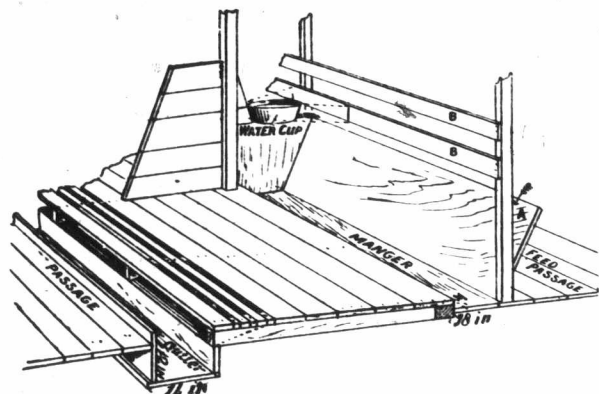


THE HELPING HAND.

Stall for Keeping Cows Clean.

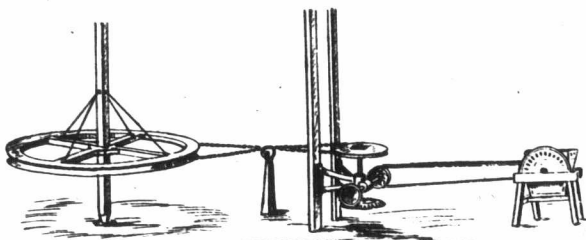
R. McLEOD, Nipissing District, Ont.:—"Having seen so much in the ADVOCATE about cow stable floors and keeping cows clean, etc., I send you a sketch of a floor I have been using for three



winters which is chiefly my own contrivance. It is clean and comfortable for the cows. The accompanying sketch is a double stall. The gutter is 12 inches deep and 14 inches wide. A wooden grate is made by nailing a 2x6 inch plank next to the gutter on joist, and two pieces 2x2 inch, with 1 1/2 x 2 inch blocks 3 inches long over each joist and between the 2x2s, for their hind feet to stand on. Underneath this grate is a board sloping to run the liquid manure into the gutter (see dotted line). The remainder of the floor is made of two-inch plank. The length of floor from gutter to manger is five feet. There is no manger log. The bottom of manger is four inches lower than floor of stall and 18 inches wide at the bottom. A is the front of manger and is sloping from feed alley. B B are two boards nailed to an upright 7 feet from the gutter, and opposite the cows' head when they are standing. This keeps them standing on the 2x6 inch plank and all droppings go into the gutter. The feed is put in over A and under B B. One and a half inch pipe is laid along the top of manger A, but is not shown in cut. A cast-iron water cup, connected to this piping with a one-inch pipe 9 inches long, is placed on the stall over the manger so that two cows can drink out of the one cup. The dotted lines over the cut represent board put in brace fashion from stall to B to protect the water cup and also to keep the cows from fighting."

Cheap Horse Power.

CAMLY CHARLTON, Elgin Co., Ont.:—"Having seen in your valuable paper some different plans of cheap horse powers, I send you the description of the one we use on the farm either for one or four horses. Our barn floor is 12 feet from bay to the



swing beam. From swing beam to the end of the barn is 22 feet on the right, and to the left is a granary 12x12. In the center is the wheel, 15 1/2 feet across; this suits the cutting box in the center of the barn floor. The rim of my wheel is built the same as the one on page 36, Jan. 15th, 1898, issue. Exactly in the center is hole, 4x4, for the upright or axle. The axle is a 4x4 scantling, with 3-inch round gudgeons at both ends. The arms of wheel have 4 half-inch round iron hooks 6 feet long; the hooks are fast in the arms with small eyes. There are also eyes in the axle about 6 feet from floor; the wheel lies on floor when not in use; the horses are put inside the wheel; it is then raised until the hooks can be hooked in the eyes on axle; this brings the wheels about 2 1/2 feet from floor, placing the draft for the horse where it ought to be. When done cutting we unhook the hooks at the eyes in axle; this lets wheel drop to floor. I run my box with a jack which stands on end and is bolted to two upright 4x4 scantling about 8 feet long, fastened top and bottom. In using rods the slip knuckle is used. To make pulley, take two hardwood planks, cut the circle you desire (mine is 16 inches), chamfer the edges on one side, put the chamfered edges together, bolt two pieces of iron, about 6 inches square, one on each side of pulley, with square hole in center to fit shaft on jack. We have an 18-inch pulley on jack that runs to the box, and an 8-inch pulley on box; this runs box plenty fast enough when horses walk slowly. We can cut enough in two hours to last our stock a week. The accompanying plan will give an idea as to how it stands in barn. We run it with a 1-inch chain from the wheel to the jack, and from the jack to the box with a 1-inch belt. The jack stands under the swing beam, so all I have to move is the box, and the barn floor is clear and ready for drawing anything into barn.

QUESTIONS AND ANSWERS.

[In order to make this department as useful as possible, parties enclosing stamped envelopes will receive answers by mail, in cases where early replies appear to us advisable; all enquiries, when of general interest, will be published in next succeeding issue, if received at this office in sufficient time. Enquirers must in all cases attach their name and address in full, though not necessarily for publication.]

Veterinary.

Enquiries Without Signatures.

We have recently received two enquiries from persons who failed to sign their names to their letters, who evidently did not notice the rule as published at the head of the Questions and Answers Department, which states that "Enquirers must in all cases attach their name and address in full, though not necessarily for publication." We adhere strictly to this rule.—ED. F. A.

Castration of Lambs.

READER, Wellington Co., Ont.:—"Will someone who has had successful experience in the castration of lambs describe the operation for the benefit of readers of the FARMER'S ADVOCATE. I have seen it stated in a stock paper that it was safe to clip off the entire scrotum with its contents when the lambs are a few days old. Has any reader practiced this method successfully?"

[I have had good success in castrating young lambs by cutting off two-thirds of the scrotum and then drawing the whole testicle and as much of the cord as possible. Just as soon as the testicles are large enough, which is usually when the lambs are nearly three weeks old, is the best time to do this. I have never used the method of cutting off the scrotum and the testicles with shears. It seems to me that it will often be found that both testicles have not descended into the sac soon enough for the operation to be performed this way, and that there will be some lambs left with a testicle unremoved. Such are nuisances in feeding. There is no risk in the method I have described, provided two things are observed: Keep the lambs in a dry place for two days after castrating, and at the end of that time notice the condition of the parts, and if there is any matter in the sac press it out, or if it is hot and slightly inflamed through exposure, rub it well with hot lard. I have castrated lambs up to nine months old in just the same way, excepting that the testicle should not be removed whole. The lining of the testicle should in this case be slit and the testicle proper removed. Cut the lining at the point where the testicle is smallest, and it will be found to protrude quickly. Then draw it and cut away the lining so as to allow as much as possible of the cord to come away. In buying feeding lambs this fall I had to take over a hundred that were castrated just before feeding started in October. They were mostly April lambs. We paid less for them because they were uncastrated and because of the risk that more or less attends any operation of the kind. We lost five out of the lot, and these dying from inflammation of the parts or from the loss of blood, as some of them were too weak when we got them to even withstand the effects of this operation. The least cutting and fumbling insures the healthiest healing. JOHN CRAIG, Iowa Agricultural College.]

Liver Trouble in Fowls.

M. H. B., Waterloo Co., Ont.:—"I have had trouble with fowls this long time, and would like to know or find out a remedy for them. About a year ago they started to get sick and mope around and die, and then I started to kill as fast as they got sick, but did no good, and about four weeks ago I started to open and examine them. The liver looks pale and has whitish streaks, and is about twice the natural size, and seems to run into the bowels just before they die. They seem to be very stupid at those times. I have lost about 50 or 60 this last year. Will you kindly give me your opinion or a remedy, as I have been a constant reader of your valuable paper this long time?"

[I think it is not hard to diagnose the trouble, although nothing is said as to the kind of ration, quantity fed, exercise or room space. I think the trouble is due to overfeeding and want of exercise. It is a form of liver complaint, a disease far too prevalent among the winter layers of the farmers and others. The overfeeding of the morning ration, very frequently in the shape of a mash of ground grains, is the cause of much disaster. What is really wanted is not so much quantity as variety of food, and discreet quantity and active exercise. In your issue of five or six weeks ago I wrote directions as to the treatment of the laying stock in winter, so as to obtain eggs at that period and yet secure good health, that will be of service to your correspondent if he will read them. As the subject is one of great import, I append the following extract taken from my Experimental Farm report for 1891. As the extract contains the opinion of the well-known expert on poultry diseases, Prof. Wesley Mills, of McGill University, Montreal, it cannot fail to be valuable under circumstances so similar:

MR. H. E. DICKHOUT, Stormness, Ont., wrote:—"My fowls are troubled with a disease that has caused me serious loss for three years past. The sick fowls get pale around the comb, and dumpy. Some linger along for a month or two, and others die in a week or two from the time I notice they are attacked. I aim to get eggs in winter, and feed liberally. I get more eggs than any farmer around, considering the number of hens I keep, but they keep dying off. I kill them

and bury them. Those that I have opened have all enlarged livers; in fact, their livers are so large as to fill the hen so full as to displace the other organs. Some have enlarged kidneys as well. One liver I weighed came to three-quarters of a pound. If the fowls were allowed to die all their livers would weigh the same. Some of the livers have whitish spots on them, appear to be very tender, and are much filled with water. My fowls are in too limited quarters, but will soon have more room. Hoping for your advice."

The case was deemed so important that the letter was forwarded to Prof. Wesley Mills, asking his opinion and advice in the interests of the farming community. With his usual kindness, Dr. Mills returned the following reply:

"I have your favor of 11th February, enclosing Mr. Dickhout's letter. From the clear and intelligent account this gentleman gives, I have little doubt that the fowls are suffering from fatty degeneration of the liver, owing to overfeeding and lack of exercise, exaggerated possibly by inadequate ventilation from the 'limited quarters.' Whether there be also cystic disease from parasites or tubercle, it is impossible for me to say without seeing one of the livers. The remedies are obvious—feeding on oats with vegetable food, scattering with chaff among straw on the floor, and enlarging the quarters."

I would suggest that the oats be mixed with the grain usually fed, and that the reduction in quantity fed be not too sudden or too radical. If mangels are handy feed them, and reduce the grain rations. A. G. GILBERT, Poultry Manager, Central Exp'l Farm, Ottawa.]

Roup in Turkey.

MRS. J. N., Prescott Co., Ont.:—"I would like to know what is the trouble with my turkey. She seems well and eats well, but her head is swelled below the eyes, and she can hardly see. What is the trouble and cure?"

[The symptoms given indicate roup, which is easily detected by a puffed face, followed by discharges from the nostrils. It is often caused by bad ventilation, filthy quarters, unclean water vessels. A roup fowl of any sort should at once be separated from the rest of the flock, so as to prevent its spreading. A remedy that has been found successful is to hold the fowl by the throat so that it cannot swallow, and fill the throat with coal oil to which has been added an equal quantity of sweet oil, holding it long enough so as to have the throat thoroughly saturated; then allow the oil to run out of the mouth; then drop a few drops into the nasal passages. Some even use pure coal oil for the purpose, and with a bad case it is, perhaps, preferable. It is also well to add two or three grains of bromide of potassium to the drinking water for each fowl for two or three days, which, with the coal oil treatment, will likely work a speedy cure.]

Tumor in Cow's Eye.

S. W., Muskoka, Ont.:—"I have a cow about nine years old. During last summer yellowish matter appeared in her right eye. Since that time it has become worse. The front corner appears to be growing over the eye, discharging matter which is beginning to smell."

[Tumors occasionally form within the orbit of the eye, due to an injury from thorns penetrating the cornea, and is likely the cause in this case. An operation is necessary to determine the extent of the injury. Removal of the offending portion of tissue will result in a cure, afterwards dressed with a lotion as follows: Liquid plumbi acetata, 1 dram; tincture of opium, 10 drops; distilled water, 8 ounces. This trouble will not interfere with the condition of her milk. DR. W. MOLE, M. R. C. V. S., Toronto.]

Miscellaneous.

Working Mare in Foal.

SUBSCRIBER, Huron Co., Ont.:—"1. Does it hurt a mare in foal to work her much, or will it have any ill effects on her foal? I feed her hay, green stuff, clover and cut straw and corn, with oats. 2. Does it pay to cut clover, oat straw, green stuff (oats and peas), and hay for stock?"

[1. If the work is moderate and she is carefully handled, and not put to very heavy drawing or fast driving, the work will be beneficial both to the mare and foal. If she is used to draw loads on the roads she should be sharp shod when roads are icy or slippery, as the slipping is liable to strain the mare's loins, and might cause abortion or other trouble. 2. If one has the machinery, or can secure the use of it at moderate cost, and it is desired to use up rough food such as straw by mixing with more palatable foods, it will pay to cut and mix.]

A Hollow Horn.

E. M., Argenteuil Co., Que.:—"We have a cow that came into the stable in September with a horn broken off close to the head, and now the flesh has grown over it. She looked so bad I cut the other one off and found that it was hollow. This was about the middle of December, and when the cow breathes we can see the steam rising from the opening in her poll. I would like to know if a hollow horn is natural or not; perhaps you might give me some information?"

[The horn as a rule in a healthy cow is not hollow, but has a solid pith in it. If the horn is cut off close to the skull, as it ought to be in skillful dehorning—that is, at least a quarter of an inch below the junction of the hair—it is really the skull that is cut and not the horn, and it is not strange that there should be the issue of steam from the warm blood of the head, but there is no danger to fear from that state if the cow is kept away from straw stacks or other places where chaff or dirt might get in and cause irritation. The opening will soon heal and close all right.]