



Putting Up Silage.

Many people make the mistake of cutting corn too green for silage, writes Dr. G. A. Billings in American Agriculturist. At this stage there is a larger percentage of water, and the silage when taken out has a large amount of acid, less starch and sugar and hence is less nutritious. Corn planted in drills with stalks eight to ten inches apart will mature a good proportion of ears.

Harvesting should not begin until the ears are passing the roasting stage and begin to glaze. Unless the season is exceptionally dry the stalks and leaves will remain green, but too mature or dry corn is more liable to mold. This may be found in spots around the sides or more generally over the silowherever the air has gained access to cause the fungous growth. This condition may be improved by tramping the material carefully in the silo, adding water by sprinkling with a hose, or if this is not available direct a stream of water into the blower or elevator sufficient to saturate the cut fodder. This moisture assists the material to settle and acts as a seal to keep out the air.

There should be labor and teams enough to keep the cutter running steadily. Nothing is gained by cutting a large amount of corn beforehand, hauling and piling near the machine to be handled over again. Aim to harvest at the least expense a ton. This will be accomplished as follows: If hand cutting is practiced, cut and hand directly to the man loading, not throwing on the ground in bundles, which will require an extra handling. Let each load come to the table of the machine in turn, handling the corn directly to the feeder. If the corn is long and heavy an extra man is needed on the table to assist.

Power should be ample and in proportion to the size of the cutter. The blower is replacing the elevator machine, economizing space and largely



FILLING THE SILO.

doing away with the stopping of an entire crew to repair the elevator. If the corn is heavy and the stalk large cutting in half inch to one inch pieces will have the tendency to partially shred the stalk, and there will be no butts refused by the animals.

The material in the silo should be kept level and well tramped, especially around the sides of the silo, and it pays to have sufficient help for this work. Where considerable silage is put up it pays to have a corn harvester and binder, which economizes hand labor. The accompanying illustration shows part of the outfit used at the New Jersey experiment station in filling the silo for fall and winter feed. The source of power for running the cutter and blower is a gasoline engine.

Clover and Fodder.

Clover and corn furnish a fodder ration that can not easily be improved upon for dairy cows. Two factors should be taken into account when determining the amount of grain to feed. One is the extent to which clover or alfalfa is fed, and the second is the production of the cow. The rule with some is to feed one pound of grain for every three pounds of milk produced. When clover or alfalfa form a large part of the ration it would seem reasonable to suppose that a less quantity of grain would suffice than the amounts named.

Avoiding Wastes.

The first great lesson to be learned is to avoid waste. Waste has been the curse of agriculture. Why pay taxes on land that is not farmed? Why only half cultivate the fields and so waste both land and labor? Why waste time and capital in raising inferior animals? Why waste money in buying what should be raised on the farm? Why waste energy in trying to do more than

any one man can do right? On many farms there is waste in a thousand ways, and no wonder that to some "farming does not pay." The small details must be looked after, and no farm should be larger than what can be properly attended to.

Overshoe for Horses.

Horses undoubtedly require an overshoe when the ground is snowy and coated with ice as much so as the



STRAPS ON HOOF.

average human being. Drivers, although anxious to protect horses from injury by falling, have been unable to procure practical and satisfactory overshoes. Those made of rubber prevent the horse from slipping, but they wear out so quickly their cost is prohibitive. In the illustration is shown one which seems well fitted to serve the purpose, invented by a Massachusetts man. It is made along similar lines to the "gripper" chain placed on automobile tires. The tread is formed of a number of metallic links. When the overshoe is adjusted on the foot the links intervene between the hoof and the ground, affording a firm grip. This overshoe need not necessarily be worn on the horse all the time, but in case of sudden freeze can be quickly adjusted in position and removed when desired.

Result of Corn Breeding.

From numerous experiments made in Wisconsin there has been developed a strain of white dent corn which grows on a very short, thick-set stalk, and which matures a good-sized ear, and the ears run remarkably uniform. The growth centers in the ear rather than in producing a big stalk at the expense of a small ear. After four years of careful, persistent work, there are numerous corn fields in Southern and Central Wisconsin which will yield 80 to 80 bushels per acre, and 100 bushels have been reported several times. Such results coming from a State which a few years ago was considered out of the corn belt demonstrate what corn breeding will accomplish when carried on along sensible lines.

Plants that Poison One Another.

It is a matter of common observation that grass does not grow so well close to trees as in the open. The same is true of grains. Experiments in England and in this country have shown that the deleterious effects of the near neighborhood of grass and trees are mutual. The trees suffer as well as the grass and grain. This is especially true of fruit trees. The cause is ascribed to the excretion by the trees, on the one hand, of substances poisonous to the grass, and by the grass, on the other hand, of substances poisonous to the trees. It thus appears that the failure of grass to grow well near trees should not be ascribed to too much shade, but to the exhaustion by the tree roots of the full supply needed by the grass.

Cheap Fertilizing.

Some of the best farms in the East have been brought to the highest degree of fertility by the use of clover, lime and manure. The farmers who have accomplished such results have aimed to save every pound of manure, and also to preserve it in the best manner. Lime is used extensively by those who know that lime is an essential ingredient of plants, and also because it is excellent for increasing the clover crop. Clover enriches the land by promoting the supply of nitrogen in the soil, hence lime and clover make an excellent combination.

Wire-Winding Machine.

The frame of this wire-winding machine is constructed of 2x4 lumber, 6 feet by 2 feet 5 inches. Standards for



MACHINE TO WIND WIRE.

holding shaft, 2 feet 10 inches. Shaft for holding wire spool, 3 feet 5 inches long with crank. For wheels, swivel cart wheels will do.

Best Grafting Wax.

The following is claimed to be the best grafting wax, by an old orchardist who says he has tried a great many: To four pounds of rosin and one of beeswax add one pint of linseed oil; put in an iron pot, heat slowly and mix; pour into cold water and pull until it assumes a light color. Work into sticks, and put into a cool place until wanted. Some prefer linseed oil to animal fat for grafting wax.

Manure for the Garden.

Let the barnyard manure for the garden be well rotted if it is desired to cultivate it into the soil early in the spring; but if coarse, green manure has to be used, scatter broadcast during the winter, and rake up or mulch part of it before plants are set in spring. Of course, this applies to ground that has been plowed the past fall.



The commissioners appointed by President Roosevelt to investigate strike conditions in Nevada and to advise him as to the need of federal troops in Goldfield to preserve order, has been made public. In connection with it the President gives out his letter to Governor Sparks, in which he calls attention to the report and the conclusion reached by the commissioners that, if the state and county exercise the powers at their disposal, they can maintain satisfactory order in Goldfield; that, so far, those authorities have done nothing, but are relying upon federal aid, and their attitude is that of expressly refusing to do anything, and desiring to throw their own burdens upon the Federal Government for the maintenance of those elementary conditions of order for which they, and they only, are responsible. The President states that the troops will be kept at Goldfield until the meeting of the Legislature, when he intimates that they will be withdrawn. In their report, the commissioners say that, in their belief, there was no warrant whatever for calling upon the President for troops; that there was no insurrection against the power of the State, and that nobody supposed there was such an insurrection. They say "The action of the mine operators warrants the belief that they had determined upon a reduction in wages and the refusal of employment to the Western Federation of Miners, but that they feared to take this course of action unless they had the protection of federal troops, and that they accordingly laid a plan to secure such troops, and then put their program into effect."

Washington is constantly improving. The new and splendid structures recently erected add very much to her grandeur, while those under way will contribute notably to this pre-eminence. Those who have not visited the capital within a decade will be agreeably surprised when they set foot in it and observe the progress made in her embellishment. The new Union station, on which the finishing touches are being made, will extort admiration from those who appreciate big things and handsome piles. Here the five steam roads will center passenger traffic in the grandest railway station in either hemisphere. Some \$14,000,000 was needed to acquire the land, raise the grade of streets leading to the approaches and erect the structure. The roadways had to be elevated for a considerable distance to place them on a level with the entrances. To obtain the needed height 14 feet was necessary in some streets, and this brought them up to the second-story level of the brick houses on either side. More than 100 houses were seriously impaired in value by the filling in, while some are a complete loss. The station is on an elevation with the capital half a mile to the north. From the old terminal the distance is a mile and a half.

Before the House Committee on Interstate and Foreign Commerce, Chief Engineer Goethals of the Panama Canal Commission and ex-Senator Blackburn, governor of the canal zone, explained the present state of the great enterprise. Colonel Goethals said there were now 30,000 men on the roll, and that last month there was for the first time more men available than could be employed. No Americans are on the laborers' roll, the list being made up from West Indians and whites from the south of Europe. A Spaniard would do twice as much work as a negro. Although he had formerly favored a sea-level canal, Colonel Goethals was now convinced that the lock system was the best. The cost of the total work would be about \$250,000,000, exclusive of the money paid for the French rights. Blackburn said he had reduced the number of saloons in the zone to thirty-four, which pay \$100 a month license.

The Interstate Commerce Commission is preparing plans for a thorough investigation of Thomas F. Ryan's manipulation of the securities of the Seaboard Air Line, which resulted in a receivership. It is understood that this investigation is undertaken at the instance of President Roosevelt and is highly pleasing to some of the Southern United States Senators, who have been preparing to urge Congress to take the matter up.

A bill to establish a central bank at Washington, to be known as the United States National Bank of America, has been introduced by Farnes of New York. The bank would have \$100,000,000 capital, of which the government is to purchase three-fifths from the sale of gold bonds and the remainder to be sold to national banks.

PERUNA EDITORIAL NO. I.

Dr. Hartman is now offering Peruna to the public as a regular pharmaceutical product. It is just as ethical as any compound put up for the medical profession. No straining of medical ethics can find any fault with it. THE PRINCIPAL ACTIVE INGREDIENTS are prominently incorporated in the label on the bottle, that the people may know that the claims made for Peruna have a true justification.

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Probable.

"I sometimes think," said Dubley, "that it would be interesting to trace the origin of some of the common phrases of the day. For instance, I wonder who originated the expression, 'It never rains but it pours.'" "Very likely," suggested Kidder, "it was Noah."

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