fore death in the discharges from the nostrils, or after death in the bronchial tubes at the base of the lungs, should be sufficient evidence to enable one to be sure.

It is very difficult to relieve hogs affected with lung worms, because of injuring the lungs or air passages in undertaking to kill or dislodge the worms. "An ounce of prevention is worth a pound of cure." Be very careful not to introduce into the herd any hogs that are affected by the parasite. If you know that any low or swampy ground on your farm has been used as pasture for infected hogs, keep healthy hogs away from it. This is not an absolute preventive, as the trouble sometimes occurs in uplands as well as lowlands.—Dr. W. L. BOYD, University Farm, St. Paul.

Ringworm in Cattle.

The Irish Department of Agriculture advises that treatment of ringworm is not usually difficult, if a determined effort is made to rid the herd of it. It is, of course, extremely contagious, and steps must be taken to suppress it immediately it makes its appearance. This means the isolation of infected animals. Ringworm is caused by a fungus, which, to live, requires air, so it is sometimes sufficient to smear the affected spots thoroughly with something which excludes all air. Thus a simple application of lard or oil, frequently repeated, is sometimes effective in producing a cure, but stronger measures should be adopted. One of the most useful applications is made by thoroughly mixing half a pound of lard with two ounces sulphur and four ounces of oil of tar, a small quantity of this mixture being smeared on the patches daily. Any good reliable sheep dip applied daily for a few days is also generally effective. A solution of four ounces of sulphate of copper in one quart of water may be used if the number of patches is not too great. Care must be taken to prevent this or any other irritant substance used from getting into the animals' eyes. Poisonous substances must not be used extensively where cattle lick themselves or each other. Mercurial ointment is a treatment of the latter class, and should be applied only about the head and neck in moderate quantities. In the treatment of any ringworm it is advised to soak the patches thoroughly with hot water in which washing soda has been dissolved in the strength of four ounces to one quart. This softens the crust, and allows the remedy, whatever used, to penetrate.

In prevention all bedding used by infected animals should be kept away from the healthy stock. The stable walls, partitions and floors should be disinfected with some such substance as the carbolic acid solution. Treating all stables with whitewash once or twice a year is a good precaution. Feed liberally, as lean, half-starved animals are more likely to be attacked than well-nourished individuals, so it is imperative that cattle, especially the younger cattle, are well fed.

Pig-Feeding Success.

Editor "The Farmer's Advocate" :

In a recent issue of "The Farmers Advocate" you invited a discussion of hog-feeding methods which, especially at this time, should be of much interest to hog-raisers.

We hear much about balanced rations for dairy and beef cattle, but the hogs are generally left to balance their own, although a balanced ration should be of as much importance in the case of hogs as in that of cattle. The average farmer does not bother much with balanced rations, but generally feeds what he has himself, or what he can buy handily.

As it is generally conceded by all experimenters that a mixture of grains and mill-feeds is better than one or two kinds of grain alone, the writer generally tries to do this, milk-feeds generally forming the bulk of the ration.

In my earlier years of farming a good deal of time and trouble were taken in caring for the hogs, and in preparing their feed. Water used to be heated and mixed with the meal in barrels; roots were pulped and mixed with dry meal; sometimes feed was boiled. This method took considerable time as well as using a good deal of wood. Now a great saving of time and labor is effected. We never boil feed for hogs, they do their own pulping, as the roots are thrown into the pens whole; no slop-feeding is followed. The meal is put into the troughs and the whey and skim-milk is poured on top. In this way they get a drink first, and then they eat the meal. Whole corn is soaked for about twenty-four hours.

The latter method is very satisfactory. The hogs grow just as fast if not faster. When heating water and feeding in the form of slop, we used to have crippled pigs occassionally, now we have none. Our clothing and our pails are not plastered with slop, and pig-feeding is made easy and not disagreeable.

We have never tried feeding only twice a day, but the idea looks good, especially in the winter time. But in the long days of summer, the hogs might raise some objections. Our brood sows now get for their noon meal a good sheaf of oats to four animals with a pail of kitchen slop. The straw then does for bedding.

I think it always pays to keep hogs comfortable and feed them well from start to finish. By following the method described (of course in summer the hogs have the run of a good large pasture) we can make them weigh as high as two hundred pounds at five and one-half months old. Of course they do not all do this, but some of them do, and they are of the bacon type too. I suppose it would be more interesting and perhaps more profitable if figures were submitted showing profits in hog-raising, but I have not kept hog-feeding accounts.

Carleton Co. JAS. FERGUSON.

White Scours in Calves.

White scours is a serious form of diarrhoea which may affect calves from a few hours to a few days old though some calves live for days or even weeks after the first illness and eventually die of pneumonia. The disease is often, though not always, coincident with infectious abortion in a herd and in some cases calves carried to full time, or nearly so, are practically born abortions collapsing in a day or so after birth. Other cases are not quite so serious. The name of the disease is somewhat misleading for the discharge from the bowels is not always white or even dirty-white, but the diarrhoea is always severe with a lightish-colored and foul discharge.

The treatment most in favor is prevention by antiseptic precautions, including disinfection of the navel cord by tying it an inch and a half below the navel and wetting the string in a fifteen percent solution of liquid formaldehyde or a five percent solution of carbolic acid, repeating until the navel cord all shrivels up. An English authority has also recommended washing the udder and teats of the dam with a solution of coal-tar disinfectants or sheep dips before the calf is allowed to suck.

For an affected calf the favorite prescription is internal administration of formaldehyde. Procure half an ounce of liquid formaldehyde, dilute with 15½ ounces water and administer with a bottle and rubber nipple, a tablespoonful of the medicine and a pint of new milk three or four times a day. Such is the orthodox treatment. There are others, however. A member of "The Farmers Advocate" staff once treated a case successfully by the giving of a raw egg shell and all once or twice daily. The egg was crushed up to a pulp well back in the calf's mouth and the calf forced to swallow it. The calf was being nursed by a rich-milking dam and began to improve after the first two or three eggs were given.

A Shorthorn breeder told us another one the other day. He claimed to have cured a persistent case of white scours with Zenoleum at the rate of a teaspoonful in milk three times a day. As his calf was about a month old, however, there may possibly be room for doubt whether it was the specific disease of white scours. It was a bad case of diarrhoea anyway, and the treatment was successful, the animal shown us being now well grown and healthy.

THE FARM.

Hair-Snakes in the Water Trough.

When the writer of this note was a youth on the farm he shared two opinions accepted without question in his neighborhood at that time, namely that fall wheat can transform into smooth chess and horse-hairs into water-snakes. Some of the boys whom he knew claimed to have proved the latter by laying horse-hairs in the water-trough although his own experiments resulted in failure. The hired man, however, who had come from the Old Country, and consequently spoke with authority declared that the only way to insure success was to fasten the hair in ditch water in the dark of the harvest moon.

It is not difficult to see that these absurd beliefs might originate, but if they still persist to any extent it is a proof of lack of training in observation on the part of our educational methods.

These remarks are suggested by the receipt from a subscriber—"M. K."—near Chatsworth, Grey Co., Ont., of a living gordins or hair-snake "pumped out of the well two months ago" accompanied with enquiries as to its name and nature.

The specimen received is a pale-colored female about 6½ inches long with a dark band near each end. This is the free adult stage now lacking a functional mouth and intestine and with no further duty in life than to mature its eggs. The larvae that will hatch from these eggs will perish if they fail to secure an abode in the bodies of insects mostly of aquatic or moist-ground species where they may dwell parasitically until they develop sexual maturity. The name gordins is drawn from the interesting classic story of the Gordian Knot on account of the habit of the adults of gathering into an apparently inextricable tangle.

Noticing the snaky motion of one of these worms in a glass of water will naturally make the drinker pause. But in case one of them inadvertently slips down his throat he need not feel any anxiety and he will not feel anything else. The well, however, from which it came may require cleaning and better protection around the top. D.

Removing the Burr from the Wagon.

Editor "The Farmer's Advocate" :

When the burr which holds the wagon wheel on, becomes stuck and refuses to move by ordinary means, most people are completely beaten themselves and are inclined to go at it with a hammer. This method is quite effective in most cases but there are times when the burr refuses to turn and to say the least hammering is hard on the burr. After letting a wheel go for some time the writer hit upon a scheme. Place the wrench over the burr and tie with a rope to one of the spokes; place a notched stick between the wrench and the opposite spoke and, holding the wrench on with one hand, pull the wheel with the other hand and push with one foot. This plan can be used on buggies and automobiles too.

Elgin Co., Ont. J. C. INMAN.

Ready for the Spring Work.