you over safely. The only profitable horse for the farmer to breed to-day, is the purebred, heavy horse.

J. GORDON McPHERSON, (V. S.) York Co. Ont.

[Note-It was not the purpose of the Government in bonusing Thoroughbred stallions that they should be bred to heavy-draft mares. All are agreed that such would be a foolish move. The mares of "cold blood" to which it was advised to breed the Thoroughbred are the general-purpose or light-boned and bodied mares of no particular breeding. We agree with Dr. McPherson that the heavy draft horse is the most profitable for the average farmer to produce but would not like to say that no good could be or is being done by the Thoroughbred sires in the country if the right type of mares were or are being bred to them. If Dr. McPherson's figures are correct and only thirty foals result from each sire in a year it doesn't look as though it was a money-making venture from the stallioner's view-point. Thirty seems to be a very low number and at this number profits would be exceedingly small, but if a larger number of foals were produced profits should be fair. Will someone who has handled one of these stallions give us his experience .-Editor.]

## LIVE STOCK.

The sow about to farrow requires a laxative diet.

Avoid too much bulky food in the brood sow's ration before parturition.

When treating cattle or other domestic animals for lice, bear in mind that it is just as necessary to clean up and disinfect the stables, as to treat the affected animals.

Cough among hogs may be due to very dusty quarters. With young hogs it is frequently due to minute thread-like worms in the bronchial tubes. A soft, hacking cough is a very common symptom of hog cholera. Hogs also have the common forms of bronchitis and pneumonia, just like other animals, and people. With hogs, coughs and lung troubles, aside from cholera, are frequently due to sleeping in warm quarters, possibly piled up, and then going into cold places to feed.

In experiments carried on at the Agricultural Experimental Station, Clonakilty, Ireland, in the feeding of pigs from eleven to fourteen weeks of age it was found that pigs can be fattened successfully with raw meal and the average daily gain in live weight was greater when meal was fed raw than when cooked into porridge. meal was fed raw less food was required to put pound increase in live weight. The proportion of dead to live weight was higher in the case of thepigsfed with raw meal, i.e. they killed out a larger percentage of carcass raw meal was found to be good feed for the pigs right after weaning and they cleaned up their food well and handled firm and also required less litter than those fed on cooked meal. This will be news to the majority of pig feeders in Ireland where the old practice of cooking feed is still adhered to by the larger portion of the feeders.

Feeding after Parturition.

Editor "The Farmer's Advocate.":

The brood sow or the ewe that has just farrowed or lambed, or the mare that has just foaled, should be fed carefully and with caution. Feeding immediately after parturition should not be the same as it was previous to this time. There must be a let-up for a time, and the feeds given should be of such nature as to suit the abnormal condition of the entire system at the time. The system is naturally somewhat feverish and vitality low, hence rations soothing in effect are the kind needed.

Instead of giving the brood sow her regular feed of slop and grain feeds, give her some fresh water with the chill taken off, and only enough of the slop which should preferably be thin, to satisfy a small feeling of want for food. For the first few feeds slop containing only rolled or ground oats is an excellent one. Oats are not heating in any way to the system, and therefore do not aggravate the fevered condition as either highly carbonaceous feeds or feeds high in protein do.

After the first forty-eight hours have passed, the normal condition of the system has again fairly well established itself and the regular feeding may gradually be resumed, such feeds being added to the ration as will encourage heavy milk production for the young pigs.

The ewe's feeding, too, after should be in keeping with her condition due to this phase of the life process. receive some fresh water in small amounts at intervals, and with the chill taken off. fevered condition of the system causes thirst, which must be satisfied to subdue the fever, and to encourage the system to regain its normal The feed in the ewe's case should preferably be dry crushed oats and a little cut roots, with such amounts of bright, well-cured clover hay as she will eat. There is not much danger that she will take too much of the clover hay, but the crushed oats and roots should never be given in large quantities just after lambing. amounts of them are sufficient, and for the first few hours after she has lambed the ewe will not demand anything other than the fresh water and a little clover hay. The ewe also, after fortyeight hours, can be gradually placed back on regular feed with such additions as are conducive to encourage her milk flow.

With the mare that has just foaled, thirst due to a fevered condition must also be satisfied to encourage the normal condition to be regained. With her, more care will be necessary, perhaps, to see to it that she does not get too much, and also that the chill is well taken off the water, because of the proportionately larger amount of water that a mare will drink than the other animals considered. Eight or ten quarts at first will do, followed later at an interval of about an hour, with a little more, or what she will take, if that is not more than an ordinary sized pailful (ten or twelve quarts).

Ground oats moistened with lukewarm water make about the best thing a mare can receive as her first feed after she has foaled, and it may be continued for the first forty-eight hours after with a small amount of crushed or whole oats given in addition. Besides these, bright and dust-free timothy hay may be at hand.

The troubles that frequently set in to effect serious results just after parturition are generally due to a lack of management or to careless-

ness, because the condition of the dam's system at this time is not understood.

That the vital forces of the bodies of all females are reduced to a decidedly low level at parturition, as compared with the ordinary condition during other periods of their lives, should be well understood.

Something is to be learned of the first condition, even from our common observations on plant life. It is quite generally understood that a large number of our plant life forms cease to exist after they have borne fruit. It becomes necessary to plant the seed in order that the same form of plant life may exist. All the cereals, which we raise on our farms annually, are of this nature. They are sown, then grow, flower, bear fruit, and after this, die. fact that they bear fruit precludes their further Their vital force has been reduced to its lowest level and then disappeared entirely from their forms. Again, in other plants the vital force leaves the vegetative portion entirely. and remains dormant in roots ready to spring up again and thrive in a new vegetation starting up from the same root.

This it known in all our ordinary pasture grasses which even produce a second vegetation within a single growing season of the year, and a large number of other plants of the perennial and biennial classes. Again, in other plants the vital force disappears entirely from only the leaves and remains in the dormant state in the body of the plant, as well as in the roots. Of these our deciduous fruits are a very common example. In other trees the vital force remains dormant even in the leaves, as is the case with the evergreen trees; while in still other plants the vital force does not even become dormant, but goes on in the active life processes. Such is the case with many of our house flowers, such as the well known Geranium and Fuchsia. However, while the active life processes do continue to go on in these plants during fructification, it will be readily noticed that during this time the plants do not seem to retain the appearance of highest thrift in their foliage, which they had just previous to and during flowering time. They take on the appearance of being suddenly checked

So it is that all life, whether of the plant or the animal kingdom, during periods of actual reproduction, through fructification or bearing young, has its vital force retarded by the process, and life's level is reduced to the minimum of its ordinary course. Since that is true of the dam bearing young on the farm, it is only natural to suppose that this is the time in her life when she is most susceptible to disease, and such, in fact, is true. Her vitality being reduced, her system is left most subject to the ill effects of outer forces and conditions. These are liable to so affect the body in its weakened state as to bring on serious troubles.

Should disease germs, which have previously been successfully combatted by the system, now exist therein, the chances of their producing disease are increased manifold, and incipient stages of disease already existing in the system are most sure to make great inroads on health. Pneumonia is frequently contracted by females just after parturition, and tuberculosis usually makes rapid advances if already in the system.

The herdsman's duty, then, is to so manage the treatment of his dams at parturition time as to place them in the best possible condition to successfully withstand the great strain.

Johnson Co., Ill. W. H. UNDERWOOD.

Lung Worms in Hogs.

Pneumonia of hogs is not always due to worms, yet it is not uncommon to find young pigs, and even old hogs, to be affected, and dying from inflammation of the lungs and bronchial tubes, due to the presence of large numbers of small white to whitish-brown thread-like worms, which are found to be located in the bronchial tubes.

Verminous pneumonia is most often found on low or swampy land, although it may occur on the uplands.

This disease of pigs occurs at all times of the year, but it is more frequently observed during the late summer and fall. When pigs are first affected, the symptoms are few and elusive, but as the invasion by this worm progresses the symptoms become more and more pronounced. At this stage of development, frequent spells of coughing.

coughing are noticed.

There is a thick discharge from the nostrils which will, at times, contain masses of mucous. A close examination of this material will, at times, reveal the presence of the young worms as well as adult worms. The symptoms most apparent to the owner are thinness and lack of development of the pigs. Death is probably due to the air passages being closed or to a watery condition of the lungs.

At times this disease may be confused with hor cholera or even with tuberculosis of swine. By careful study of the symptoms and history, together with the finding of the worms either be-



A Study in Sheep.

Whole sheep may be valuable to keep down roadside weeds, they are more valuable to destroy weeds on the farm, and at the same time add fertility to the soil.

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