they hatch, make their way down the plant behind the sheath of the leaves. In the spring, they go down to the first or second joint above the roots, but in the fall, when the plants are much smaller, they usually go down to a point just above the roots. The effect on the wheat, in the fall, is to prevent the plant from sending up shoots that would bear heads the following year, and to reduce the growth to a mere bunch of rank growing leaves, that kill out during the winter. In the spring, the maggots, or young, go down to the first or second joint above the roots, and there become imbedded in the straw, thus weakening it, and when the grain comes to head the straw thus weakened will topple over and break down, thus giving rise to what is known as "straw fallen" grain. The insect passes the winter, largely, in the flaxseed stage about the plants, just above the roots. It passes the summer, largely at least, in the stubbles that are left in the fields at harvest. Thus the adults breed in spring and fall at dates varying with the latitude. They live but a few days and die almost immediately after depositing their eggs. The preventive measures are late sowing, rotation of crops and burning of stubble, where this can be done. The remedies consist in the use of quick-acting fertilizers, in the fall, or pasturing There is no early sown fields, preferably with sheep. known remedy against the spring brood of flies.

Canadian Horses for England

Another fine shipment of heavydraught horses has been got together by Mr. John Sheridan, of this city, for the British market. The shipment consists of upwards of forty animals of fine quality and type and purchased chiefly from the farmers in Peel, York and Ontario counties. The horses range in weight from 1,500 to 1,800 lbs. each and are in their prime, their ages ranging from five to seven years, the bulk of them being six and seven years old. This is considered to be the finest shipment of horses that has been sent to England from this country for many months and should serve to increase trade with Britain in Canadian horses. At any rate they will show what can be done in this country in the way of producing prime heavydraught horses for export.

The Practice of Dipping Sheep

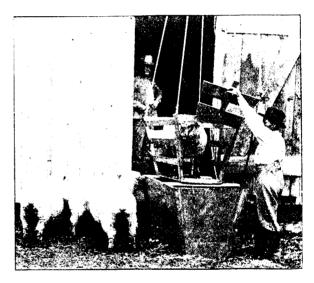
John A. Craig, Iowa Experiment Station

The main justification for the dipping of sheep lies in the fact that it is the only way we have of guarding against losses from the presence of the many parasites which attack sheep. Not only is dipping, when effectively carried out, necessary in removing these, but a good dip should also have a beneficial influence on the wool and contribute to the general health of the sheep. It would be only fair if our markets would discriminate more in favor of the wool that comes from dipped sheep; for there must be a marked difference in the fleeces that are dipped and those that are not should be treated in regard to their shrinkage. When sheep are dipped in the spring after shearing and again in the late fall, the fleeces should show the benefit of this both in growth and cleanliness, and it seems but reasonable the wool dealers should recognize this.

Shortly after shearing is an excellent time to dip the ewes, for then the skin may be cleaned and the sheep completely rid of ticks. The advantage of again dipping in the autumn is that it cleanses the wool after it has become more or less dirty with the dust, and this treatment of the fleece usually keeps it in good condition through the winter. If for any reason it is only possible to select one time in the year, in the northern sections, to do the dipping, it will likely be the most satisfactory to do it before the cold weather comes on in the fall, and just previous to the time when the sheep require shelter. When the fleece is about

half grown, it is then that the ticks cause most annoyance, and later than this the scab usually begins to make its presence known by the havoc it plays with the sheep and its fleece. It is a very good plan, when a small flock of sheep is kept and the facilities for dipping are not extensive, to have a small dipping vat, in which the young lambs may be dipped two or three weeks after the ewes have been shorn. The shearing of the ewes causes the ticks to seek other quarters, and these they find to be most comfortable on the lambs. Small flocks may be kept perfectly clean in this way, but it is certainly more advisable wherever possible to have a large dipping vat for the treatment of the older sheep.

No sheep farm is complete in its equipment unless it has a draining vat, at least two feet long, for dipping the mature sheep. On our northern farm the vat is twenty-four feet long, twenty inches wide on top and six inches wide at the bottom. It is four feet six inches deep and made of two inch plank, matched, leaded and painted. The tank is sunk about two feet below the ground level. On the whole, I think that the steel tanks which are made would be much more satisfactory, as they are more durable. At the entrance to this tank we have division yards. The one nearest the tank would be better if floored, as it helps to keep the feet of the sheep cleaner. At the other end of the tank there are two draining pens, elevated above the



Dipping Sheep.

exit of the tank, so that the fluid dripping from the sheep runs back into the tank. At the entrance of the draining pens there is a gate that swings both ways, so that when one of the drainage pens is filled with the sheep they may be closed in by this gate and those which follow are compelled to pass into the other pen. The upper end of the drainage pens is one foot higher than the lower end, where the sheep enter, and from the outer edge of the pens to the centre, or dividing line between them, there is a fall of four inches. At this dividing line there is a drain two inches wide, and one inch deep, which carries the drippings back into the vat. These draining pens each hold the same number of sheep as one of the division yards. These are the main features of this dipping arrangement, which have proven very satisfactory to us.

In the operation of dipping I would emphasize the importance of keeping the sheep long enough in the fluid that it may thoroughly soak the fleece and reach the skin. It may be necessary, if the vat is not long enough, to stop them in their progress through it and hold them in the fluid for a short time. Another point that I would emphasize is that the fluid should be stirred from time to time, and, if possible, kept hot. Warm water will likely be more cleansing than if the fluid is used cold.

For the comfort of the sheep it is desirable to choose a day that is not too warm, and care should be observed when driving and penning them that they do not become heated. In passing them through the dip haste should be