

water, with no advantage. What treatment would you advise? We are greatly pleased with the **FARMER'S ADVOCATE.**

[We are afraid this horse has a cartilaginous tumor, and that it will remain permanently. Old white horses sometimes are affected with melanotic (black) tumors, which are only cured by their removal, and as we are not in a position to state positively from the written enquiry, we would advise W. A. L. to consult a competent veterinarian. We are inclined to believe the only remedy will be removal by the knife.]

IMPAIRED SECRETION.

A. H., Huron Co., Ont.:—"I have a young cow, four years old, that was sick from impaction of the rumen. She was properly treated and recovered all right, but gives only half the quantity of milk she formerly did. What is the trouble?"

[This cow's glands are, in all probability, in the same condition as the stomach, and will only improve as her digestion becomes stronger with regular feeding on easily-digested foods until grass comes, when she will probably make a complete recovery.]

Miscellaneous.

UNTHRIFTY BULL—SOILING CROP FOR COWS.

F. C., Middlesex Co., Ont.:—"I have a bull which is unthrifty. I feed him good timothy hay, and whole oats, as he will not eat chop. He is poor, and makes no improvement.

"(2) What grain crops should I grow for ten cows, to feed in the stables in summer?"

[1] Give the bull a good physic: 1½ lbs. Epsom salts, or 2 lbs. if a very large animal; 1 quart common molasses, and 2 heaping tablespoonfuls of ground ginger; all dissolved in 2 quarts of hot water. Dissolve the salts in the hot water first, and add the other ingredients; drench slowly from a quart bottle. Feed good clover hay, and some roots if you have them. Try a few sliced potatoes, if you have not other roots; feed equal parts oats and bran on chaff or cut straw. A little coarse ground oil cake mixed with oats and bran will be good for him if he will eat it. If he is quiet, let him out to grass with the cows in the spring for a month or two, then keep in box stall during hot weather.

(2) See **FARMER'S ADVOCATE** of March 1st, page 120, under head of "Prepare for Seeding." Oats, peas and tares mixed, and sown at different dates, seem to be preferable for the early months of summer, and fodder corn for the later months.]

MANURE CAR—WATER TANK—LIGHTNING RODS.

R. P., Perth Co., Ont.:—"Let me know through the **FARMER'S ADVOCATE** if you have a good plan for carrying the manure out of the stables with a car on track?"

"(2) Would you advise putting a water tank for stock up on posts outside?"

"(3) If you had good buildings, would you get lightning rods on them for protection?"

[In the June 1st, 1897, issue of the **FARMER'S ADVOCATE** is described a stable-cleaning car as seen by a member of our staff on the farm of W. J. Duck, Elgin Co., Ont. It consists of a 3x4-in. scantling track, suspended, like a horse-fork track, from the ceiling of the stable, over the passage behind the cattle. On this track a car with flanged wheels runs, and to which a box is suspended near the floor. The box is 4 feet long, 2½ feet wide, and 1 foot deep. It is hung so as to almost balance, and held upright by a pin. By withdrawing the pin the box is dumped. The track runs out to the yard, over the manure heap, and is suspended on a beam supported on posts, between which the car passes.

(2) The very cold weather in February proved that the outdoor tank on posts is not the proper thing for Ontario. We have heard of several farmers having no end of trouble with such tanks the past winter. The tank should be built inside or protected in some way from frost.

(3) The fact that our editors have good barns, and none of them rodded, answers this question. Rather than live in dread of being burned out by lightning, we would pay for a little extra insurance protection.]

THISTLES—TWITCH GRASS.

J. A. G., Norfolk Co., Ont.:—"1. I have a field that is pretty bad with Canada thistles. Can they be successfully killed with a crop of corn, or will I have to summer-fallow to clean the field of them?"

"2. I have some patches of twitch grass. Can you give me the best mode of destroying it?"

"Perhaps some of the farmers who are readers of the **ADVOCATE** can answer these questions."

[1. There is no reason why a properly cultivated cornfield should not prove as effective as a summer-fallow in destroying thistles. The success of thistle destruction lies in the same direction as in drowning pups—the heads must be kept below the surface. Frequent shallow cultivation is the best cure, as then the underground roots become exhausted and die. Of course the hand hoe would require to be used to cut out the thistles close to the corn plants.

2. Twitch grass, like thistles, produces an underground network of roots, which throw up the plants above ground. Shallow surface cultivation for several weeks, followed by a smothering growth of rank growing oats or buckwheat, will usually bring twitch grass into manageable condition. The following season a hoed crop should be grown. We hope to receive some advice from readers upon the eradication of these weeds.]

GYPSUM ON CORN AND WHEAT—SEEDING AN ORCHARD.

SUBSCRIBER, Muskoka, Ont.:—"I would like to know from some of your readers if land plaster is of use to corn? If so, when is the best time to put it on, whether in the hills when planting or sow it broadcast and harrow it in or wait till the corn is up? (2) What effect has plaster on spring wheat, if any, in a country like this, where there is no lime in the land?"

"(3) What are the best seeds to sow in a young orchard? Some trees are bearing and some were set out last spring. I want to seed it down and pasture it with hogs."

[1] While gypsum increases the power of soil to absorb ammonia from the atmosphere, its main action as a manure is to liberate potash. The lime it contains is not rendered available to plants, but is fixed in the soil. Such crops as corn and wheat do not usually suffer for lack of potash, so that an application of gypsum would have little, if any, effect upon corn or wheat. Leguminous crops, such as clover, seem to benefit by an excess of potash, which fact gives plaster a value peculiar to these crops.

(2) We would advise seeding the orchard with 6 pounds of red clover, 2 of alsike and 2 of white clover per acre. Sow this mixture with a bushel of tares per acre. As soon as the tares are 10 inches high the pigs may be turned on, but they should wear nose rings to prevent them from rooting.]

THISTLE ERADICATION.

G. M. S., British Columbia:—"I have a large patch of Canadian thistles in a pasture field. I keep cutting them down every year when they come into blossom, but with the exception of making them have a weakly growth, they seem to come thicker on the ground than ever. The ground is a sandy loam, river bottom land. What would you recommend to eradicate them? Would summer-fallowing do it? I left off plowing up the land, as I found it cut the roots in pieces, and were carried by the plow or harrows to other parts of the land, consequently spreading the thistles.

"I am thinking of trying copper sulphate, as you recommended last year in the **ADVOCATE**. If so, would there be any danger of it poisoning cattle in the pasture? How often ought the thistles to be sprayed, and what would be the proportion of blue-stone to water?"

[What are known as Canadian thistles have long-creeping root stalks, which form a network some four to eight inches beneath the surface. From the joints of these the thistle plants shoot up and grow luxuriantly in favorable locations. The best treatment towards eradication is to repeatedly sever the up-growing plants, thus cutting off the contact with the atmosphere and smothering the root stalks. When the root stalks are cut and brought to the service it is really a successful means of replanting the crop; but if the heads of the plants are repeated cut off as soon as they appear above ground, they can be effectually killed in one summer. Yes, summer-fallowing would be good treatment, as would also a hoed crop, but the cultivation should be frequent and not more than about three inches deep.

Regarding the copper sulphate treatment, we would advise that a small portion of the patch be treated as an experiment, rather than to depend upon it to exterminate the weeds. We have not seen enough of this treatment to warrant our recommending it as a positive panacea. About 4½ ounces of copper sulphate to every gallon of water would be a 3 per cent. solution, which is the recommended strength. One application should destroy the thistles. While such a small quantity of the chemical as cattle would get from grazing sprayed pasture could not do much harm, it might be just as well to keep stock off the patch for several days after an application.]

HENS EATING EGGS.

JOHN RENISON, Middlesex, Ont.:—"Kindly let me know through your valuable paper what one would do for hens that break their eggs and eat them?"

[When once the habit of egg-eating has become established in a flock of hens, it is a difficult matter to cure it. The best plan we know of is to use dark nests, such as we have illustrated in this issue. Give the hens plenty of meat, grit and lime. Cut green bone will serve a good purpose in this direction. Hens that persist in laying on the floor outside the darkened nests should be separated from the rest of the flock, as they serve to keep the habit going in the flock.]

LOW-GRADE FLOUR AS HOG FEED.

R. W. W., Charlotte, N. B.:—"Would you kindly answer, or make the enquiry in your **FARMER'S ADVOCATE** of some of your numerous readers, at what price per hundredweight would it be profitable to purchase wheat flour for pig feed, with corn meal selling at \$1 per hundred?"

[Replying to your St. Stephen correspondent, I beg to say that, according to digestible constituents, wheat flour and corn are very similar, the flour being slightly higher in protein and lower in carbohydrates and fat. Flour, however, will scarcely be found so palatable as corn if fed alone, and if your correspondent can get the flour for the same price as corn, I would advise him to purchase and mix the two. In this way he would have a better food than if he fed either alone.

G. E. DAY, Agriculturist.

O. A. C., Guelph, Ont.]

SEEDING WITH ALFALFA—SAMPLES OF SEEDS FROM EXPERIMENTAL FARMS.

J. F. H., Simcoe Co., Ont.:—"Will some of the readers of the **FARMER'S ADVOCATE** be kind enough to tell me how to seed down with alfalfa or lucerne clover? I have a field of wheat which I sowed on a summer-fallow last fall. (1) Would it do to sow lucerne clover on it this spring the same as you do red clover; and if so, how much seed to the acre? (2) At what stage do you cut it? (3) How does a person secure samples of seeds from the Experimental Farms?"

[Lucerne does not do equally well on all soils, nor in all latitudes, so that it is wise to go easy with it at first by trying a small area. It does best sown alone on well-prepared, clean land having a dry subsoil, and it is generally considered that not less than 18 to 20 pounds of seed should be sown per acre. Sown thus in April, it may be cut twice the first season, as it grows rapidly and luxuriantly. It may be drilled in lightly and afterwards harrowed, or sown broadcast and shallowly covered. In the particular case in question it would be well to try a small area along with the fall wheat. We would say harrow the wheat well in April, sow the alfalfa seed 20 pounds per acre, harrow again and then roll.

(2) Alfalfa is not as suitable for hay as red clover, but it is more suitable, where it does well, for green forage. For hay it should be cut just as it is coming into bloom. If left later the stalks become very woody and indigestible.

(3) If seeds are desired from the Guelph Experimental Farm, write to C. A. Zavitz for a list of the grains sent out; and if they are wanted from Ottawa, write to Prof. Wm. Saunders, LL.D., Central Experimental Farm. The seeds are sent free when applied for.]

THE BEST SEPARATOR.

G. C. ROSE, Hants Co., N.S.:—"There has been a considerable written lately about cream separators. I would like to know what make of hand separator is considered the best and cheapest, most durable and runs the easiest, and has the least machinery to keep clean. I was thinking of getting one, but think they all cost too much money?"

[We presume a great many dairymen are looking for the same information as our Nova Scotia correspondent asks. In fact we would like to learn which is the best and cheapest separator, but we do not expect the answer in the near future. The question is about as difficult to answer as to decide who has the best wife. We have heard this separator question put to operators of several kinds of separators in dairy schools, and the answer invariably given is that all of the leading separators have their superior points, but none excel all others in all points. In the same dairy schools different members of the staff will be found differing in their opinion as to which is the best separator. Among the best may be mentioned the following: American, Alpha, Melotte, Alexandra, and others. While the first cost may seem high for a good separator, it is considered a profitable investment to one who conducts a dairy of from six cows upwards, not only in the extra quantity of cream secured, but in the uniformly better condition of this product, and other advantages which have been pointed out in these columns by dairymen and dairywomen who have tried different methods of creaming milk.]

GRAINS WITH WHICH TO SEED DOWN.

WM. MURPHY, Restigouche Co., N. B.:—"I want to seed down, this coming summer, a piece of interval land with grass seed. I would like to know what would be best to sow with the grass seed. Some say oats are not good. Some of it I broke up last fall, but never seeded it down, and some of it has been growing hay for the last thirty years, but should be re-seeded. I plowed it down and manured in spring, and sowed it in oats. I plowed it again last fall, and intend to manure it again this spring when I am seeding it down. The field is about ten acres. Please let me know through the **FARMER'S ADVOCATE**?"

[Spring wheat and barley are about equally suitable for seeding with grass, and are superior to oats, inasmuch as they are not so liable to smother the young plants. Whatever grain is grown should be sown thinly, and if neither wheat nor barley do well on the land referred to we would recommend sowing a very light-strawed oat, from four to six pecks per acre.]

MANURE FOR BUCKWHEAT.

SUBSCRIBER, Simcoe Co., Ont.:—"I have been in the habit of plowing down barnyard manure for buckwheat of late years, and since doing so have never had a really good crop. Do you think the manure has hurt the crop by producing too much straw? My land is a clay loam in fair condition."

[We would like to hear from readers who can give some light on the matter in question. While we have not experienced the difficulty referred to, we are aware that buckwheat is very susceptible to blight, especially if sown early in the season. We have found the best time for sowing to be the last half of June, but we await replies from readers regarding the effect the manure would have on the crop of seed.]

SPRAYING.

J. G., Bruce Co., Ont