

HOW TO MAKE AND KEEP THE ROADS SMOOTH

American Highway Association.

The traffic on earth and gravel roads has a constant tendency to develop ruts, chuck holes, and depressions. The chief aim and purpose of road maintenance is to prevent and remedy this destructive action. To be successful and efficient, road maintenance must be systematically and continuous. Haphazard work is extensive and unsatisfactory.

If the road is very rough and uneven or the crown very low the road machine or grader is very efficient for placing it in shape. One must guard, however, against the all too common practice of scraping the sod and other vegetable matter and refuse from the sides and ditches on to the road. In general, on the clay and heavy soil roads all vegetable or spongy material should be carefully excluded. Such materials absorb moisture readily and furnish but little resistance against the wear. The road surface should be built up with the best material possible—material which will pack and consolidate under traffic and which will be as nearly water proof as possible and will wear uniformly.

In general the road machine or grader should be used in the spring of the year while the ground is moist and in such condition that it will work easily and at the same time pack well under passing traffic. Considerable skill and judgment is required to use the road grader to the best advantage. An unskilled and careless operator will sometimes actually leave the road in a worse condition than when he began work. Do not scrape sod and refuse into the road. Good earth is far better as it will not decay nor absorb moisture so readily. Do not be guilty of the too common practice of leaving a windrow of clods or loose earth along the middle of your roads to impede traffic and absorb water at the first rain. Leave the roads smooth over the entire surface and traffic will spread and be less likely to produce ruts. Always use the grader in such a way as to make the road better and not worse for the passing traffic.

When the road has been placed in good condition as to crown and smoothness the road drag is the best tool for maintaining it in good condition. Drag the road after each rain while the surface is still moist but not sticky. Use a light drag and move only a very little earth—just sufficient to fill the ruts and depressions and leave a slight surplus if the crown is low. Ride on the drag and shift your position according to the amount of earth necessary to be moved. If the rain has been of long duration it may be advisable to drag the road twice; first, very soon after the rain, and again when the clay is drying out of beginning to set.

Do not drag a dry road. Successful dragging is dependent on a certain amount of water or moisture in the road surface. Practically all clays and most soils, if not too sandy, will puddle if worked when wet, and on drying out will set very hard. The drag in connection with traffic is essentially a puddling machine which, when properly used, leaves the road surface crowned and covered with a smooth layer of puddled and densely packed soil. This layer is as nearly impervious to water as it is possible to make it. Following rains find little or no place for lodgement, as the water quickly runs off to the side ditches. Unless the rain is long continued the road surface is not softened to any great depth. The prompt use of the drag after each rain leaves the surface smooth and ready to withstand the next storm.

Therefore, to make your road smooth—use a machine or grader to put it in proper shape in the spring of the year. Too keep your road smooth, use the road drag judiciously after each rain. This will keep an earth or gravel road in the best shape in which it is possible to maintain it throughout the year.

THE SHYSTER LAWYER

There are scores of ways in which a slyster lawyer and his tout and his assistant, medical or other, may work. Through ambulance-chasing; through watching newspaper columns for suggestions of actionable libel; through simple blackmail of the innocent, taking advantage of unfortunate coincidence; through blackmail of those guilty of transgression of the social code, punishing thereby innocent relatives; through obstructing corporation changes after purchasing for the purpose a few shares of stock.

Magistrate Corrigan, of New York City, who knows of more such ways, through his bench experience, than he would probably care to tell, lays bare in a recent issue of the New York World some of the harm that unprincipled lawyers can do to the public. He blames two things: "Inhuman newspapers" that publish details of social transgressions, and "hypocritical legislators" who pass hypocritical laws.

WHY HAVE GOOD ROADS

There are an abundance of reasons why we should have good roads, even under normal conditions.

But there are urgent reasons why we should have them this year, when conditions are expected to far surpass even those of normal.

Our roads must be in condition for prompt harvesting of the great crops which the world is demanding of America this year.

Experts in all lines of business predict that 1915 will be the most prosperous year in the history of the United States.

President Wilson has publicly warned the farmers of the country that the task of feeding the world will soon devolve upon us, and he urges us to utilize every ounce of energy and every foot of ground that the supply may be equal to the tremendous demand for food.

Europe today is non-productive, yet the people of those countries must be fed. They must not starve. And America is the only nation that is equal to the gigantic task.

And because this herculean task falls upon the American farmer, it is imperative that no act of ours be left undone that may be productive of greater or swifter results.

And herein lies the value of good country roads.

Tremendous crops may be grown, and harvested, but they must be marketed in record time this year.

And without good roads this cannot be done.

The time is opportune for the people of this community to take up this matter and see that prompt measures are taken to insure the best of roads in the country districts before the time is at hand for the moving of the great crops we are asked to produce.

Horses and mules must draw this produce to the shipping points, and this is a matter requiring both time and animal energy.

An animal possesses only a certain amount of energy, beyond which it may not be taxed, and when that energy is exhausted it ceases to be of the greatest value to its owner, and future movements are retarded because of its lost vitality.

If the country roads are placed in the best possible condition during the spring and summer months, the fall movement of crops will be accomplished with greater ease and less expense than heretofore. And every hour of time will be needed this fall if the farmers heed the call of the world and the warning of our president.

Let us be "up and doing" here, that we may contribute bountifully to our substance when humanity turns to us for bread.

PURCHASE OF LAND UNDER WEEKS LAW

Representatives of Forest Reserve Department have been over the large areas in Western North Carolina recently purchased by the United States Government, and are highly pleased with the purchases made.

The appropriation for the further purchase of lands runs out this year, and the Forest Commission will ask for \$10,000,000 additional to carry on the work already started. Certain lands already or being surveyed will not be taken over unless more money is provided, there being only about \$500,000 remaining unexpended of the \$5,000,000 appropriation originally made.

The commission, which is composed of Secretaries Lane of the Interior, Garrison of the War Department and Houston of the Department of Agriculture and a number of members of Congress is supported in its desire for \$10,000,000 by the various forestry associations.

Great interest in the purchases has developed within the last few years in the South. At first there was much opposition among the native mountaineers to the Government scheme to buy and control lands along the streams in the mountainous sections of the State.

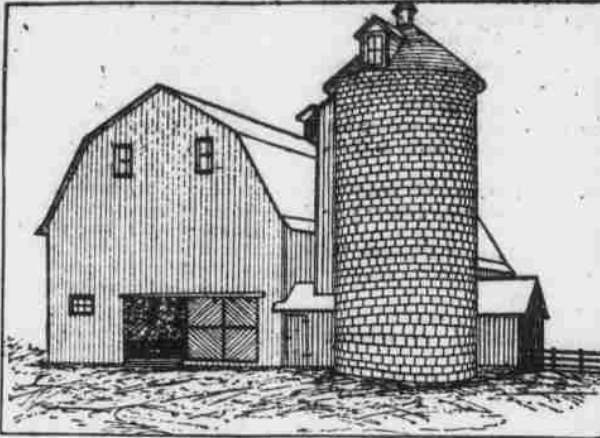
The North Carolina lands taken over under the Weeks law amounts to more than 800,000 acres. The Biltmore tract, with its beautiful scenery, improvements in the way of roads, and well-handled forests, contains 76,200 acres. It is proving a blessing to the people of the mountain section. The Government will open it up next year and it will be a vast, popular playground for tourists and others.

To The Public.

"I feel that I owe the manufacturers of Chamberlain's Colic, Cholera and Diarrhoea Remedy a word of gratitude writes Mrs. T. N. Witherall, Gowanda, N. Y. "When I began taking this medicine I was in great pain and feeling terribly sick, due to an attack of summer complaint. After taking a dose of it I had not long to wait for relief as it benefitted me almost immediately." For sale by all dealers.

The manufacture of macaroni by the Waldensians at Valdese in Burke county is one of the new industries announced in this State.

WHOLE CROP HARVESTED BY USE OF SILO



A Good Silo Adds Beauty to the Farm Yard.

(By W. J. FRASER, Illinois.)

The digestive organs of animals that chew the cud are so formed as to require comparatively juicy and bulky food. The cow cannot, therefore, thrive on exclusively dry food so well as can the horse. The nearest ideal food that can be obtained for the dairy cow is good pasture; but, in many sections, for more than six months in the year green pasture is not available. The best substitutes to use during this period are corn silage and such roots as mangels and turnips. Corn yields an average of twice as much dry matter per acre as do root crops, and since the latter require much more labor, which in this country is relatively expensive, silage is far more economical.

Making corn into silage is a means of preserving the grain as well as the stalk in the best possible condition for feeding and without the expense of shelling and grinding. In feeding whole corn, either in the ear or shelled, many of the kernels are not digested. With silage, the grain being eaten with the roughage, nearly all the kernels are broken during mastication, and since they are somewhat soft, are practically all digested.

By the use of the silo the corn is removed from the field at a time when no injury is done the land by cutting it up while soft. As the corn is cut before the blades are dry enough to shatter, there is no waste from weathering and both stock and grain being in good condition, the whole crop is consumed by the stock, while with dry shock corn a large percentage of the leaves and butts of the stalk is wasted.

It has been determined that one cubic foot of hay in the mow contains about 4.3 pounds of dry matter, and that a cubic foot of silage in a thirty-six foot silo contains about 8.3 pounds of dry matter. From this it is evident that a cubic foot of space in a silo of proper depth will hold more than twice as much dry matter as the corresponding space in a mow. It is also true that on the average a larger amount of digestible feed can be obtained from an acre in the form of silage than in any other way at like expense. Making corn into silage is

then both an economical and compact method of storing feed.

Much damage has been done to the cause of silage by the extravagant claims of its over-enthusiastic friends. Although corn silage is not a complete and balanced ration in itself, it is so well relished that large quantities are consumed. Being a succulent feed, it tends to heavy milk production, and should be given an important place in the ration of dairy cows. It has proved an important factor in steer feeding as well as in milk production, but a steer cannot be finished on silage alone, any more than a cow can produce her best yields of milk on such a ration. To obtain the most economical returns, some dry roughage should be fed in connection with silage, and a legume hay, as alfalfa, clover, or cowpeas, is the best for this purpose, particularly for young stock and cows. Economical milk can be produced from these feeds without the addition of grain, if the cows are not giving more than two gallons of milk a day, providing the corn was well cared and both the silage and the legume hay are of excellent quality. Cows giving a larger yield must have grain added to their ration.

A pasture will carry much more stock during spring, early summer, and fall, than it will through the hot, dry weather of midsummer. By helping the pasture out at this season with partial silage, the cattle not only have better feed during this critical period, but more stock can be carried on a given area than by pasturing alone. As land increases in value and farming becomes more intensive, there is greater need for silage, and the most satisfactory method of providing a substitute is by means of the silo. It requires too much labor to cut green crops every day and haul them to the cows, and besides there is necessarily a great loss in being obliged to feed the crops before they are fully mature and after they are over-ripe.

No crop furnishes more feed to the acre than corn, and with the silo it can be utilized for silage, thus permitting the whole crop to be harvested when at the right stage of maturity and fed when needed, saving both feed and labor.

POTATOES IN COW'S RATION

As Valuable Succulent Food as Any of Roots Like Mangels, Turnips, Etc.—Rich in Protein.

Potatoes are fully as valuable as a succulent food in ration for dairy cows as any of the roots, like mangels, turnips, etc. In food value as shown by their chemical analysis, they are fully equal to any of them, being much richer in starch, equal in protein and also nearly equal in fat. This being the case, it is largely a question of palatability and digestibility. Cows may not at first like potatoes as well as they do roots, but it is largely because they have not been educated to eat them.

When potatoes are very cheap it will pay to feed them to cows, but usually they are worth too much for human food to be used as live stock food. Beets or carrots, etc., are not usually figured as being worth more than four to five dollars per ton for stock food; according to this, potatoes must be as cheap as 15 cents to pay to feed them.

KEEP SILAGE OVER SUMMER

Extra Supply Will Not Spoil During Hot Weather in Average Well-Built, Well-Filled Silo.

Don't worry! The extra supply of silage left over from the winter's feeding will not spoil during the summer in the average well-built, well-filled silo. In case of doubt, cover what silage remains with straw, hay or barn sweepings, tramp down hard and damp thoroughly.

At corn harvest remove the covering and fill as usual. You'll never know the difference. But better than all this, supplement your pastures with silage during the dry spell this summer.

Black Pig is Preferred.

In the northern states color is of little importance, but in the south a large number of pork-growers prefer a black hog, as being less susceptible to the heat and sun.

However, some southern hog-growers still cling to white hogs and seem to experience no trouble from that source.

LEGUME TO FERTILIZE SOIL

There is No Excuse for Man Who Cultivates Poor Land in South—Yields Can Be Doubled.

It will pay to grow some legume after oats or wheat, or in the corn, or during the winter between crops of cotton and corn to plow under to fertilize the soil.

It will pay better to feed legumes to good live stock and return the manure to the soil than to plow the crops under direct for fertilizer, but on soils that will not now produce a profitable crop it may be the best thing to plow under at least one or two crops. It does not pay to cultivate poor soil, and it only costs the seed and labor of seeding to grow a crop that will more than pay for this cost when plowed under, in the increased yield the first year and then repeat the increase the year following. There is no excuse for the man who cultivates poor soils in the South. He can grow the same one crop a year he is now trying to grow and between these at practically no extra cost grow a crop that will quickly double his yields.—Progressive Farmer.

STIMULATE A SLUGGISH JACK

Veterinarian of Oklahoma Experiment Station Gives Direction for Handling Breeding Animal.

A breeder writes to Oklahoma A. and M. college that he has a jack that is apparently in good health, but refuses to work. Dr. W. P. Shuler of the department of veterinary medicine of Oklahoma A. and M. college gives the following directions for handling a breeding animal of this kind:

"Provide sufficient vetol tablets for a ten-day course of treatment. These tablets contain yohimbine, a recently discovered drug having a powerful stimulating action on the sexual organs.

"Secure tablets which contain one grain each of this drug. This is a dose. It should be administered three times daily in the food, or dissolved in a half-pint of water as a drench.

"This is a much safer drug to use than cantharides or 'Spanish fly,' and is surer in action."

TO TEACH IN NOVEMBER

Moonlight Schools For Adult Illiterates

The month of November has been chosen, as has been announced in The Courier, by the State committee on Social Service as the period during which the moonlight schools shall be held throughout the State.

It has been decided to have meetings of the county committees on social service with the teachers of the counties at each county seat a week or more before the time for the schools to begin, and then to have meetings of the local committees and the local teachers on the eve of the opening of the schools, these to round out the arrangements and stir enthusiasm to the utmost. It will be permissible to change the dates in counties in which the county schools are not actually in progress during the whole of November.

The 12 lessons each on reading, writing and arithmetic, especially adapted for moonlight school work, have been perfected and will be adapted for publication in pamphlet form and for publication in the weekly newspapers of the State, so that the newspapers can be used as the actual text books in their respective counties.

Besides the whole educational forces of the State, including over 5,000 school teachers, there are pledged to special effort, the civic service organizations of the State, the Federation of Women's Clubs with Mrs. Lingle of Davidson College at the head of a special committee of 100 of the leading women of the State, the Farmers' Union, the Junior Order United American Mechanics and other strong forces throughout the State.

The social service committee has decided to launch no other civic service movement this season and concentrate energies and effort on this moonlight school movement.

Biliousness and Constipation.

It is certainly surprising that any woman will endure the miserable feelings caused by biliousness and constipation, when relief is so easily had and at so little expense. Mrs. Chas. Peck, Gates, N. Y., writes: "About a year ago I used two bottles of Chamberlain's Tablets and they cured me of biliousness and constipation and biliousness. For sale by all dealers."

KEEPING SWEET POTATOES

The keeping qualities of the sweet potato depend upon the variety grown, the type of soil in which it was grown, and the methods of handling at digging time. Clay soils on which highly nitrogenous fertilizer has been used will produce rough cracked potatoes.

Such potatoes are generally poor keepers. A poor sandy soil will produce small, well matured, smooth, uncracked potatoes. Such potatoes are usually good keepers.

Too much care can not be spent in digging the potato. If carelessly dug and handled the potato becomes bruised, hence they very easily rot. When digging it is best first to cut the vines, preferably with a vine cutter, and then run under the potatoes with a regular sweet potato digger. The diggers are similar to a plow but have fingers attached to a short mould board. After digging, the plants or hills should be lifted and laid carefully in piles, after which they can be picked off by hand. This method will prevent a lot of needless handling and bruising. When the potatoes are shaken off in heaps, or are picked and pitched to a heap or into a basket they are badly bruised and skinned, and when in this state are in a very favorable condition to rot. Before being placed in storage they should be allowed to dry out as much as possible.

The successful keeping of sweet potatoes depends on the following principles:

1. Harvest potatoes before they are frosted.
2. Don't bruise them, handle as little as possible when digging.
3. Throw out all cracked and broken potatoes.
4. Dry out as much as possible before storing.
5. Keep dry.
6. Keep warm.

WINSTON-SALEM MAN SAVED FROM DEATH

J. E. Erwin Says Wonderful Remedy Brought Him Astonishing Relief.

J. E. Erwin of Winston-Salem, N. C., was for a long time the victim of serious disorders of the stomach. He tried all kinds of treatment and has many doctors.

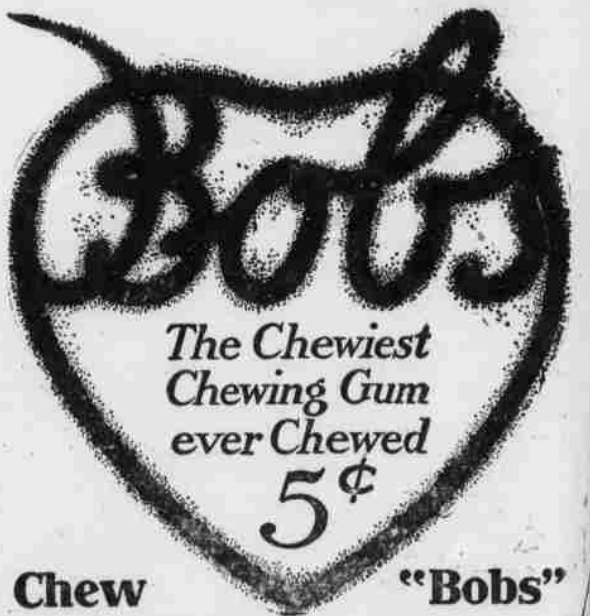
One day he took a dose of Mayr's Wonderful Remedy and was astonished at the results. The help he sought had come. He wrote:

"I am satisfied through personal use of the life-saving powers of your Wonderful Remedy. You have saved my life. I could have lived but a few weeks more had it not been for your remedy. I am inclosing a list of friends sufferers who ought to have some of your remedy."

Worth Their Weight in Gold.

"I have used Chamberlain's Tablets and found them to be just as represented, a quick relief from headaches, dizzy spells and other symptoms denoting a torpid liver and a disordered condition of the digestive organs. They are worth their weight in gold," writes Miss Clara A. Driggs, Elba, N. Y. For sale by all dealers.

Children Cry FOR FLETCHER'S CASTORIA



Chew "Bobs"

5c. the packet or two "Bobs" for a cent at all the better stands and stores.

AND now Hearts are trumps in chewing gum!

"Bobs" made it hearts—raised the bid on the pep, the flavor and the chew—and put over a grand slam. Look for the candy-coated chewing gum hearts—"Bobs."

Everywhere's "Bobs"