

Economic Wintering of the Farm Work Horses

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One of the Michigan Agricultural College Work Teams.

Most farmers are confronted by this problem, in a serious manner because of the short crops of the past dry season and the present high prices for feed stuffs. In wintering farm work horses one of two extremes usually prevails. The lover of good horses saves the best mow of hay and the best bin of oats for his horses during winter when they are producers as workers, thus rendering their cost of keep very expensive. On the other hand, however, too many horses are wintered in the barnyard on straw and corn stalks only, going into the spring weak and thin and untitled to undergo the severe strain of the seedling work. There is a medium between these two extremes by which coarse cheap feeds in sufficient variety can be used in wintering the horse cheaply and satisfactorily.

If the horse is in moderately good condition and doing no work it can be wintered on corn fodder, straw and ensilage with a small feed of mixed hay daily. If there are no rubbers of corn in the fodder a few ears may be fed daily. Under these conditions the horse of a yard during the day with ample stall or shed protection at night is desirable. If the horse are being em-

REPAIR WORK ON THE FARM

The Use of Tools Has Educational Value  
By R. J. BALDWIN,  
Michigan Agricultural College

The successful management of a modern farm depends largely upon the care and repair of the equipment, with which the work is performed. This implies the necessity of housing all implements when not in actual use and their repair before needed again. To do this there must be a suitable outfit of tools on the farm arranged in a shop where work can be conveniently and comfortably done. Alterations and repairs on buildings and fences are required from time to time and if there are not tools at hand suited to this purpose the work will not be done well, if at all.

The question of how far to attempt to do repair work on the farm depends upon the distance from the farmer himself. The regular work of the farm should be the first consideration and anything that will interfere with field work should be undertaken. In many cases the work of a trained machanic is more satisfactory than that done at home, and we must always depend upon the village blacksmith for many things. All ordinary repairs to machinery can be repaired on the farm, and this, in addition to the work which must be done about barns, stables and fences, make a repair outfit an important part of the farm equipment.

The general overhauling of machinery should be done at a time of year when no other work is pressing and when it may be done as a rest or a hobby. The best time for this work is when the farm implements are stored during winter in places not easy of access or left in open weather they will probably be out of repair when needed again; but if they are housed in a building on corner of which is a shop the job of fixing them will be more attractive and the work will be more liable to be done before spring. Frequent applications of some metallic paint such as Venetian red and raw linseed oil does much to improve the appearance of implements, and adds greatly to their lasting qualities. The use of tools is of great educational value, especially when the work is carefully performed. The boys on the farm should be encouraged in the use of tools, both for the care of the implements and the character of the work performed with them. The tool outfit of the farm is of special service on stormy days and when employed in keeping the boys employed and contented to remain at home."

Suggestions on the selection of tools and the arrangement of a shop may be found in Farmers' Bulletin No. 347, which may be obtained upon request from U. S. Department of Agriculture, Washington, D. C.

All brush and rubbish in the orchard should be gathered and burned before winter. Such things harbor all kinds of pests such as rabbits and mice which are liable to gnaw the trees while snow is on the ground.

WASHINGTON GOSSIP

Nation Loses Millions by Bad Roads



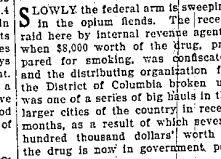
WASHINGTON.—In the United States there are in all about 2,500,000 miles of roads of one kind or another—enough to reach around the earth 100 times. Much of this, however, is of a character not worthy of the name road. Some of it is little better than a rock pile, and others are wide tracks through which seven miles in each hundred can be said to have any improvements whatever, and on the most of it the improvements are such as to be unworthy of note. Altogether not two per cent. can be said to be first class. With the proper improvement of this network of roads will come a saving that will richly repay the nation.

The roads in the United States may be the worst in the world, but they are bad enough as a whole, that is certain, compared with those in other civilized countries. Europe is a network of magnificent highways. In France, France and England one can ride for miles without striking a stone or a puddle. This does not add to pleasure alone. It is the means of saving millions of dollars each year in the four countries where such roads are maintained.

The cost of hauling over our country roads is now about 25 cents per ton to the mile. In the European countries as long as 18 years ago the cost had been reduced to 10 cents, and it is much lower today. On some of the roads going into London, by the motor cars now in use, a wagon freight can be hauled almost anywhere on the continent for from one-half to one-third its cost in the United States. The saving effected in the "road" system amounts to hundreds of millions of dollars every year.

According to the report of the interstate commerce commission in 1908, our railroads handled more than 900,000,000 tons of freight which originated on their respective lines. All this had to be taken to and from the cars. A great deal of it was made up of the products of the farm and the forest, and it is estimated that at least 200,000,000 tons of it had a haul of nine miles at a cost of 25 cents a ton. That bill alone would represent more than \$400,000,000, and other freights. Handling would run the cost to \$500,000,000 or over. Now suppose we cut the wagon freight bill in half, or to 12 1/2 cents a ton, which is still far above the cost of hauling in Europe, and the saving would be \$250,000,000 a year.

Government Busy Cleaning Out Opium



SLOWLY the federal arm is sweeping in the opium fields. The recent raid here by internal revenue agents, which has cost the government \$8,000 worth of the drug, prepared for smoking, was confiscated and the distributing organization for the District of Columbia broken up. It was one of a series of big hauls in the larger cities of the country in recent months, as a result of which several hundred thousand dollars' worth of the drug is now in government possession.

In the last five months just such hauls, many larger and more important, have been made by means of which agents have in many cases been able to trace the drug to the illicit manufacturer, thus dealing the most serious blow of all. In Terre Haute, Ind., where the richest haul of all was made, nearly \$100,000 worth of the drug was found when the inspectors raided a small river shack where the crude opium was being prepared for distribution to smokers throughout the middle west.

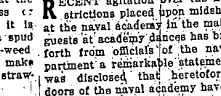
"We are learning how to go about it," they are discovering the hauls of them," said a special officer, "it has been a hard job, because there is no interstate regulation. There is a law for that purpose before congress now."

Mammoth Guns to Guard Panama Canal



THE greatest gun ever built will become part of the coast defense of the Pacific and of the Panama canal. The giant weapon is now at Sandy Hook, N. J., but according to orders received from the war department will soon start on the most remarkable journey ever taken by a weapon of its size. It weighs 350 tons, is 50 feet in length, with a 16-inch caliber and power to throw a 2,400-pound projectile a distance of 33 miles. The gun is being moved because war authorities believe New York is in less danger of being attacked than the west end of the Panama canal. There is no ship that pokes its nose above the horizon will be safe against the monster gun for with a single well-directed shot it could send to the bottom the largest war craft the world knows of.

Bar Unbidden Guests From Naval Ball



RECENT agitation over the new restrictions placed upon midshipmen at the naval academy in the matter of guests at academy dances has brought forth from officials of the navy a payment of a remarkable statement. It was disclosed that heretofore the doors of the naval academy have been opened wide on the evenings of dances, and all presenting themselves have been admitted without question. Several embarrassing situations have developed from time to time involving midshipmen in serious trouble. Therefore, it is stated, the academy officials will require that no person be admitted without presenting a card of invitation, and the names of all persons to whom such cards are issued are to be listed.

"The invitations to balls and hops at the naval academy," says the statement, "have been either a source of misunderstanding or a cause for attempting to slip up and pretend to be a friend of some one of the academy but would de-

Bucelle Music.  
Little Willie, being a city boy had never seen a cow. While on a visit to his grandmother he walked out across the fields with his cousin John. A cow was grazing there, and Willie's curiosity was greatly excited.  
"Oh, Cousin John, what is that?" he asked.  
"Why, that is only a cow," John replied.  
"And what are those things on her head?"  
"Horns," answered John.  
Before they had gone far the cow mooed long and loud.  
Willie was astonished. Looking back, he demanded in a very fever of interest:  
"Which horn did she blow?"—Everybody's Magazine.

Wednesday Midland.  
A Broadway actor got carried away by the spirit of the times and remained carried away for several days. He came to himself in his own room without knowing exactly how he got there. A friend sat beside him.  
"Hello," he said, as he opened his eyes, "what day is this?"  
"This," said his friend, "is Thursday."  
The invalid thought it over a minute.  
"What became of Wednesday?" he asked.—Saturday Evening Post.

Diphtheria, Quinsy, and Tonsillitis begin with sore throat. How much better to cure a sore throat in a day or two than to be bed for weeks with Diphtheria. Just keep Hamlin's Wizard Oil in the house.  
What has become of the old-fashioned politician who used to imagine he was destiny's only son?—Toledo Blade.  
Mrs. Whalton's Soothing Syrup for Children teething, softens the gums, reduces inflammation, allays pain, cures wind colic, etc. a bottle.

If every man had all the money he wanted, the devil would get us all.

Catarrh

One of the most common of blood diseases, is much aggravated by the sudden changes of weather; at this time of year. Begin treatment at once with Hood's Sarsaparilla, which effects radical and permanent cures. This great medicine has cured 40,366 Testimonials.

Spinal Irritation

The Disease That Causes Pain, aching or bracing in back part of head or base of brain; pulling of cords in neck; trouble with eyes; pain between shoulders or in other parts of spine, or a burning, aching, tenderness or soreness; both of constitution or pain around body; or aching of joints; or frequent irregular aching; peculiar, almost indescribable pains or distress in chest, stomach, kidneys, or other parts of chest or abdomen; rheumatism; or any of the above, or a combination of them. Hood's Sarsaparilla, which effects radical and permanent cures. This great medicine has cured 40,366 Testimonials.

DR. J. D. KELLOGG'S ASTHMA

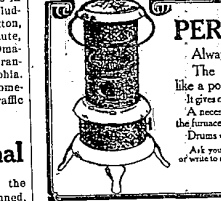
Remedy for the prompt relief of Asthma and Hay Fever. Ask your druggist for it. Write for FREE SAMPLE. NORTHROP & LYMAN CO. LUM., BUFFALO, N.Y.  
KEYSTONE CEILING  
A beautiful finished ceiling of 14 ft. square and 16 ft. square. Write for catalogue. KEYSSTONE CEILING CO., Brooklyn, N.Y.  
DEFIANCE STARCH  
Agents Wanted to introduce good quality Starch. Address: NORTHROP & LYMAN CO. LUM., BUFFALO, N.Y.  
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Aids Nature

The great success of Dr. Pierce's Golden Medical Discovery in curing weak stomachs, wasted bodies, weak lungs, and obstructed and lingering coughs, is based on the recognition of the fundamental truth that "Golden Medical Discovery" supplies Nature with body-building, tissue-repairing, muscle-making material, in concentrated and concentrated form. With this help Nature supplies the necessary strength to the stomach to digest food, build up the body and thereby throw off lingering chronic coughs. The "Discovery" re-establishes the digestive and nutritive organs in sound health, purifies and enriches the blood, and nourishes the nerves—in short establishes sound vigorous health.

If your dealer offers something "just as good," it is probably better FOR HIM—it pays better. But you are thinking of the cure not the profit, so there's nothing "just as good" for you. Say so.

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PERFECTION SMOKELESS OIL HEATER

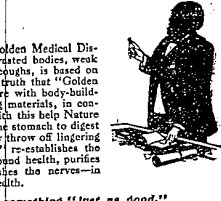
Always ready for use. Safest and most reliable. The Perfection Smokeless Oil Heater is just like a portable fireplace. It gives quiet, glowing heat whenever, wherever, you want it. A necessary in hall and spring, when no cold coal or gas is the furnace. Durable and safe as an ordinary heater in midwinter. Drums of blue enamel or plain steel, with nickel trimmings. Ask your dealer to show you a Perfection Smokeless Oil Heater, or write to any agent.

HENKEL'S

BREAD FLOUR. Two cargoes of Northwestern Spring Wheat have already this season gone into our elevators to be ground into this wonderful flour for bread baking.  
VELVET PASTRY FLOUR. A soft winter wheat flour wonderfully milled for the delicate possible cakes and pastries.  
PANCAKE FLOUR—GRAHAM FLOUR—CORN MEAL.  
Recommended by all users.  
FLOUR  
Rayo Lamps and Lanterns  
Scientifically constructed to give most light for the oil they burn. Easy to light, clean and rewick. In numerous shapes and styles, each the best of its kind.  
Ask your dealer to show you his line of Rayo Lamps and Lanterns, or write for illustrated booklet direct to any agency of the Standard Oil Company (Incorporated).

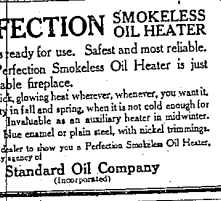
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\$2.50, \$3.00, \$3.50 and \$4.00 SHOES  
All Styles, All Sizes and Widths, for Men and Women  
THE STANDARD OF QUALITY FOR OVER 30 YEARS  
The workmanship which has made W. L. Douglas shoes famous the world over is maintained in every pair.  
If I could take you into my large factories at Brockton, Mass., and show you how carefully W. L. Douglas shoes are made, you would then realize why I warrant them to hold their shape, fit and look better and wear longer than other makes for the price.  
CAUTION: Beware of cheap imitations. W. L. Douglas shoes are made in Brockton, Mass., and are stamped with my name and the name of my factory. Beware of cheap imitations. W. L. Douglas shoes are made in Brockton, Mass., and are stamped with my name and the name of my factory.  
ONE PAIR OF MY TOES W. L. DOUGLAS shoes. TWO PAIRS OF ORDINARY BOOTS shoes. Part Color Lighter Green Leather.



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