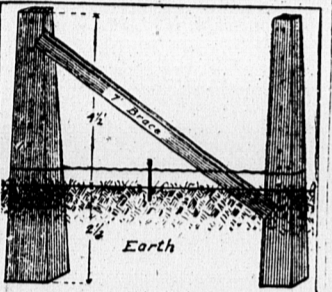


ROAD AND FARM IMPROVEMENT

BRACING A CEMENT END POST

How to Construct a Pillar That Will Not Give Way in Stretching a Fence.

In order to brace an end post securely, first plant the post 3 1/2 feet deep, says a writer in Indiana Farmer. Be sure that the dirt is well tamped around the post. Packing the first foot well is the most essential thing in making a post stand firm. Lean the post back about three inches. This leaning causes the post to pull to the ground instead of lifting out of the ground, as it will do if it leans the other way. Then cut a notch about half way between the ground and top of the post for end of brace to rest in. Then plant a smaller post about six feet in front of end post for foot of brace to rest against, placing top side of lower end of brace six inches below the surface of the ground with a flat rock under it (to keep the brace from settling in the ground). Now pass three strands of well-galvanized No. 9 wire around the two posts, making six strands of wire to twist to-



Brace for Cement End Post.

gether. Fasten the ends of the wire together, so they will not slip. Take a rod about 18 inches long, place between the six strands of wire and twist them together. Do not neglect to twist them tight, for this is the secret in making the posts stay in position. If my instructions are followed the fence stretcher is not made that will move the end post one inch at the top.

POTATO CULTURE PROFITABLE

Certain Sections of Country Where Irish Potato is Best Growing Crop on the Farm.

There are certain sections of the United States which are, owing to climatic conditions, combined with the nature of the soil, better adapted to the growing of the Irish potato than probably any other farm product, and as this crop can be marketed at remunerative prices on an average of four years out of five, the farmers of what is known as the "potato districts" rely almost entirely upon this product for their money crop; therefore, it becomes necessary for them to secure as great a quantity of tubers as possible, from each acre of land planted, from a minimum amount of labor and expense, in order to get the greatest percentage of profit obtainable.

The soil best adapted to growing the potato is a sandy loam well supplied with vegetable matter. This kind of a soil is not available in all cases and we have to be content with that of a heavier nature. In that case it is advisable to turn under a sod of some character, preferably clover, which will serve to keep the land in a mellow condition and retain the moisture longer than if the soil should become more compact.

More attention every year is being given to the selection of seed, and the most successful potato growers have long ago discarded the using of culls for seed potatoes. Experiments have shown that an ordinary size potato cut in quarters will often produce 25 to 30 per cent. more salable potatoes per acre than when cut with only one eye to the piece.

If proper precautions are taken and treatments begun in time there are none of the enemies of the potato, which, if properly handled, cannot be reduced to a nonentity as far as damage to the crops is concerned.

For Slugs or Snails.

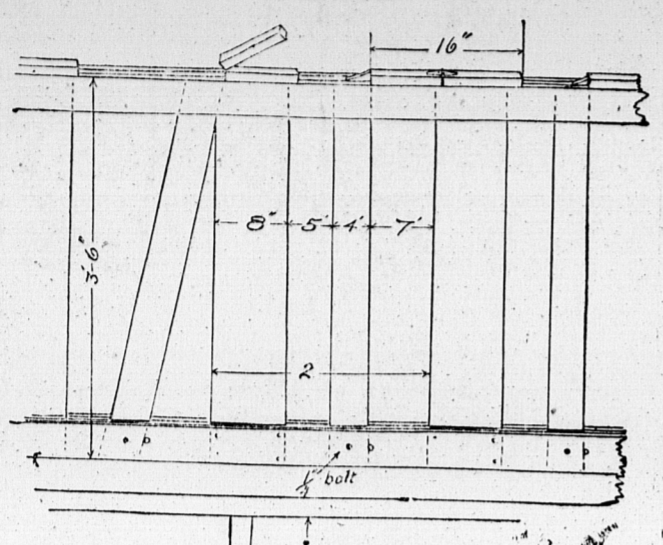
Salt is a sure remedy for the slugs or snails, says the Ohio Farmer. Discretion, however, is always necessary in its use, as it is liable to kill or injure plants to which it is applied at all freely. We find ordinary air slacked lime just as sure to kill slugs as salt, and probably much safer. Slugs are night feeders, leaving their hiding-places and feasting on the leaves first reached (usually the lower ones) shortly after sundown. To destroy the pest that the lower parts of the foliage of affected crops thickly with the air-slacked lime. The effect is immediate. Next morning you will find the remnants of the dissolved slugs.

Value of the Berry Patch.

Where an old berry patch has been cleaned out is fine for a crop of melons or potatoes. Then it should be sown to cow peas or clover. Either of these crops are fine for storing up fertility in the soil. An orchard may be started on reasonably thin soil if the proper care is given to store up plenty of fertility for the use of the trees in producing their crops of fruit.

STANCHION-MANGER FOR CALF FEEDING

System Gives Utmost Satisfaction and Permits Youngsters to Be Fed Individually - By J. B. Monston.



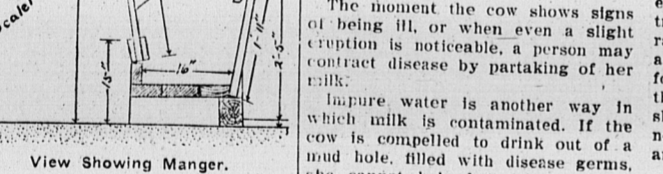
View Showing Stanchions.

A form of confined stanchion and manger for calf feeding is illustrated in a bulletin published by the Michigan Experiment station and is recommended as being very convenient. The principle on which the stanchion is built is not claimed to be new; the use dates back a number of decades, but the special application and adjustment of the one hereafter described presents some new features. This particular model is produced as the result of three years' trial, having undergone several changes since the first one was installed. This appliance can be adjusted so as to accommodate the calf from birth up to 12 months of age. The calves are confined in the stanchions at feeding time only. After the calf has been secured the milk bucket is placed in the manger; when the milk is consumed the bucket is removed and replaced by hay. By using this stanchion method of feeding the maximum number of calves can be kept in a minimum amount of space in a clean, healthy, thrifty condition, providing they are given access to the outdoor yardage. The average size of the four calf pens in the dairy barn, including manger space is 15 feet three inches by 12 feet 3 inches. Each pen accommodates eight calves up to five or six months of age. The average size of two pens in the grade herd barn accommodating six calves each, is 9 feet

DISEASE GERMS FROM COWS

Milk Contaminated in Various Ways From Time It Leaves Cow Until It Reaches Table.

There are a hundred and one places where milk can be contaminated from the time it is drawn from the udder till it reaches the table in the form of sweet milk, cream, or butter. First, a great deal of bacteria, impurities and disease germs get into the milk at the barn or lot in which the cows are kept. Second, a great many more of these owe their existence in milk to the attendant and the place in which the milk is kept.



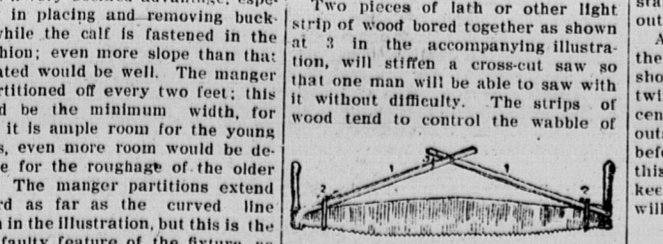
View Showing Manger.

9 inches by 14 feet 10 inches, and three occupied by five each are 10 1/2 feet by 11 feet 9 inches. Of course, in all cases except one, the calves have access to yardage at will. Referring to the illustration for detailed description, the bottom of the manger, 18 inches wide, consisting of 2-inch hemlock, is 6 inches above the floor. As the front of the manger is built on rather than against the bottom it leaves the inside bottom measurement of the manger 16 inches. The side of the manger over which the calf's neck is placed in feeding is 8 inches above the bottom, one-half of this distance being taken up by a 2x4, the balance by the bottom framework of the stanchion resting on it. The top part of the manger over which the calf feeds is 15 inches above the floor and should not be made higher, as even this is rather high for the new born calf. The youngest calves can feed over this, but should not be left fastened during the day, as they could not lie down comfortably. The side of the manger next the feed alley is practically 2 feet high and 2 1/2 feet above the floor; the slope given to this part of the manger is a very decided advantage, especially in placing and removing buckets while the calf is fastened in the stanchion; even more slope than that indicated would be well. The manger is partitioned off every two feet; this should be the minimum width, for while it is ample room for the young calves, even more room would be desirable for the roughage of the older ones. The manger partitions extend upward as far as the curved line shown in the illustration, but this is the most faulty feature of the fixture, as it is possible for one calf to reach over and suck another one's ears if the meal and ensilage is not promptly supplied after the milk is consumed, though this rarely happens. A more perfect manger division will be made

CROSS-CUT SAW SUPPORT

Pieces of Light Timber Attached to It Make It Possible for One Man to Operate.

Two pieces of lath or other light strip of wood bored together as shown at 3 in the accompanying illustration, will stiffen a cross-cut saw so that one man will be able to saw without difficulty. The strips of wood tend to control the wobble of

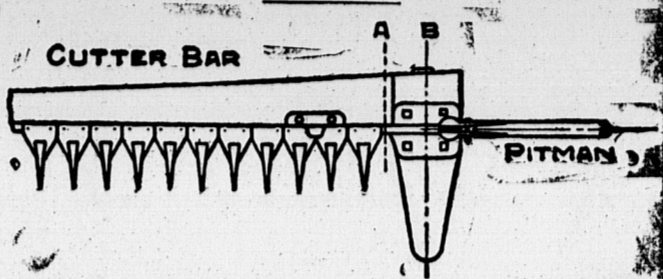


Strengthening Saw.

the free end. A piece of stove wire twisted around the saw and a strip at 2 will aid in keeping it in place. A wire twisted about the laths at 3 will help to maintain the strength.

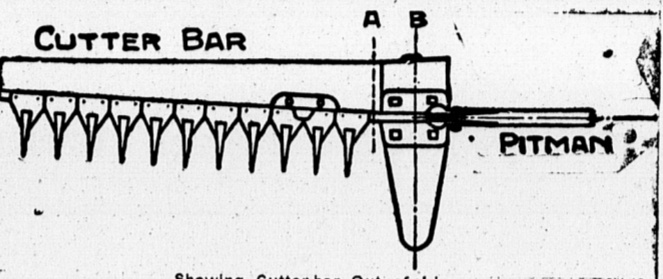
DETAILS AND CARE OF FARM MACHINERY

Mower Is Simple and Easy of Management, Yet Its Care and Adjustment Need Attention - By Prof. Fred R. Crane.



Showing the Cutter-bar in Line with the Pitman.

The mower is a simple machine, easy of management, and yet certain details of its care and adjustment must be attended to carefully to secure good and economical work. The cutter-bar sometimes gets out of line with the pitman, causing the machine to run hard. This may also result in breaking the sickle near the sickle-head at A as shown in the drawing. By the proper adjustment upon the



Showing Cutter-bar Out of Line.

line B, where the cutter-bar hinges, this bar may be brought into line with the pitman, and it should never be worked when out of true. The proper line-up is shown in the drawing. B, wristpin joint upon which the cutter-bar works and the line upon which the adjustment must be made the sickle and require more force to run the machine. The main-spring of the mower should be adjusted tight enough to assist in raising the cutter bar, but not so tight as to cause the bar to keep flopping up and down when cutting in the field.

BUILD YOUR SILO EARLY

Thrifty Farmer Will Have It Ready to Take Care of Crops Before the Frost Comes.

Silos should be built in time to take care of the crops before frost comes, and the thrifty farmer will build as early as possible. I built a round silo, 16 feet 4 inches in diameter by 30 feet high, and placed it in about seven acres of drilled corn well eared, and three acres of hill corn from the shock, all cut and blown into the silo, mixed as it went in and wet down well, writes Joseph Newman in Farmers' Review. This made 125 tons of the best winter feed for dairy cows that I ever saw.

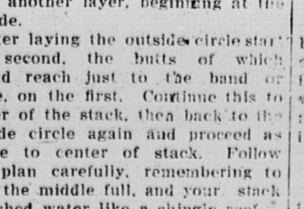
We started feeding it to 50 cows and ten head of young stock on December 1, and it was sufficient to last them until March 10. The corn put in in this way furnished not only the roughage, but concentrated and needed to balance the ration was four pounds of gluten meal and four pounds of wheat bran per day for each cow. Following this stock in the barnyard were about 30 hogs, sows and pigs, and with practically no other feed I never saw stock look any better on March 1.

We found the best way to feed was to feed the bran and gluten meal before and during milking time, and the ensilage after milking. The milk was bought by one of the large milk companies which supply Chicago with bottled milk and was pronounced by them a fine article, testing on the average about 3.7 per cent. butter fat by the Babcock test. For a dairy of 50 cows, two round silos, each 18 feet in diameter by 38 feet high, should furnish enough for the winter's feeding and to carry the stock through the dry time the next fall. I do not put anything on top of the silage after filling, and did not lose six inches on top, and the pigs took care of that when it was thrown into the barnyard.

CLOD CRUSHER AND LEVELER

Illustration and Directions for the Construction of Handy Farm Implement.

The clod crusher and field leveler for plowing ground shown in the accompanying illustration may be made any size desired. Six pieces of two by six timber may be used, set on edge as indicated, and placed four inches apart. They are held together with blocks having holes in the center, through which are passed half-inch iron rods, 22 inches long.



Plank Clod Crusher.

Ground Dries Quickly. The time of year has come when the ground dries out very fast after a rain. Give plenty of time after each rain for the soil to dry out before you begin work on it. More injury than good is done by working the ground when it is too wet. Do something else while the soil is drying so as to be ready when it is in a good workable condition.

PLANK FRAME BARN BUILDING

It Is No Longer an Experiment and Has Made Good Wherever Properly Constructed.

In general the foundation and roof are costly parts of a barn. Added storage capacity costs little in height, so it is wise to build of good height. The plank frame is no longer an experiment. It has made good where properly constructed. Its advocates claim a saving of material over the old style frame barn, writes E. L. Allen, in Rural New Yorker. But if the building is high (as it should be) it will require longer material for braces. The long timbers are hard to get and are more expensive. Another advantage in the plank frame is that it is much more quickly and easily erected. Quite a large saving may be made here. The roofing question is a complicated one. A good deal might be said for and against almost any kind of roof. But the slate roof is the cheapest and most satisfactory in the end. If the barn is to house stock, let the stable receive your special attention. Study the subject of ventilation, and adopt some system, as King's, that will enable you to have pure fresh air in the stable constantly. It is vital. Plan for all the sunlight practical. Make it sanitary. There is a chance for a lot of head-work here. Money expended to secure best stable conditions will pay you the biggest kind of interest every year you use it.

Value of Pigeon Post. The pigeon post is proving a valuable adjunct of civilization, even in these days of fast trains and steamships and wireless telegraphy. The isolated lighthouse of Matanuska Island is 75 miles northwest from Hobart, Tasmania. In a direct line and 90 miles by steamer, and since January 21, 1908, 12 homing pigeons have kept up communication with the mainland, three being regularly liberated every three weeks. The first message left the lighthouse at ten a. m. reaching Hobart at 1:30 p. m. The service has been generally satisfactory, though not all messages have reached their destination; and it probably saved the life of an assistant at the lighthouse, as an urgent message brought much-needed medical relief from Hobart in 12 hours.

To Prevent Boiler Scale.

Boiler scale is prevented in the process of F. A. Lart, an English experimenter, by simply passing through the working boiler the moderate current of any ordinary dry or wet electro-chemical primary battery. The current hastens the deposition of solids in mechanical suspension and the precipitation of those in chemical solution and the resulting mud contains only loose particles of the lime, magnesia or other impurities from the water. Tests are suggested to determine the working value of this process.

Changes in Comet. The changes in progress in a comet are now shown on a screen in moving pictures. Morehouse's comet was favorably situated for observation in England during last autumn, and as this body gave an unusual opportunity for studying changes the astronomer royal had photographs made at frequent intervals so as to obtain a cinematograph record. Care series shows the alterations that took place in a period of about nine hours.

HOW TO MAKE SIMPLE STILL.

A Contrivance to Distill Water Is Made From a Test Tube, Some Hose and a Bottle.

A still to distill water can be made from a test tube, some heavy rubber hose and an ordinary bottle. Secure a stopper for the test tube, and bore a hole through the center, into which fit a small hollow tube. The bottle is also fitted with a stopper containing a bot-



Distilling Water.

low tube, and both bottle and test tube connected with a hollow rubber tube. The test tube is partially filled with water and supported or held over an alcohol lamp. The bottle should stand in a basin of cold water. When the water in the test tube begins to boil the steam passes over to the bottle, where it condenses. The basin should be supplied with cold water as fast as it begins to get warm. The rubber tube will not stand the heat very long and if the still is to be used several times a metal tube should be supplied to connect the test tube and bottle.

NOVELTY IN SAFETY RAZOR.

Latest Improvement Can Be Manipulated Same as Old-Fashioned Unprotected Blade.

The introduction of the safety razor was undoubtedly welcomed by a great many men who found it impossible to shave with the old-fashioned razor without cutting their face. In direct variance with this is the regular fact that those men who formerly used the old-fashioned razor successfully were unable to shave with the safety razor without injuring the face. The difference in the methods of handling the two razors readily accounts for this. A Reading man became acquainted with the fact, and accordingly designed the safety razor shown here, which in form closely resembles the old-fashioned razor, and is manipulated in mostly the same manner. A guard is provided, as in the ordinary safety razor, which is attached directly to the handle, the blade of the razor being detachable



Used Same as Old-Style Razor, and having two sharp edges. The guard is also double-edged, to protect both edges of the blade. Obviously as one edge becomes dull the other can be brought into use, and when both are dull an entirely new blade substituted.

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Recommended As An Ideal Remedy



W. S. BOND, Esq.

"I beg to say, March 10th, 1909. For some years I have been greatly troubled with headaches and indigestion, brought on by stomach disorders, constipation and biliousness. I had tried many remedies with only indifferent success, until 'Fruit-a-tives' came to my notice. Being a general storekeeper I was selling a good many 'Fruit-a-tives' to my customers, and remarking how pleased they were with the results obtained from using 'Fruit-a-tives,' I decided to try them and, I might say, the effects were almost magical. Headaches and biliousness disappeared and to-day I recommend 'Fruit-a-tives' to my customers as 'An ideal remedy.' I might also add that about three years ago I was laid up with LUMBAR SCIATICA - couldn't get out of bed or lift one foot over the door. A good treatment of 'Fruit-a-tives' cured me of these pains and disabled the Sciatica and Lumbar so that today I am as well as ever and can do anything necessary." (Signed) W. S. BOND.

Unusual Silver Plate

Knives, forks, spoons, etc., marked

"1847 ROGERS BROS."

possess a charm and durability that come of over sixty years' experience in the making of fine silverware.



Carbo-Magnetic Razors - Have revolutionized razor making. They are tempered by our exclusive secret process of electricity. THESE RAZORS DON'T PULL!

S. W. CRABBE

We beg to tender our sincere thanks to the public for their generous patronage during the past year and extend to all

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E. W. Patterson

G. D. Wright

General Director and embalmer - Miss A. Ferguson, Lady Assistant - Personal Attention and Promptness Guaranteed. Ambulance calls answered at shortest notice.

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