

NEW YORK AND LOS ANGELES BUS SERVICE



The first transcontinental bus service plying between New York and Los Angeles regularly has been inaugurated. The trip takes 5 days and 14 hours and passengers may stop overnight at any city through which they pass and take the next incoming bus the following morning. The 26 chairs may be used in either a sitting or reclining position, thus affording ease and comfort throughout the journey. This is the longest bus ride in the world.

MUCH OF FATIGUE IS UNNECESSARY

Many Little Driving 'Tricks' Which Will Conserve Driver's Energy.

"Much of the fatigue experienced by the average motorist is owing to an unnecessary expenditure of energy in the act of handling his automobile in traffic," says Charles M. Hayes, president of the Chicago Motor club.

Approaching Curves. "There is plenty of available evidence to substantiate this point. Take the case of curves, especially on a strange highway. It is a driving error to approach a curve at high rate of speed, and to overcome this the driver is forced to apply his brakes suddenly, and at the same time put forth a great deal of strength to steer the car around the curve safely. There may be many curves in the course of a day's drive and if the driver continues to approach them at a high rate of speed, he will have used up a great deal of energy by the end of the day. "Then there is the driver who thinks there is no necessity of shifting to second gear when descending a hill, in spite of warning signs. This means that he will have to hold his car back with the brakes—another useless expenditure of strength.

Another Driving Blunder. "Approaching at high speed any point where it is known in advance that a stop must be made is another driving blunder that leaves the driver exhausted at the end of the day, as this practice requires sudden and vigorous application of brakes, and as a result, muscular fatigue. "There are many little driving 'tricks,' which, if the motorist will learn and practice, will not only conserve the driver's energy, but will also lengthen the life of the car."

Road Hogs Develop in the First 1,000 Miles

There is one time in the career of nearly every motorist when he subconsciously is inclined to be a road hog. Unless he is aware of this temptation he is likely to make himself a general nuisance. The time in question is right after the acquisition of a new car. Breaking in the engine carefully requires driving slowly for the first 1,000 miles. Now, driving slowly is only one element of road-hoggishness, but it is the first one. The second, keeping in the middle of the road, is likely to be the product of inattention, or concentration on the operation of the machine in the case of the new car owner.

Therefore, he should keep a close check on what part of the highway he uses in putting the first 1,000 miles on his brand-new speedometer. Otherwise, he becomes a road hog.

Motorists Pay Big Road Tax Over Poor Highways

Motorists pay a bad roads tax equivalent to 22.3 cents on every gallon of gas consumed on a poor highway. The Chicago Motor club reports that this conclusion was drawn from experiments recently conducted in Washington, Iowa and North Carolina.

The figures were based on the premise of a car making 10 miles to the gallon on a rough highway. On a basis of a speed of 33 miles per hour, the test showed the cost of gasoline and tires per one thousand miles over rough roads used in the experiments was \$35.10 for an average four cylinder car weighing 3,500 pounds loaded. The cost for the same car at the same speed over a very smooth improved road was only \$12.50, according to the tests.

Adjustment of Bearings Depends on Crankpin

Bearing adjustments are incomplete if they are made without first having determined the condition of the crankpin, which is susceptible to uneven wear. It frequently happens that what looks like a perfect job of bearing tightening is most disillusioning when the engine is started, largely because the journal is worn "out of round." The condition of this part should be determined before any adjustment is made. If grinding is necessary, it is a fairly simple job with the up-to-date facilities of the average repair shop.

Simple Way to Thaw Out Radiator When Frozen

If your radiator freezes while you are driving, a simple way to thaw it is to attach a short length of rubber hose to the overflow pipe from which



With a length of hose attached to the lower outlet of your overflow pipe, you can convey steam through the fins of a frozen radiator and speedily thaw it out.

the steam is flowing and squirt the steam through the fins of the radiator. Start at the top and work downward. Keep the motor idling slowly and when the flow of steam stops you will know that all the ice which has clogged the lower portion of the radiator has melted.—Popular Science Monthly.

Color Seen as Factor in Reducing Accidents

A prominent safety engineer recently pointed to brilliant body colors as a means of reducing motor accidents. Bright colors, because they can be seen at much greater distances and attract attention much more readily, are an important factor in driving safety. Chromium plating which is found on all bright surfaces supplements the color factor of safety. The armored steel body adopted by Studebaker in 1925 as standard for its entire line has demonstrated the wisdom of Studebaker engineers repeatedly by withstanding crashes as only steel can.

AUTOMOBILE ITEMS

One thing the driver of a flivver airplane will not have to worry about is a grade crossing.

"Don't test your brakes on the other fellow's car" is a slogan being circulated by a safety advocate.

An autoist is suing another for \$25,000 as a result of a collision of their machines. He is holding out his hand.

In view of the pronounced success of windshields of that type, there are expectations that something can be done eventually about a nonshattering hope.

With most cars, particularly those equipped with a plate clutch, one may shift from first directly into high in starting with a normal load on smooth pavements.

Vegetable Crops Boosted by Lime

Phenomenal Result Obtained by Chemist at New Jersey Station.

More than 29 times as many carrots to the acre on limed soil as on acid soil is the phenomenal result obtained by A. W. Blair, soil chemist at the New Jersey experiment station. In his experiments with lime on vegetables, Writing in the New Jersey Agriculture, official publication of the experiment station, Professor Blair explains the methods employed and the results obtained.

Carrots Were Planted. The report deals with four one-fourth-acre plots. The soil of plot one is strongly acid and has received no lime for many years; plot two received ground limestone at the rate of 1,000 pounds per acre; plot three limestone at the rate of 2,000 pounds per acre, and plot four limestone at the rate of 4,000 pounds per acre (limestone applied at intervals of five years). Carrots were planted on each plot. The yield on the unlimed plots was at the rate of only 300 pounds per acre (more than half too small to market). On the other hand, where 2,000 pounds of limestone was used the yield was 8,900 pounds of carrots to the acre, and with 4,000 pounds of limestone the yield was 10,700 pounds to the acre.

Beets Also Used. A similar test was conducted with beets. The yields were as follows: Where the soil was strongly acid, very few seeds germinated and the crop was a complete failure; the plot that received 1,000 pounds of limestone gave 3,290 pounds of beets to the acre; the plot that received 2,000 pounds of limestone gave 8,584 pounds of beets, and the plot that received 4,000 pounds of limestone gave 7,750 pounds of beets (beets were weighed without tops). From the results on this plot it would appear that over-liming may, in some cases, depress the yield.

Professor Blair in his article suggests that to have their soils tested vegetable growers would do well to get in touch either with their local county agricultural agents or with the experiment station at New Brunswick. He advises that no charge is made for this service.

To Eradicate Barberruy Would Kill Stem Rust

Condemned to die, a barberruy bush languished in a death cell at the grain show at the Wisconsin state fair, says the Wisconsin Agriculturist. All passing through the building were impressed with the death blows which were being recorded against the deadly enemy of the grain fields. The barberruy is the intermediate host of the black stem rust, which, in humid seasons, works such havoc in wheat and oat fields. To eradicate the barberruy would go a long way towards eliminating the huge annual loss.

The methods being employed by state and federal officials concerned with barberruy eradication is a systematic survey of location followed up by heavy application of common salt at the base of the plant. The skeletons of once thriving bushes give a grim reminder of the effective methods being employed.

Live Stock and Poultry Suffer From Parasites

From New Year's day to New Year's eve live stock growers need to combat the parasites that take toll from animals and poultry, and sometimes endanger human life as well. To guide farmers and to remind them of the best time for attacking parasitic enemies, the bureau of animal industry has contributed "A Calendar of Live Stock Parasites" which the United States Department of Agriculture has just published for free distribution as Miscellaneous Publication 25-M. The department would like to send a copy to every live stock producer who is interested.

Farm Notes

Destroy all old plants as soon as harvest is over.

During fall, winter and early spring months, rye furnishes good pasture for hogs.

A Clemson college scribe remarks that balanced rations for old sis cow will help balance the bank account.

Some one at the University of Florida opines that the hen that molted in August needs to be introduced to the chopping block and ax.

If pullets are to lay continuously after production starts they must be put in the laying houses early. Give them a good chance to do their best.

Fall pigs which have access to rye pasture will make faster gains at a lower feed cost if they have a rye pasture than if they are fattened in a dry lot.

While silage was first used as a feed for dairy cattle, it has been demonstrated in recent years that it has just as much value as a feed for fattening steers and beef-breeding cows. It also is a satisfactory feed for breeding ewes and fattening lambs.

Tree Tops Are Best Guide for Cutting

Look Up and Then Down, Says Extension Forester.

"Look up and then down! Let the tops be your guide!" is the message that E. L. Scovell, extension forester of New Jersey, is constantly stressing to woodlot owners.

"Far too often woodlot owners in trying to thin out their young timber growth make the mistake of paying too little attention to the tops of the trees. In so doing they are overlooking the easiest and surest guide," asserts Mr. Scovell.

"The size, shape, and condition of the tops of trees are the best indicators of their relative health and vigor. Trees that have full, vigorous tops which reach up into the sunlight are likely to be the strongest and best trees in the stand. Trees that have thin, small tops which are partially or entirely overshadowed by larger trees are likely to be the weaklings of the stand. Therefore, if the woodlot owner first looks up to form an estimate of the tops of the trees and then looks down to note the condition and character of the stem, he can decide most accurately which trees to leave as his timber crop and which trees to weed out. He will be surprised to discover how easy it is to pick out the weaklings and the poorly formed trees and to leave a full crop of healthy, vigorous, and well-formed individuals."

Poor Apple Varieties Should Be Top-Worked

Because of the advisability of reducing the number of varieties of apples grown in New Jersey, growers will find it to their advantage to top-graft worthless varieties to desirable kinds, says the department of pomology at the New Jersey State College of Agriculture, Rutgers university.

Numerous odd and unprofitable sorts are grown in the state, many of which should be removed entirely, while others should be profitably top-worked to standard varieties which are well adapted for market production.

Top-working may be done successfully on trees less than twenty-five years old, provided the following precautions are observed: The trees should be healthy; lot headed too high; the scaffold limbs should be suitably located so that a desirable shape will result after grafting; cions should be taken from well-matured terminal shoots or water sprouts.

With trees that are not more than five or six years old, all the new grafts may be inserted at one time. However, with older trees it is often preferable to spend two or three years cutting away only part of the leaf-bearing surface at one time and thereby insuring proper development of the grafts and the rest of the tree.

Desirability of Having Organic Matter in Soil

One of the important explanations of the desirability of having a quantity of humus or decomposing organic matter in the soil, is found in the capacity of humus for soaking up and storing water which is thus made available later for use by growing plants. Experiments have revealed that 10 pounds of sand can hold only 25 pounds of water, and 100 pounds of clay soil can hold half its weight in water. In contrast, 100 pounds of decaying organic matter may hold as much as 190 pounds, or nearly twice its weight of water. Most soils are mixtures in varying proportions of sand, clay, silt and organic material. As a rule the greater the proportion of organic matter contained in the soil the greater its water-absorptive capacity, and the greater reserves of moisture it will retain for resistance to droughty and hot weather.

Pruning Apple Trees to Obtain Better Results

You trim out an apple tree not only for the sake of the tree itself but in order to obtain better fruit by getting more air and sunlight among the branches. F. H. Ballou, Ohio horticulturist, instructs his pruners like this:

Remove extremely low, overshadowed branches.

Cut out the much shaded inner branches.

Get the limbs that cross or are too closely parallel.

Straggling side branches make the tree's contour bad.

Keep the top growth from attaining a height that makes the tree hard to spray and the fruit inconvenient to harvest.

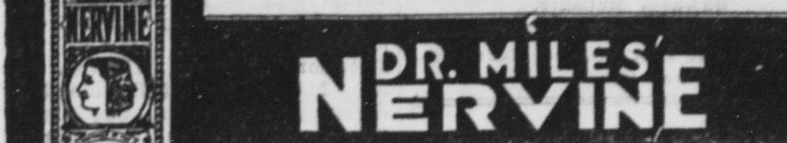
Well-pruned is half-sprayed, says Mr. Ballou, because you can't grow good fruit in a brush heap.

Neutralize Acidity

Limestone spread over the soil evenly and uniformly has a much better opportunity to efficiently neutralize its acidity. Lime sowers or end-gate lime spreaders can be used in this connection to very good advantage. Either of these two methods of application eliminates unnecessary waste and makes a ton of lime go further by spreading it evenly over the entire surface besides eliminating a great deal of hard work and extra time required to scatter it with a shovel.

for Sleeplessness

Nervousness, Nervous Dyspepsia, Nervous Headache, Neuralgia, Neurasthenia



DR. MILES' NERVINE
Sleeplessness is usually due to a disordered condition of the nerves. Dr. Miles' Nervine has been used with success in this and other nervous disorders for nearly fifty years. We'll send a generous sample for 5c in stamps. Dr. Miles Medical Company, Elkhart, Ind. \$1.00 at your drugstore

Two of Greatest Southern Backs

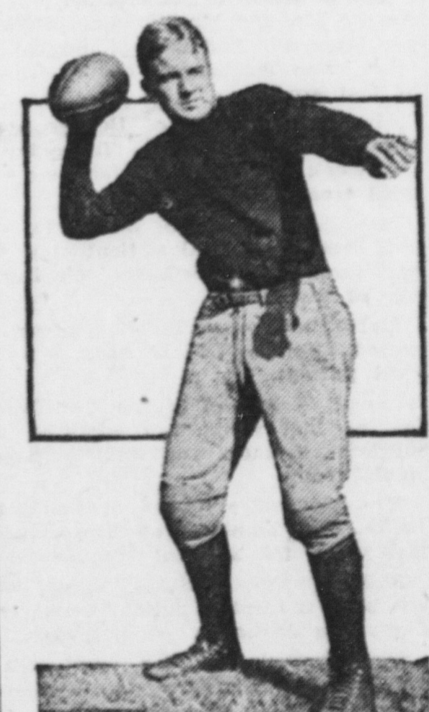


Left, Bob Randolph, fullback, and right, Stumpy Thomason, halfback, two of the greatest backs in the Southern Conference in a remarkable action picture taken during scrimmage practice of their team, Georgia Tech.

Golfer Gets Gopher Instead of Birdie

Golf possibilities—a gopher. Players who number birdies, eagles and aces among their scores recently stood in line at Armour club, Minneapolis, to congratulate Fred Way of Minneapolis, who shot a gopher from the twelfth tee. Way's drive caught the little fellow squarely just as he drilled his way out onto the fairway.

Captain of Harvard



Art French, halfback and captain of the Harvard university football team, and one of the reasons why the team is feared this season.

Athletic Director Says Radio Lowers Receipts

Radio broadcasting of football games cuts down gate receipts, M. F. Ahearn, director of athletics at the Kansas State Agricultural college, believes. Ahearn said it was his opinion that broadcasting was largely responsible for small crowds at home games in which the Kansas Aggies' football team played last year. Only 21,217 people paid admission to see the four home games. The Nebraska game drew the largest crowd, 8,140.

"I believe that broadcasting of games has hurt attendance generally," Mr. Ahearn said. "When there was a threat of rain and the possibility of muddy roads, people stayed at home, saved their money and heard the game reports over the radio. If radio reports could be shut off within a radius of 100 miles and then broadcast beyond that, I don't think attendance would be harmed, but, of course, that is impossible. "We believe that broadcasting is one of the services of our institution, however, and plan to continue with the air reports."

Sport Notes

This is said to be Dr. John Wilce's last year at Ohio state.

Grady Adkins, Chicago White Sox hurler, is one of the slowest, most deliberate pitchers in the majors.

Mr. Fox of the Athletics is a figure in baseball, even if his name looks more like an equation in algebra.

Temple university football team is coached by "Heinie" Miller, former all-American end at Pennsylvania.

Crib Buck, former All-American tackle at the University of Wisconsin is coaching football at Miami university.

University of Dubuque has decided to return to intercollegiate athletic competition after a lapse of three years.

Hugo Bendek, famous football coach at Penn state college, has received his final naturalization papers at Bellefonte, Pa.

Who can remember when you used to pitch underhand to the little kid who played right field for the other scrub team?

A runaway race hurt the Mississippi Valley league this year. Waterloo ran away with the flag, being 12 1/2 games ahead of Moline.

Completion of a deal whereby Charles (Slug) Tolson, first baseman, goes back to the Chicago Cubs next spring was announced.

The biggest heavyweight fighter on record was Charley Freeman, who stood seven feet three inches in his ring shoes and weighed 330 pounds.

George Lott, co-holder of the national doubles title and third ranking tennis star, has enrolled for the autumn quarter at the University of Chicago.

St. Louis university high school maintains a fully equipped first-aid room, with a trained nurse in daily attendance, to accommodate the school gridgers.

Thirty thousand racing fans attended the opening program of the half-mile Timonium track in Maryland—the largest crowd in its fifty years of existence.

Joe Devine, Pittsburgh scout, says Earl Averill with San Francisco is the best outfielder he has seen in the Pacific Coast league since the days of Paul Waner.

Many a sensational halfback has succeeded in later life, after recovering from the idea that five or six stalwarts will always be on hand to clear the way.

Recent changes make almost no difference to the football spectator who still explains the game to his wife.