

## DEHORNING YOUNG STOCK.

J. P., Glencross:—"During the last summer I tried killing or stopping the growth of the horns on about twenty-four calves, with stick caustic potash. It was not a success; only about half of them are without horns. The potash does not take effect unless applied two or three times, which is very hard to do in a herd of wild cattle. A neighbor of mine sent and got a bottle of dehorning fluid, with no better success. I find the horns on the bulls harder to kill than on the heifers. I have a lot of last year's calves, some with two horns, some with one and some without any. 1. Can anything be got that will kill the horns every time with one application? 2. Will the horns grow out if cut close to the head on one-year-olds, and will they bleed much? 3. How is the best way to hold a beast while cutting off the horns? My cattle hook one another a good deal about the buildings and yards, and have lost a great many."

1. "J. P." has not been thorough enough in his application of the caustic potash. We herewith give directions which, when followed, have made perfect mulleys: The hair should be closely clipped from the skin before the calf is eight days old, and the little horn moistened with water to which soap or a few drops of ammonia has been added, to dissolve the oily secretion of the skin so that the potash will more readily adhere to the surface of the horn. Care must be taken not to moisten the skin except on the horns, where the potash is to be applied. One end of a stick of caustic potash is dipped in water, until it is slightly softened. It is then rubbed on the moistened surface of the little button. This operation is repeated from five to eight times, until the surface of the horn becomes slightly sensitive, showing a disposition to bleed. The whole operation need take only a few minutes, and the calf is apparently insensible to it. A slight scab forms over the surface of the budding horn and drops off in the course of a month or six weeks, leaving a perfectly smooth poll.

2. From evidence at hand, it would appear preferable to defer dehorning till animal is older. What say readers who have dehorned young stock?

3. To hold a beast while cutting off the horns, place the head through a stanchion fitting the neck closely, draw the head forward by a rope attached to a halter, held by two men, after passing it through a pulley several feet in front of the animal. The head should rest on a box and be held steady. The stanchion should have two cross-pieces of iron bar, wood or rope, one to hold the neck down, the other up. Then proceed to work with the saw. If clippers are to be used, less secure holding is necessary. It may be done by tying the animal firmly to a post by means of a halter, with one man to hold the head steady by the nose and halter.]

## Miscellaneous

## OUT OF PLACE IN CLOVER SEED.

LOCAL SEED DEALER:—"I enclose you a few small seeds I have taken out of a sample of clover sent me. Will you tell me what they are, and if harmless or otherwise? I am acting for a seed house in \_\_\_\_\_, and am particularly anxious to know the names and character of all foul seeds."

[The seeds are of rib grass or English plantain (*Plantago lanceolata*), a plant imported from Europe, but now very common; and though not looked upon by some seedsmen as "very bad," yet must be considered as a weed.]

## PERMANENT PASTURE.

W. C. W.:—"Will you please give me a mixture of grass seed for a permanent pasture; how will a mixture of meadow fescue, timothy, orchard grass, red clover, white clover and lucerne do? Would this mixture do to cut for hay the first crop? Please to answer in the ADVOCATE."

[As reported in the ADVOCATE of Feb. 15th, Prof. Fletcher, Central Experimental Farm, Ottawa, recommends for permanent pasture the following: Timothy, six pounds; meadow fescue, four pounds; orchard grass, two pounds; June grass, or Kentucky Blue grass, one pound; with two pounds each of white, alsike and red clovers. Where the soil is deep, with a well-drained subsoil, he also recommends two pounds of lucerne. This mixture would make a good cut the first year, and provide a succulent pasture right through the summer season.]

## TANNING HIDES.

DUNCAN ANDERSON, Arva:—"Would you kindly, through the columns of the ADVOCATE, let me know how skins are tanned (coon)?"

[All fatty and fleshy matter should first be removed from the skin. For each skin take two ounces of salt, two ounces of alum and one-fourth of an ounce of borax; dissolve these in a pint of hot water, and when cool enough for the hand to bear, stir in sufficient rye meal to make a thick paste. This is spread thoroughly over every part of the fleshy side of the skin, which is then to be folded together lengthwise, and left for two weeks in an airy place. Then remove the paste, wash and dry the skin. When nearly dry it must be worked and pulled and scraped with a blunt knife made for the purpose, shaped like a chopping knife; or with a piece of hardwood worked to a sharp edge. The more the skin is worked and scraped as it dries, the more pliable it will be.]

## SPRAYING AND CREAM HEATING.

J. J. L.:—"I have secured a spray pump for the coming season. I should like to find out the best mixture for apple-blossoms, and so the amount of mixture required?"

2. "I see in one of your papers where one of the writers states that in heating cream for churning it should not be heated by hot air, but by warm water. What makes the difference?"

[1. Before the spraying season opens we will publish full directions for spraying fruit trees and bushes.

2. When the cream pail is set in a vessel of hot water, which should be from 105° to 120° Fahr, the cream will heat up much more quickly and more uniformly than if set on or near a stove, when perhaps the bottom of the vessel, or one side, will become too hot before other parts of the pail are warm.]

## GAS LIME.

FRANKLIN HORNER, Mimico:—"Please inform me through your paper as to using gas lime as a fertilizer, or other qualities that it may possess; when and how to apply it?"

[Gas lime when quite fresh contains a large proportion of sulphide of lime, which is poisonous to plants, but on exposure to the air this takes up oxygen and changes into the sulphate and then into the sulphate, the latter being a valuable manurial substance. It may be put on the land fresh in the autumn, so that it will be oxidized before the crop is sown in the spring. As much as four tons to the acre may be thus used, though smaller quantities at short intervals are desirable. Besides its manurial properties, it is an insecticide, and has some slight reputation as a weed killer. It is also, of course, liable to kill the nitrifying organisms in the soil. Mixed with earth or waste vegetable matter, it forms good compost. It gives best results on stiff clay soils, while as much as three tons per acre may be spread directly on rough pasture land with benefit.]

## CRANBERRIES.

Y. Z., Brookfield, N. S.:—"Can you give the required culture for cranberries on swampy land now growing young alders, grass, etc? Is flooding required in winter or summer? Why? Is sanding three or four inches deep quite essential? Where can good sets or seeds be obtained? Give time and method of planting. Will orchard grass stand the winters of Nova Scotia?"

[The best soil and situation consist of peat and muck bottoms coated with pure sand obtained from adjacent banks, and the ground thus prepared to be capable of being flooded with clear running water at pleasure during winter, and thoroughly drained at other times. Muddy water running over the plants injures them. In preparing the soil all wood and rubbish must be cleared off, and the surface of turf covered with a hoe or other implement. It should then be provided with drains by clearing out the main watercourse and making parallel, open side-ditches at regular distances of about two rods. The whole surface is then covered, from four to six inches, with fine sand. An embankment or small dike should surround the whole to allow the plantation to be flooded at will. After sanding, the plants are set in rows from two to two and one-half feet apart, and 10 or 12 inches in the row. Flooding should be continued from December to May, which furnishes, among other advantages, protection from mice, etc., and early frosts. The plantation should be carefully kept clear of weeds for the first two or three years, after which, if well managed, the cranberry plants will cover the surface and render the labor comparatively light.

[We would recommend that "Y. Z." communicate with nurserymen in his own locality regarding seeds and sets. Orchard grass is a very hardy sort, and will stand much colder climate than that of Nova Scotia.]

## SEED OATS.

ANDREW HALL, Ayr:—"Could you inform me where I could get about 45 bushels of good heavy white oats? I have about 20 acres of clay loam which was single ploughed three times after the wheat has harvested. Please let me know which is the best kind to sow."

[Consult our advertising columns.]

## DEHORNING.—JUNE GRASS.

JOHN TAYLOR, JR., Galt:—"1. We would like to try dehorning in spring. What advantages have the dehorning clippers over the saw? Will not the clippers shatter and injure the root of the horn more than the saw?"

"2. We have a field covered with "June grass" or wild grass; the land is in an excellent state of fertility. How can we best get rid of the grass? What rotation of crops would be best? Do not want to grow a hoe crop on it; it is too far from home. Don't believe in a bare summer-fallow. How would it do to sow peas rather late in spring, working up ground thoroughly first, then plough them down before they ripen, and work land for wheat? Or if a heavy crop of peas were taken off would the "grass" be injured any?"

[1. The dehorning clipper, if kept sharp and properly used, does its work more quickly and fast as well as the saw, on all but very old cattle, with which there might possibly be a risk of splintering the bone.

2. It is new to hear of June grass giving so good a crop, to eradicate where reasonably good cultivation is given. Where a hoe crop is not taken, and the grass is grown, a good rotation would be clover, peas, wheat, barley or oats, and then a fallow, and ploughed down in the spring, and ploughed under late in the fall, and worked in the spring. It is a good idea to enrich the land very much, and to sow buckwheat in same manner with the peas, to smothering effect on the grass.

so much fertility as the peas. To take off a crop of peas would not have the same effect, as that crop usually goes down early, allowing all grass and weeds a splendid chance to flourish.]

## SILO BUILDING.

INQUIRER:—"I would like to ask readers of the ADVOCATE, who have had experience with silos, their opinion of the following wall: Silo 13x15 feet, foundation concrete, studs rock elm, 2x8 inches, 18 inches apart, covered outside with inch pine lumber and battened, lined with inch lumber, then a coat of tar paper, then a veneering of bricks plastered. Around the outside of the silo, half way up, is placed a timber 6x8 to stiffen walls inside. Also, if a silo were filled with cornstalks cut in 15-inch lengths, would it keep properly and would the stock eat it as cleanly as if cut shorter? It is my idea to haul the corn to the top of the silo by slings, and cut up with hay or straw knife, thus saving the expense of engine, cutting-box, and men necessary to run them."

## LICE ON STOCK.

F. HUGHSON writes us:—"For lice on cattle I use sweet oil, and it is a sure cure. The cheapest oil does its work well. One pint is sufficient for a cattle beast; applied around the head, spine, root of tail, and anywhere the lice are found. It is a sure cure and perfectly safe. It not only kills the lice, but also removes the scurf and leaves the hair nice and clean."

## EFFECTS OF RAIN ON HAY.

JAMES MCCARTHY, Eastman's Springs:—"Please let me know in your next issue, to what extent timothy, or timothy and clover, suffers in food value by being rain-soaked two or three times before being stacked? Also the percentage of loss between hay stacked out all winter and that stored in barn?"

[The extent to which grass or clover loses value by becoming soaked will depend upon the extent it has been cured when the rain comes. If freshly cut, soaking will harm it very little; but if fairly dry, very much of the most easily dissolved substances will be washed out and lost, but just how much cannot be stated. It will also suffer loss by becoming brittle, thus losing many of its leaves and heads. Its palatability will also suffer materially by being soaked—a very serious desideratum. If a stack is properly built, none except the outside will have received any more loss than if stored in a mow.]

## APIARY.

## Bee Culture in the West.

BY J. GATLEY, AUSTIN, MAN.

In the FARMER'S ADVOCATE of Dec. 20th, Mr. Robinson, of Broadview, enquires if bees have been tried between Brandon and Regina. That I cannot answer; but as bees are successfully kept in different parts of Manitoba, near Winnipeg, Portage la Prairie, Westbourne and Austin, I see no reason for supposing they would not do well near Broadview.

Any one examining the wild flowers of this country, by the sense of smelling, would very likely say they did not contain much honey. I have kept bees for five years in this part, and know that there is a large amount of honey in most of our wild flowers. In each of the last two years I have extracted between two and three hundred pounds of honey, besides sections of comb. In 1893, one warm filled 53 sections, and in 1894 another swarm gave me 40 full sections. I kept bees for 20 years in England, during which time there were only two seasons as good as every one here:—no need of feeding bees in this country. I think there should be 20 bee-keepers here where there is only one now. The kind I have are Ligurians, and are hardy enough for this climate. The bees I got to start with were in a "Jones" hive, which I found was not suitably for Manitoba winters, so I adopted the "Langstroth," in which they winter better and also give more section honey.

I should like to hear the experience of others with bees, and their opinions of the honey-yielding plants. For my part, I consider golden-rod the queen of honey plants, almost equalling the purple heather of the Old Land. As farmers come to realize how they are exhausting the land by continually growing grain, I have no doubt they will grow white clover, which will give honey for bees, fodder for cattle and a good sod to plough under to enrich the soil.

Wintering bees in this climate will furnish matter for a future letter, if no one more competent than myself supplies it before October.

An interesting report on the counties of Ayr, Wigtown, Kirkcubright, and Dumfries, by Mr. John Speir, Assistant Commissioner, has been issued by the Royal Commission on Agriculture. A general idea of the condition of agriculture in those counties may be formed from this statement:—"In the districts visited by me depression certainly exists to a greater or less extent, and both landlords and tenants have felt the pinch of hard times. In some districts the value of land has fallen more or less in value; in others the total collapse of farming can be seen. The result would lead the uninitiated to suppose that no farms on landlords' hands, and that the land is lying idle, nor is there the least prospect of a farm of almost any kind. In some districts there are usually from ten to twenty farms, and although sharp reductions in the value of land have been met with, more especially in the case of small farmers, still there is always more or less of a surplus of farmers."