

Remove the orchard litter.

Sweet clover is very drouth-resist-

Plan for an orchard this year, if you

The cow is the final judge as to the real worth of silage.

Rye straw is of very little use on the farm except for bedding.

A cow should be dried off for a few weeks before the calving period.

Keeping records of the cows is oftentimes the first step toward success.

During the summer months poultry consume a large amount of green for-

Chickens are always considered more or less of a side line on the

Plenty of out-door exercise and fresh air will insure a crop of vigor-ous lambs.

Regularity in milking belps the flow during the present and all subsequent

lactation periods. Good drainage to a cow stable is absolutely necessary, and a cement floor

serves this end to good advantage. Keep your chicks on dry ground, where they can get no red worms.

and they are not likely to have gapes.

Except when pigs are small, two feedings of warm, sloppy feed per day, morning and evening, is suffi-

The trap nest picks out the layers, the best brooders, the drones and the unprofitable hens as well as the egg

The season has arrived when farm-

There will be no danger of white specks, or black specks either, in the knows a good dairy cow when he sees

the churn, The sooner anyone gets rid of "cull" stock the better, and when a favorable

advantage of it. A cow that is run down or hidebound, the result of faulty digestion

build up her blood. Many of the troubles experienced at lambing time are are result of rough

period of pregnancy. The farmer's family is fortunate in having an abundance of good food at

all seasons of the year, but this is especially true in the winter. Every farmer can have plenty of eggs and chickens for himself and for

market if he will only turn a little of his energy toward the hen house. Are there not some places about the

farm where evergreens ought to be planted? They make a splendid windbreak about the barns and yards.

In hauling manure, ice, wood or othmended.

You must keep track of your hens and know what they are doing if you are going to keep them at all, and then you can have as large a flock as you can manage.

There is no danger of cattle choking on shredded fodder. They chew it the same as hay before they at mite destroyer there will be no dantempt to swallow it and it goes down their throats as easily.

Some one who has not been asleep all the time during recent years has daily, and disinfected thoroughly at eald: "Cement and alfalfa are going to make western farmers the most and always after a case of disease independent people on earth."

Before the appearance of blossoms and foliage, spray for soft scale and like insects with the lime-sulphur wash or kerosene emulsion. No fruit grower can expect to have clean, that they may be ready at the first healthy trees unless he uses sprays and washes.

Given plenty of good roughage and a light grain ration of wholesome farm feed supplemented with a little oll and some root crops or corn en always make the bull keep his place. stiage for succulence the ewes should Never take any chances, by getting then be in ideal flesh condition at careless, and never fight a bull unless

Poultry prefer light houses.

Be careful of your feed with all

Drainage is a necessary foundation for a good road.

Gapes can be cured by fumigating the chicken with sulphur.

Select your cockerels to overcome

the shortcomings of your hens. Baked potatoes occasionally fed to

he chicks are relished by them.

Butter fat seems to absorb more colsture when comparatively warm.

Many growers think there is more money in raspberries than strawber-

Sunshine is a great purifier; allow it free access in the barn whenever

Milk is very susceptible to filth and disease, and care must be exercised in handling it.

The cow that does not yield a profit at the pall eats just about as much as the cow that does.

Don't plant any flowers in straight rows except hollyhocks or sunflowers, or plants for borders.

The one cry against the general practice of dairy farming is that it requires too much labor.

The well ventilated barn will be more comfortable on the coldest day than one poorly ventilated.

Twenty acres of corn put into the sile is worth more in feeding a dairy herd than 30 acres in the crib.

Don't forget about the lice these days, when the hens are shut up a good part of the day and night.

There is a best temperature for each individual lot of cream, but this can be determined only by experience.

If the man who has no silo would watch his neighbor feed and watch the results he would soon have one.

Do not neglect to use these days when the ground is frozen hard to dress the land liberally with manure.

A hill of potatoes stripped by bugs or on whch the leaves are injured by blight, cannot give a satisfactory

Whitewashing or painting the interior of the cow stable is advisable and does not bring a burden upon the dairyman.

Place no reliance in the theory that ers and gardeners should begin testing breeds contaminate by simply seeing a seeds to determine their power of ger- different variety on the other side of

Unless the dairy farmer really butter if the cream is strained into one, he should not attempt to build up a dairy herd.

There is a tradition that cows will do better in warm weather than in opportunity comes it is well to take cold weather, but experience has disproved this fact,

The best way to feed straw to horses and mules at work is to reand assimilation, needs a tonic to duce it to chaff and mix it with middlings and corn chop.

No animal suffers more readily from intense cold in the winter or more. handling and treatment during the severely from intense heat in the summer than the hog.

> Get ahead of the season in all garden work. By and by the rush of other things will come and a part of this work may be neglected.

> Plant strawberries as soon as the sesson will allow. Next year's crop depends upon the start made this season, so strawberry growers say.

> To seed down a vegetable garden after the earth has been worked, fined and raked thoroughly, the first needful thing is to level the ground.

The time will soon be here when we er slow work about the farm where a shall need seed corn for planting. It team stands a good share of the time is always well to make a selection the use of blankets is to be recom- and have all things ready before planting time.

> The cow freshening in the spring will produce a maximum flow of milk during the first couple of spring months because of the ideal conditions of the pastures.

If perches, houses and coops are thoroughly treated now with a good ger of their making any further trouble until next summer.

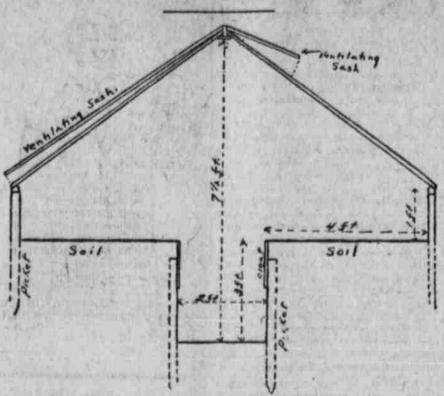
Stables should be cleaned carefully least twice during the winter season, among the animals in the stable.

Don't forget the machinery, the tools and implements that may need a little tinkering with here and there to be put into good working order, so call of the new season and not cause you delay.

It is advisable to gain the bull's confidence and let him know that you are his friend. Be kind, but firm, and you want trouble.

EASTERN MAN'S CONVENIENT COLD FRAME GREENHOUSE

Permanent Structure Is Believed to Be Better for Growers in North Than Ordinary Frames-New Yorker Tells How to Erect One.



New York Growers' Convenient Cold Frame.

ested in our method of building a permanent cold frame, which we believe is better for growers in the north than the ordinary frames. It might be termed a cold greenhouse. We use plants that must be started and grown before danger of considerable snow and cold is past and handling sash on the ordinary frames under such conditions is hard work.

Last fell we built two cold frames, 10x80 feet, and we would not change to sash again for a considerable sum. The sketch shows a cross-section of this cold frame house. The beds are put where the plants can be easily set and the air inclosed is of so large a volume that a considerable degree of frost can be suffered without danger to the plants. In extreme cold weather we used straw for a cover. We will build two more frames like this the coming spring, writes H. P. Langdon of Constable, N. Y., in the Week-

ly Market Growers' Journal. In making the frame we dug the trench wide enough to set two rows of cedar pickets, three feet apart in the We set these pickets so that the trench was two feet wide and about three feet deep. We boarded them up on the outside and made the beds as shown in sketch, four feet wide on either side of trench. Then 2x4 plate; which was nailed to the north and south

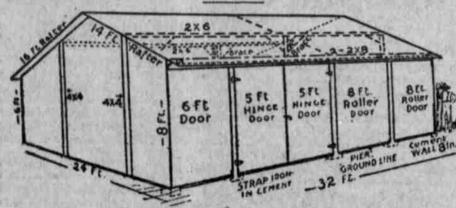
Some of your readers may be inter- | pickets. We then put up sash bars to make the walk in the trench 71/2 feet in the clear.

> The bars were set at distances apart to suit the glass used. We used butted glass, 10x14, set up and down. The bars were grooved one-sixteenth of an inch deep and three-eighths of an inch wide and set far enough apart to allow one-sixteenth of an inch full for side play of glass. The glass was fastened by ordinary lath put on with one-inch fine nalls.

The ventilators were made of bar material, four lights each, hinged to the ridge five bars apart on the east side. On the west side there are five ventilators full length from ridge to plate, two bars wide and hinged to the ridge. In the north end we made a door above ground level and another door full depth in the south end, just the width of the alley with two steps leading down to it. All the pickets were set very firmly with bar and ledge to prevent spreading.

If one is handy with tools this cold frame can be made at home with the exception of the sash bars. Especially for the north it is much superior to any cold frame in comfort and saving of work in handling sash. The plants can be set in cold, rainy or windy weather. This is often desirwe drove a row of short pickets at able when the work is rushing. It is the outside edge of each bed and well to cover the plate with a strip boarded these up on the inside. We of roofing paper before the bars are house should stand

SATISFACTORY MACHINE SHED



doors will pass on a track nailed on to doors,

As the result of our reference to the | the 2x8 plate before the roof is put machine shed in a recent issue, W. H. on. Use as short a roller as possible Dunning sends in his plan, says the so it will roll under the eaves. There Orange Judd Farmer. Selecting a are only two posts in the center. well-drained spot with a south front, After passing the door there is a the best shingles that could be pro- space 16x24 feet so that it is not neccured were used for the roof of the essary to move everything to get what shed and the sides are shiplap up and is wanted. The heavy machinery will down, which will paint. The front is go through the ten-foot door and can all doors and no sill to lift over. There be taken in and out with a team. This is only one hinge door, the hinges be- shed may be built longer and the same ing set in enough so that the roller kind of doors used without more hinge

PROPER TIME FOR PRUNING

Apple Trees May be Treated Auy Time From Late Fall Until Spring-Care Is of Utmost Importance.

(By R. G. WEATHERSTONE)

Apple trees may be pruned any time from late in the fall until spring. Care should be exercised in pruning to give the trees an open head. This does not imply that all small limbs should be removed, leaving a lot of whipstocks, but that such of the larger limbs that are parallel and close together, or those that cross, should be cut out. Half of the difficulty of pruning is avoided if one decided to allow the tree to take its natural turn rather than to shape it to some particular

model. Too many fruit growers think that pruning a tree shortens its life, There is little reason for such a belief other than the general statement that it is unnatural to prune a tree. However, nature prunes more heavily than men the mechanical operation of pruning. also kill disease germs and seeds of it is important that large limbs be re- worms and other parasites.

moved with great care and the wounds painted to prevent the entrance of fungi which will induce decay.

Avoid all crotches that will have s tendency to split down or break when the trees become loaded with heavy fruits or sleet and ice. If bad crotches cannot be avoided they should be strengthened with iron bolts to prevent them from breaking and ruining the tree.

Drilled Grain,

Drilled grain will yield from onefifth to one-fourth more crop than the hand-sown. The drill deposits the seed in the soil at a uniform depth and this cannot be done by hand sowing. When sown by hand many seeds fall in depressions and are covered too. deeply by the harrow while others are left on top of the ground and are not covered at all. The roller should follow the drill.

Good Lice Killer.

A good liquid lice killer is made by dissolving in ordinary kerosene all the crude napthaline flakes it will take up. The solution is an excellent disinfectant for use about poultry houses, and at all seasons and in the rudest as well as a lice killer. Used on the manner. By this it should not be un- dropping boards and roosts, it will dederstood that care is not necessary in stroy and prevent red mites, and will

SELF-FEEDERS SAVE HAY AND CONSIDERABLE LABOR

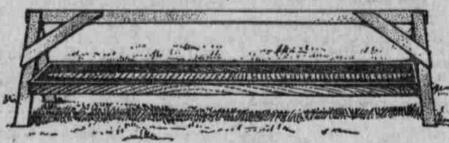
According to Tests Made at Colorado Experiment Station Fully 20 Per Cent. of Feed Is Wasted by Old Method of Feeding.

roughage to sheep or cattle are not only the means of saving considerable labor, but, according to tests made at the Colorado experiment station, are the means of saving a great deal of hay One lot of lambs at this station | jy greater. were fed whole hay in a self-feeder rack and another lot whole hay in racks on the ground, such as are in common use in many sections of the country. The average gain of these two lots was practically the same, the lot feeding from the self-feeder averaging only one pound heavier Agriculturist. Also, the grain consumed varied but little, being only gain in the first lot than in the second. The great saving came in the

cost of roughage.

Seif-feeder racks for supplying | tically 20 per cent, in favor of the self-feeder racks. It makes a difference of 42 cents in the cost securing each 100 pounds of grain. These results were secured on alfalfa valued at \$5 per ton. With a higher price the difference would be corresponding-

These self-feeding racks cost \$1 per running foot completed. They had the ordinary capacity of four lambs per running foot, two on each side, not so much space being required at a selffeeder as at an ordinary rack, since all the lambs will not eat at one time. As already stated, the saving in this than the others, says the American one experiment amounted to 42 cents. per 100 pounds of gain. This is equal to about 14 cents on each lamb. Countnine pounds more for a 100-pound ing four lambs per running foot, this would make a saving on one season's operations of 56 cents. In other words, the rack would pay for Itself in two The lot eating from the self-feeder years. It is thought that when a type consumed 601 pounds of hay for each | of self-feeder is developed for handling



Popular Type of Grain Trough.

This indicates a difference of prac- by wind,

100 pounds of gain and those eating | chopped hay better results may be seoff the ground consumed 733 pounds | cured from it than have hitherto been of hay for each 100 pounds of gain. possible, by reducing the waste caused

RUSSIA GAINS IN FARMING

Prevailing Impression That Little Progress Is Made in That Country Is Erroneous - Series of Readings Gratis.

(By J. B. SNODGRASS.) The impression generally prevails that, although Russia is most generously favored by nature, little progress is being made in agriculture. This improvement and cultivation of the is erroneous.

As an illustration of the interest cultural economy, seeds, agricultural that is being manifested along these implements, cattle raising, swine raislines, and as indicative of the progressive policy that has been adopted and is now being pursued, it may be cited that the Imperial Agricultural tures on a variety of agricultural submuseum, in its endeavor to popular- jects. ize the study of agricultural subjects. has for the last few years conducted gratis, at the museum in St. Petersburg, a series of systematic readings on agriculture for the benfit of everyine interested. In addition to this course, popular lectures are delivered and special readings conducted for

men in the lower ranks of the army. In the experimental department of the museum the taking apart and putting together of various machinery is demonstrated by trained mechanics. Agricultural machinery in motion is also demonstrated and the use of agricultural implements is explained; experiments are also made with all classes of farm machinery, such as locomobiles, winnowers, sorters, and the like. In separate departments are demonstrated the fertilization of the fish spawn and the development of the chicken in the incubator.

The attendance at these lectures has been uninterruptedly increasing from year to year. For the past four years the attendance has been: 5,093, 17,808, 32,442, 60,346; showing great increase:

The lectures are delivered in the evening from seven to nine and on Sunday from two to three'p. m. The praclecturers and the students, such as the hens busy.

trips to exhibitions and farm in the suburbs, and even to stockyards and slaughter houses.

Likewise the special classes pass through practically everything pertaining to plant culture, stock raising, poultry raising, bee culture and dairy farming, with all that pertains to the latter, such as butter and cheese making.

In the present scholastic season the courses of the systematic lectures will embrace the following academic subjects: Elementary chemistry, elementary anatomy, physiology of plants. soil, agricultural meterorology, agriing, etc.

On Sundays it is intended to conduct popular public readings and lec-

The Wyoming experiment station, after repeated trials, concludes that corn and the bearded or Scotch barley, when fed with alfalfa, were about equal in value for mutton production. Barley in this test proved to be a shade the better. Twenty-seven per cent, less alfalfa and 28 per cent, less grain were required where barley replaced either in a ration. Grade lambs with mutton sires made greater gains, conditions being similar, than did Rambouillet lambs, though a record of food consumption for each class was not kept.

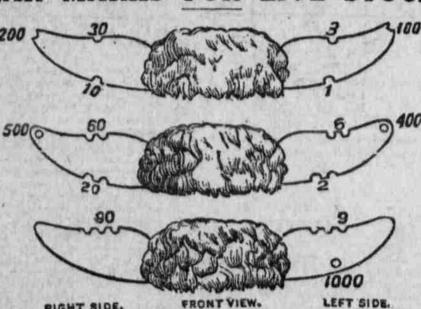
Draft Horses.

Draft horses are suitable for raising on level land, while lighter horses and mules are best adapted to hilly farms. Horses designed for the saddle and road use will develop activity and stamina on rough and hilly pasture land while they are young.

Litter for Scratching.

Every month during the winter season the poultry buildings should be well supplied with clean straw, leaves tical work and excursions are conduct- or litter of some kind into which the ed by prearrangements between the feed is thrown in the morning to keep

EAR MARKS FOR LIVE STOCK



RIGHT SIDE. For the numbering of polled cattle, | equals 10; two notches equal 20. sheep or swine to make identification most satisfactory method. A system of this sort is necessary in keeping a 100. record of registered stock. The key

to the numbering is as follows: A notch in bottom of left ear equals

1; two notches equal 2. A notch in top of left ear equals 3; | 500. two notches, 6; three notches, 9, A h notch in bottom of right ear 1,000.

A notch in top of right ear equals sure the marking of the ear is the 30; two notches, 60; three notches, 90. A notch in end of left ear equals

A notch in end of right ear equals

A hole on end of left ear equals 400. A bole in end of right ear equals

A hole in bottom of left ear equals