

ROAD BUILDING

TRANSPORTATION IS COMMUNITY FACTOR

Community cannot hope to prosper unless its roads are bad, for transportation is the prime factor in the development of any community and where roads are inadequate and where the means of transportation will be inefficient, progress is slow and it requires more time and money to reach than it would on a dirt road as on a paved road. They also have

that a motor truck will run as far on a gallon of gasoline as a horse-drawn wagon will on a concrete road as it will on a dirt road with the same amount of

illustrations, shown here speak for themselves in bearing out these facts. On the concrete road the motor truck glides along smoothly. The even surface of the road offers no bumps or ruts.

to Navigate a Road Like This. It is virtually no resistance to the muddy, rutty earth road shown in the other photograph, how it illustrates an altogether different picture. Because of the many irregularities and the great resistance to wheels of vehicles, only small loads can be carried. The large load is well as easily on the paved road as the small load carried in the mud being drawn over the earth

Tennessee Has Big Sum to Spend for Highways

Tennessee has available for highway construction during 1924, \$9,854,848, with a maintenance fund from counties of \$1,400,000, or a total of \$11,254,848. It is stated in "Tennessee Highways and Public Works," the annual report of the state highway department.

It means that the state has available for highways during 1924 eleven and a quarter million dollars, this sum being given first position in the budget of the new highway department.

As shown that the state has now completed construction 484.12 miles of the primary system of highways, and with \$4,477,944 available for work upon 477.94 miles, the department will have completed construction by the end of the year.

Comparing the above figures a little later in the magazine says, it will be seen that by December 31, 1924, 748.8 miles of primary roads will be under construction, leaving 485.3 miles to be completed at later dates. The total for the remainder of the year will be under construction 243 miles primary roads. Contracts let February 1 and May 9 have already bonded under contract \$6.8 million. Continuing the rate of primary roads in the state, the department will be under contract by the end of January, 1925, 1,000 miles of primary roads, and by the end of the year, 1,677 miles of primary roads, and 16.7 miles of secondary mileage, and 100 miles of state-aid mileage.

Many Trucks in Use

There are approximately 300,000 trucks in use on farms in the United States at the present time. It averages very near one truck to every 100 acres of farm. This is a remarkable development of truck usage in the United States when it is recalled that only fifteen years ago a horse-drawn wagon was used for the same purpose. The farmer now realizes that the horse-drawn wagon rendered by a horse of value that he can get without one.

Auto Taxes Pay Bill

The statistics compiled and reported to the state road commission by the state and local federal aid of the United States is paid by automobile taxes, with a comfortable margin. Since 1917, the federal government has collected from the automobile industry, in taxes, the sum of \$88,012,221. In the same period the total of federal aid for road building has been \$264,782,216, or only 34 per cent of the special motor vehicle and accessory taxes.

ORCHARD GLEANINGS

PEACH YELLOWS IS DANGEROUS DISEASE

The fact that the peach diseases called yellows and little peach have not been severe the past few years has bred a feeling of false security on the part of some growers who believe that these troubles are on the decline.

In an article in New Jersey Agriculture, in which he gives a detailed description of these destructive diseases, William H. Martin, plant pathologist at the New Jersey agricultural experiment station, says in substance: Peach yellows is by no means a new disease in New Jersey; the term was coined as early as 1791, when the disease made its appearance in the lower Delaware river valley.

The most characteristic symptom of yellows, the article reads, is the ripening of the fruit several days to two weeks in advance of that of a normal tree. In addition to this the fruit from an affected tree is commonly more or less red-spotted and blotched. The spots occur either on the skin or throughout the flesh. Little peach differs from yellows in that the fruit remains small and ripens from seven to ten days later than normal fruit of the same variety, and the diseased fruit is frequently flattened and somewhat irregular in form.

A tree affected with yellows develops sickly, wiry and finely branched shoots on the trunk. These much-branched shoots may appear on a very young tree and are an important symptom of the disease. Young trees show a drooping of the leaves toward the branches and trunks of the tree, combined with a slight curling of the tips toward the petioles or leaf stems. The foliage of the tree is frequently yellowish green, although this is not always the case. On a tree affected with little peach the leaves droop toward the branches and are curled and rolled; their color becomes lighter, usually a mottled yellow-green.

In conclusion Dr. Martin says: "In many sections small, neglected orchards exist which contain a large per cent of diseased trees. Conditions are better in the imported fruit-growing sections, but a number of diseased trees are to be found. These trees are a menace to the healthy trees and should be destroyed. It is a waste of time and money to attempt to bring them into bearing."

The New Jersey State Horticultural society advocates that active steps be taken to reduce these dangerous diseases, and in the opinion of Doctor Martin, all peach growers would do well to co-operate in a plan of eradication.

Spray From Under Trees to Control Aphid Pests

It is extremely difficult to control aphids on apple trees by spraying unless a systematic method is followed in spraying each tree. In experiments conducted in apple orchards in western New York by the entomologists of the New York experiment station at Geneva, N. Y., it was found that when spraying was done from the top of the spray tank the results were quite uncertain, due to the fact that the insects congregated on the lower branches of the trees where the spray mixture failed to reach them. At the same time, in orchards where the station spray system was followed, in which the spraying was done from the ground and under the trees, practically complete control of the pests was accomplished.

In the station method, the spray outfit is equipped with a sufficient length of hose to enable the nozzle man to work from the ground and under the tree. He then takes up certain designated positions in spraying each tree which insure the spray mixture reaching the underside of every branch and twig. By moving from place to place and by maintaining a pressure of at least 200 pounds at the spray tank, it is claimed that each tree can be completely covered in a relatively short time. The station tests and spray system are fully described in Bulletin 487 which may be obtained from the station free of charge. New York Experiment Station.

Orchards in Sod

There are probably more orchards in sod than under tillage in America. This does not detract from the desirability of sod, but, since letting trees run to grass is cheap and easy and tilling them is laborious and expensive, it chiefly shows that many fruit growers are careless, or lazy, or slovenly or practice not spending where they should practice right spending.

Handle Fruit Carefully

After fruit is picked and packed, it must be carefully handled on its way to market. Good roads and wagons or trucks with good springs have done much to lengthen the life of small fruits over what it formerly was. The precooling and icing of refrigerator cars for long distance transportation of small fruits would be of no avail unless proper transportation from the fields with the fruit protected from dust and sun was insisted upon.

Tillage for Fruit Trees

Everyone who grows crops accepts this generalization as to the value of tillage in general agriculture. Yet somehow the notion exists that fruit trees are unlike other crops and do not need tillage. It is a notion that has been discredited many times by careful experimental work, and every observant man may note in any fruit region in America that the health and energy of any kind of fruit plant is better maintained in tilled than in untilled land.

POULTRY

PREVENT SPREAD OF DISEASE OF CHICKS

The method of spread or transmission of white diarrhea is well known. That method is this: Chicks that survive the white diarrhea, contain the organisms in their bodies and a certain percentage of the eggs laid by that hen when grown are infected before hatching. The chicks come out of the shell with the disease and immediately show symptoms of white diarrhea and this spreads through their first four days of life to all the other chicks in the flock. During the first four days of life, if one chick comes out of the batch infected, others of that particular batch will become infected.

Prevention consists in hatching chicks from eggs free from infection. If your chicks get the disease, treatment is practically useless. Attention would be better given to prevention than to treatment. Kill all noticeably diseased. Remove all free from disease away from infected premises.

The only satisfactory method of determining whether a hen is infected is by means of blood test. Draw a small vial of blood from each hen that is to be bred from. The college is testing blood free of charge at the present time and will soon have a bulletin available explaining this method.

The proper time to test for white diarrhea is in the fall after culling. Test all hens you propose to keep over for breeding purposes. One test may not eliminate all disease. Test at least every year, or every six months, until you know they are free. Do not add to your flock any bird you do not know to be free from this disease.

All may soon be forced to test as people are going to stop buying indiscriminately from hatcheries or breeders whose eggs come from unknown, untested stock. They will buy from the hatchery that tests the hens that lay the eggs. The blood test is the only means at all satisfactory for the elimination of white diarrhea, as it eliminates the hen that lays the eggs that are infected.—Dr. H. E. Newsom, Pathologist, Colorado Experiment Station.

Convenient Nests Easy to Keep in Good Order

Good nests are easy to clean and easy to get at when collecting eggs. They are most convenient to reach when located under the dropping boards or on the side walls. Unless the dropping boards are at least four feet from the floor, the nests should not be under them.

There should be one nest for every four birds in the pen. A box 12 by 12 inches is the most suitable size for the average bird. A 1 by 4-inch piece placed about four inches in front of the nests will give the hen a place to step from into the nest. By hinging this strip it can be used to close the nests against pullets in the fall and the broody hens in the spring.

The New Jersey experiment station ranks nesting materials in the following order: hay, shavings, sawdust and straw. To make cleaning easy, they suggest building nests in sections 12 by 12 by 16 inches, with a strip in front of 1 by 4-inch material to hold in the nest filler and a similar strip for the back of the nests. This sets on a platform the width of the nests and as long as the row of nests is to be. The nests are covered with a top of matched lumber which answers for the platform for the second tier of nests. When it is desired to clean the nests, they are simply pulled off the platform and all the nest material falls to the floor. These nests can be used either under the dropping boards or on the side walls.

Chicken Lice Destroyed by Dipping in Solution

Chicken lice can be easily destroyed by dipping the birds in a solution of sodium fluoride and water. Five ounces of sodium fluoride dissolved in a tub containing five gallons of water will be sufficient to treat 100 adult birds or twice that number of chickens ten to twelve weeks old. Every bird on the place should be drenched in this solution to entirely eliminate poultry lice for the next few months. Select a warm day and dip the birds early in the forenoon.

Meat in Growing Mash

Do not feed over 10 per cent meat in the growing mash, as a high protein ration will mature the pullet instead of developing growth. Thirty-five pounds of cornmeal, 25 pounds bran, 25 pounds middlings, 10 pounds meat scrap and 5 pounds bone meal is suggested. Milk may replace the meat, but do not leave out the bone meal, particularly in this case.

Remedy for Scaly Leg

Scaly leg is a common summer disease among poultry. It is caused by a small parasite that burrows into the scales of the bird's leg, causing them to protrude. One good way to cure it is to fill an empty fruit can with coal oil and keep the legs of the bird immersed in this for a few minutes. If this is done twice a week for a month it will usually kill the parasites, but it is well to supplement this treatment by using lard as an ointment for the legs.

Critical Period for Hens

The molting period is a critical time for the laying hen. It is possible that you can help her through the moulting by feeding her feather-producing foods. This means to give her enough protein. The feeding of a wet mash once a day, containing milk, will help. A little oilmeal added to this ration will improve it. It is possible that by carefully handling the old stock they will continue to lay throughout the molt. This, however, requires great skill.

VARIOUS USES FOR WIRE FRYING BASKET



Wire Basket for Deep Fat Frying.

(Prepared by the United States Department of Agriculture.)

If one happens to possess a wire frying basket, which of course is kept scrupulously clean, there are many daily uses for it besides the occasional deep-fat frying for which it was bought.

After washing fruit, celery or lettuce the wire basket will be found a more effective drainer than a colander. It can be set directly on the ice to keep the product crisp, says the United States Department of Agriculture.

Scalding Tomatoes. All the tomatoes for a salad may be scalded before peeling by lowering them quickly into boiling water for a few seconds. Some peel peaches in the same way. Beets may be readily peeled if after cooking they are plunged into cold water merely long enough to loosen the skin but not chill the hot vegetable. In boiling eggs for the family breakfast, place the required number in the wire basket and lower into boiling water. When the eggs are done they can easily be removed all at the same time by lifting out the basket. In frying croquettes or potato chips the use of the wire basket to hold the material to be fried saves time and energy.

Frying Doughnuts. For frying doughnuts instead of placing the doughnuts in the basket use the bottom of the basket to force the doughnuts under the surface of the fat as soon as they rise to the top. This use of the basket saves time and fat, for doughnuts fried under the fat absorb less grease and can be fried in a shorter time. The basket can also be used to drain the fat from the doughnuts after frying.

Another use for the wire basket is in grating soft cheese. It is much easier to force the cheese through the meshes of the wire basket than through a grater.

DIFFERENT WAYS TO MEND RUGS AT HOME

(Prepared by the United States Department of Agriculture.)

Several methods of home mending of rugs and carpets have been tested in the United States Department of Agriculture, which gives the following suggestions:

Select wools for mending to match those of the rug in color and texture, if possible. These may be raveled from scraps of carpet, or bought from carpet dealers, or if necessary heavy knitting yarns may be dyed to match. Carpet yarns are stiffer and more durable than ordinary wools and should be used if obtainable. A stout needle with a large eye will, of course, be needed, and curved scissors are particularly convenient for clipping the threads when mending a rug or carpet with velvety pile.

Darn Ingrain carpet with the over-and-over stitch used in mending stockings, and work in the design on this background.

In pile rugs, such as brussels, wilton, and some kinds of oriental weaves, replace the linen, jute or cotton backing first and then work in the pile with colored yarns. Just how to make the pile stitch depends on the texture of the rug, but a good method can quickly be developed by experimenting. It is generally made by knitting the yarn around the warp in such a way that it holds firmly and the ends stick out to form the velvety surface of the rug. These ends can be clipped off after each stitch is taken, or they can all be sheared at once after the entire hole is filled. Ragged edges make otherwise good rugs look shabby and are not difficult to repair. Sometimes they can be bound or blanket-stitched or overcast with stitches run into the rug at least a half inch or, what is much better looking, an excellent salvage similar to that on oriental rugs can be made. Lay one, two or three cords along the edge and with black or neutral-colored wool darn them to the rug with over-and-under stitches set close together. Choose cords of such size that when covered with the wool a durable, flat strip about the thickness of the rug is formed and use hard-twisted wool or regular carpet wool if it can be obtained.



Mending a Rug at Home.

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Spoon Bread Is Always Acceptable in Morning

There are many ways of making corn bread, using part or all cornmeal. Old-fashioned spoon bread, so-called because of its soft, moist texture, is one of the most popular corn breads. The United States Department of Agriculture has tested this recipe:

- 1 cupful corn-meal
- 1 cupful water
- 1 tablespoonful salt
- 1 egg
- 1 cupful milk

Place the meal, salt, shortening and water in a double boiler and cook for ten minutes, stirring until smooth and thick. Allow this to cool somewhat, then add the well-beaten eggs, and finally thin down to a batter with the milk. Beat well, pour into a greased pan or baking dish, and bake in a rather hot oven for about 30 minutes.

HOUSEHOLD FACTS

People who get fussy about their digestion and assume personal control of their nerves have "nerves" and are apt to have no digestion.

Throwing away the water from cooked rice, macaroni, or vegetables isn't a state-prison offense, but it is an offense against the family pocket-book and nutrition.

WHOLE FAMILY ENDORSE TANLAC AS BEST TONIC



"Tanlac has been our constant friend for years, and my wife and myself and eight children are all enjoying wonderful health, largely due to this medicine," is the remarkable statement of Harry H. Pistole, 310 Archer St., Waco, Texas.

"In my own case Tanlac has done what seemed to be impossible. When I began taking it my stomach was in such a bad fix that I had to live on a milk and egg diet and I was almost a skeleton. I had been flat on my back in bed and under treatment for 18 months and felt that my time was about up. "After my case had been given up as hopeless and I thought I was beyond redemption a relative put me on to Tanlac, and the result is, I gained 20 pounds, and enjoy as good health

as anybody could wish. "My wife was all broken down in health. But now she weighs 155 pounds, and is strong and well and I am giving Tanlac credit for it. We give Tanlac to the children to tone them up and make them grow, and nobody ever had a healthier set of children than we have. "Tanlac is certainly the greatest medicine on earth for anyone whose life is wrecked by bad health. We are sure to have a great deal to praise Tanlac for at my house." Tanlac is for sale by all good druggists. Accept no substitute. Over 40 million bottles sold. Tanlac Vegetable Pills for constipation; made and recommended by the manufacturers of Tanlac.

Eat Sweets, Lose Weight Stout persons, anxious to "reduce" usually make a special point of avoiding sweets. This is a mistake, for sweets offer a valuable weapon to those who would lose weight. Too much food is the usual cause of corpulence, and a slim diet offers the obvious remedy. A scant meal, though, does not seem so scant if brought to an end with dessert, and the practice of following lean meals with sweets is recommended as an aid to perseverance with a "reducing" diet.—Popular Science Monthly.

English Leaning Tower The tower of the Salisbury cathedral in England, too heavy for its chalky site, leans about twenty-eight inches out of plumb. Don't checkle if you put over a substitute when an advertised product is called for. Maybe your customer will never come back. Ben Mulford, Jr.

MOTHER!

Clean Child's Bowels "California Fig Syrup" is Dependable Laxative for Sick Children



Hurry, Mother! Even a fretful, feverish, bilious or constipated child loves the pleasant taste of "California Fig Syrup" and it never fails to sweeten the stomach and open the bowels. A teaspoonful today may prevent a sick child tomorrow. It doesn't cramp or overact. Contains no narcotics or soothing drugs.

Ask your druggist for genuine "California Fig Syrup" which has directions for babies and children of all ages printed on the bottle. Mother! You must say "California" or you may get an imitation fig syrup.

It Often Happens The danger in having liberal ideas that you may cling to them and be called an old fogey ten years from now.—Duluth Herald.

It is possible to win temporary approval without deserving it, but you can only keep it by merit.

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