represented by the growth, may be taken out or allowed to accumulate. In the case of the woodlot, however, the withdrawals can be so made as to greatly benefit the condition of the stand and improve its productivity.

The Dominion Forestry Branch and the various provincial forestry organizations have done much to encourage farm forestry by supplying advice and assistance. The Dominion Government distributes annually between 3,000,000 and 3,750,000 seedlings and cuttings among the farmers of the prairie provinces. In Ontario, the Forestry Branch of the Department of Lands, Forests and Mines also supplies seedlings for planting in farmers' woodlots.—R. D. C.

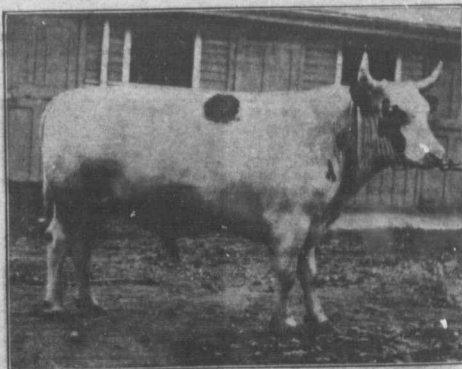
## Sour and Mouldy Silage

### Some of the Abuses in Filling

J. TOBIN, Haldimand Co., Ont.

EVERY year I notice enquiries in the agricultural papers concerning mouldy or sour silage. Occasionally, too, I hear of a silo owner who has given up filling the silo and knocks the silo at every opportunity. Usually these knockers have had bad silage, and from their own limited experience have decided that the whole system is wrong. Certainly the filling of the silo is an operation capable of great abuses, and these abuses will explain fully every case of dissatisfaction with corn ensilage.

I have had personal experience with some ensilage, but the most that I know about it I have been content to learn from the experience of others, and from these observations I would say that in the great majority of cases, sour ensilage is due to silaging the immature corn. This immaturity



Hillsdale Peter Pan, Senior Champion at the Canadian National.

This bull was first in the Mature Bull Class, winning chiefly on his superior ribbing. He was in lower flesh than when exhibited last year, and consequently showed to better advantage. Hillsdale Peter Pan is the herd sire of Alex. Jones & Co., Campbellford, Ontario.