

FOR BETTER ROADS

MILLIONS GOING INTO ROADS

Western States to Spend Much Money in Highway Construction and Needed Maintenance.

Millions of dollars will be expended in highway construction and bridge work and maintenance by the states of the central West during the present year, according to data recently compiled by highway authorities.

Colorado has \$1 million of highways under construction at a cost of \$300,000; 91 miles ready for contract to cost \$300,000, and 50 miles and three bridges contemplated, to cost \$350,000.



The Photograph Shows a Portion of the Pike Peak Ocean-to-Ocean Highway.

Maintenance on 4,000 miles will amount to about \$500,000, while local road and bridge expenditures will amount to about \$2,200,000.

Idaho has \$7 million, costing \$720,000, under contract; 45 bridges, costing \$425,000, ready for contract, and about \$1,900,000 worth of additional work is contemplated during the season.

Iowa will expend \$15,000,000 on the road system of the state, of which about \$11,000,000 will be for road and bridge construction.

Missouri has 690 miles under contract, costing \$1,755,000; 888 miles, costing \$3,104,000, ready for contract, and about \$3,000,000 additional construction contemplated. Local road and bridge expenditures in the state will amount to about \$7,000,000.

Nebraska has 173 miles, costing \$431,000, under contract; 145 miles, costing \$500,000, ready for contract, and about 610 miles, estimated at \$1,310,000, contemplated. Local road and bridge expenditures will amount to about \$3,000,000.

Nevada has four miles, costing \$54,000, under contract; 102 miles costing \$937,412, ready for contract; 123 miles, costing \$523,000, contemplated. Local expenditures on maintenance will amount to \$900,000.

Oklahoma has 128 miles, including 90 bridges, costing \$1,930,000, under contract. Additional construction of 165 miles, costing \$2,500,000, contemplated.

These amounts will be supplemented by increased federal aid appropriations and later, it is hoped, by national construction of main trunk lines under the supervision of a federal highway commission, as provided for in the Townsend bill which will come up for consideration by the next congress.

SAVING OF IMPROVED ROADS

Report of Congressional Committee Shows 8 Cents Per Ton Per Mile Can Be Saved.

The report of the joint congressional committee which investigated highway economies in 1914 shows that a saving of 8 cents per ton mile can be effected in transportation costs when a road is lifted from the dirt to the durable class. This does not take into account increased real estate valuation or social advantages resulting from the improvement.

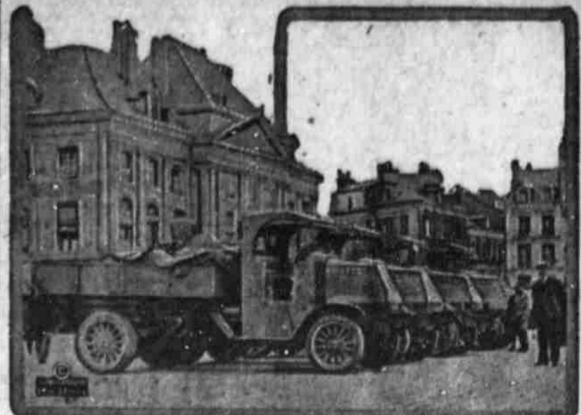
Build Roads Now.

If roads are a good thing, why not build them immediately, instead of waiting and suffering inconvenience for years to come, because it should be remembered that we are not saving any money by acting in such a manner.

Big Change in Berthing.

People are apparently ready and willing to spend large sums for roads where a few years ago it would have been impossible to secure even a small appropriation for this purpose.

UNCLE SAM TRAINED 75,000 DRIVERS FOR DIFFICULT TASKS DURING THE WAR



United States Motor Transports Used in Carrying Supplies to Front in France.

When Uncle Sam's armies finished the war the motor transport corps comprised a force of roughly 150,000 trained drivers of motor trucks, cars and motorcycles.

Of this great force, only about half were trained drivers when they enlisted for the service, so it was necessary in order to have this force of men to train 75,000 men to drive automobile vehicles.

The ammunition trains, supply trains, sanitary trains and casual motorized units which first went overseas were composed of trained drivers, as a rule. Those who came after were the men who did not know cars, engines, or any of the problems of driving, particularly such problems as driving over roads under shell fire or with the great congestion of the roads to the fighting zone in France. The men who came in the second great rush of men to the army had therefore to be trained from the very beginning to know the machine, and then to know the problems of driving in formation on military roads.

Big Problems Presented. The two big phases were the teaching of the mechanism of the truck engine—I say truck because this was by far the more vital part of the training of driving in military formations of huge fleets of trucks.

Now that the war is over the problem of teaching the mechanism of the machine is by far the more important to the commercial truck operator. As to the military formation required in the army, this can be disposed of quickly.

On the Mexican border, and with the Pershing expedition into Mexico, the problem of mass operations with trucks was of minor importance. The drivers went forward with some semblance of military formation, with certain distances between trucks, and

with some attempt at military cohesion. The truck work, however, was more or less of a problem of every man to drive his own machine.

New System Developed. When the American army reached France, with the greatly restricted area of operation, the shorter distances for ordinary hauls, and the intense congestion of the roads, it was necessary to develop a military precision in handling of trucks, before that unheard of. The French transport was first to develop this precision, and its vital need was shown in the British offensive on the Aisne in 1917, when the enormous number of over 5,000 trucks moved an entire British corps in military formation into the fighting line. Such a column meant nearly 100 miles of length for the train. And to have this body of trucks operating properly the strictest discipline was required.

This truck discipline was first systematized on the French lines by work and experiments at Camp Johnson, Fla., near Jacksonville, the mother school of the motor transport corps, and was soon developed into book form and standardized for the army.

Thorough Training Given. To the commercial truck operator, however, the work done to train the drivers in the handling of their vehicles was far more important. Every man who went into the corps was given a thorough training in the operation of the motor vehicles, and while the Camp Johnson school was working out truck discipline enormous repair and shop units were in full operation in other parts of the country. Such, for instance at Camp Holabird, near Baltimore, and at Atlanta, while over in the West there were such units as at San Antonio. These were mechanical organizations for repair work and for shop training.

RULES FOR RADIATORS

The radiator takes so little care that we are likely to give it even less than it requires. Here is a simple rule which will give good results:

1. Keep it full, especially with a thermo-siphon cooling system. The less the water, the less the cooling effect and the worse for the motor by overheating.
2. Keep it full when using alcohol in winter. The smaller the volume of mixture, the sooner it boils and evaporates.
3. Keep it full.

TO PROPERLY CUT GASKETS

Plan Which Will Be Found Convenient for Owners of Cars—Frayed Edges Avoided.

Everyone who owns a car has had difficulty with cutting gaskets. Try this method the next time: Put the material—gasket, felt, paper, etc.—over the hole for which it is being cut. Take a ball-head hammer and place it on the material over the hole. Then tap this first hammer gently with another hammer, and the gasket can be cut without the frayed edges that are so annoying.

KEEP WHEELS IN ALIGNMENT

When Car Has Suffered Bump or Crash Against Curb Wheels Should Be Tested at Once.

Whenever the car has suffered a bump of any kind, a crash against the curb or anything of the sort, the wheels should immediately be tested for alignment, as a bang of this kind is quite enough to force them out of correct alignment, which will lead to excessive wear.

OIL WILL SILENCE SQUEAKS

If in Hurry to Stop Noise Pour Little Kerosene Over Spring and Shaky Car.

If in a hurry to stop a spring from squeaking, pour a little kerosene over it, getting the oil down the sides with the finger so that it will run down the leaves. Wipe off the excess. Pour kerosene all over the spring the next day. Now shake the car so the oil will be drawn in and the noise will stop.

EMERGENCY WHEEL FOR AUTO

Device, Mounted on Axle, Can Be Readily Attached to Disabled Cars by Clamps.

For the garageman who encounters road jobs that necessitate towing in a car with a broken wheel or axle, an emergency wheel, such as is used by one suburban repair shop, is not only adaptable to most any kind of car, electric, gasoline, or steam, but is



An Emergency Wheel, Mounted on a Special Axle, Can Be Readily Attached to the Disabled Car.

quickly made up of discarded materials with but little work, says Popular Mechanics.

The wheel is of the regular automobile type with a 24 by 4-inch pneumatic tire, this size being suitable for use on both large and small cars. The axle is either a broken front axle or a short section of a strong steel beam. The emergency axle is bent or dropped, the offset being necessary to clear the axle-housing flange or brake drum. The device is attached by means of two U-shaped clamps and nuts. The sketch shows the general appearance and manner of attaching the emergency wheel to the rear axle of a car, but it may also be used in front, as the clamps are easily shifted.

TO SILENCE RATTLING RODS

Noise Made is Source of Much Annoyance to Occupants of Car—Way to Remedy Trouble.

Where long rods of small diameter are used for brake connections, and so forth, particularly on the smaller cars, the rattle and chattering they make is a source of constant annoyance. There is an easy way, however, to put a stop to these noises. A coil spring one-half inch to an inch in diameter should be firmly attached to one end to the middle of each rod and the other end extended under tension to the frame side member or some other convenient part of the chassis. The tension on the coil spring will hold the rods right and prevent vibration and noise.

Economy Corner

To Mend an Ugly Tear.

Sometimes you are unfortunate enough to make an ugly tear in a handsome new gown. It may be mended very successfully, and if in an inconspicuous place it will not show at all. Lay the tear edge to edge, and baste across it, being careful that while the edges meet, they do not overlap. Cut a piece of rubber tissue, which may be obtained at any tailoring shop, to amply cover the tear. Lay the garment on the ironing board right side down, place the rubber over the rent, and over the rubber lay a piece of goods of the same material as that of the garment to be mended. Keep both rubber and goods perfectly smooth, and press out with a hot iron for several minutes. Now cut out the basting threads on the right side, and shave off any rough edges remaining. When there is no material of the dress on hand, a piece of lightweight woolen goods of the same color will answer. That the bottoms of men's trousers are held together in this way is a good sign that the method is practical and successful.

small opening through which the hook of a suit hanger may be slipped, and use it to protect a nice dress hanging in the closet. Washed but seldom it will last a long time, and will be found more convenient than a bag, as it is so much easier to insert the dress without crushing.

Use for Old Leather.

One should always save the tops of old shoes, or the gauntlets of heavy riding gloves or other pieces of leather. They are excellent as an interlining for iron holders. Do not make the holder too large, as it is clumsy to handle. Those which are oval in shape are preferable. Cut the covering and the interlining the same size and shape, stitch all the thicknesses on the machine, close to the edge of the material, then bind with a tape or piece of seams binding.

Pongee Again.

As sure as the coming of summer pongee in some form appears. This year there are lovely pongee parasols. Some are mounted on brown frames and sticks, with no other trimming than brown cords on the handles and brown tassels on the ends. Another shows lovely blue butterflies embroidered all over the inside of the parasol, with blue cord and blue ends to the sticks.

A Footwear Fad.

The few who wish to follow fashion's whim in footwear can wear, this summer, white oxfords with black shoe laces and black stockings. This combination is sanctioned by New York's latest decree. Of course the generality of women will use the conservative all white.

A Dress Protector.

When the yoke of a nightdress becomes worn, cut off the nightdress skirt, take out the sleeves and sew it together across the top, leaving a

Summer and Sport Suits



No one is prepared for midsummer unless she has ready for warm weather a sport suit, or a sport coat that may be worn with skirts of the same character, supplemented by a sweater or sweater-coat. The sport suit has made a place for itself that nothing else can fill. It is not an extravagance even for the woman who believes in reducing her expenditure on clothes to necessities, for the sport suit replaces dressier and less generally wearable clothes. It is smart enough to take the place of afternoon frocks and it remains informal, whatever it is made of. "Bull" is a term that covers the combination of a sport skirt and a sport coat that do not match, as well as skirt and coat of the same material.

The suit at the right is made of a heavy ribbed silk-skirt and coat of the same material. There are several patterns in these sport silks, some of them in two colors, others in figured designs of one color. Angora cloth is a favorite for embellishing them, placed in bands about the skirt and coat and as cuffs and collars. But many of these suits are untrimmed, as the fanciful fabric makes variety enough. Even in sport suits the vest has made a place for itself, and it appears in this model with cut at the bottom having six little buttons set along the center. But there are many sport coats that imitate the vest of vest.

A handsome example of the first combination appears in the suit on the left of the two models shown in the picture. In this the skirt is of white satin and is made of one of those low waves that appear to be better suited to sport skirts than to anything else. It is strong and brilliant. On the overlapped waist at the left side, five large, flat pearl buttons are set near the bottom. Nothing could be done more to improve the character of the skirt. The coat is in the same class as the

skirt, and is made of bright green silk tricotette, with sailor collar and band of self-colored embroidery about the bottom. A satin vest worn with it has small pearl buttons, set close together, down the front. Bright green tulle coats with machine stitching of white silk, and coats crocheted of the green silk in lace designs are noteworthy among the novelties to be worn with white satin or silk sport skirts. All the coats have belts or sashes.

DADDY'S EVENING FAIRY TALE

By MARY GRAHAM BONNER

THE TREE SWALLOWS.

"Somehow," said Daddy, "when it is spring I always want to tell you stories of the birds, of their habits, their ways, of what they do, and of how we can get to know them and study them."



"Birds always seem to be a part of the spring. To be sure we have certain birds in the winter, and many, many birds in the summer, but in the spring the birds all are arriving, they are building their nests, they are mating, and they are seeing about their eggs and looking forward for the time when the little birdlings are going to come."

"And somehow, too," continued Daddy, "spring is so joyous a time of the year with all the flowers opening, with the blossoms and the trees all wearing their fresh green leaves, with the gardens waiting to be planted, with the children looking forward to the summer holidays—well all of these things seem to be told in the joyous songs of the different birds as we hear them in the spring, after a long, quiet winter."

"So if I tell you more bird stories than almost any other kind you will forgive me?" "Forgive you?" repeated Nick. "We love birds, and we're going to be on the lookout for all the birds you have told us about. You've told us what they wear and how they sing and we're going to really study and know the birds this year."

"Yes," said Nancy. "We have already tried to help the birds because of the stories you've told us, and we gave them sweet last winter when it was cold and snowy. We gave them bread crumbs then, too, and last summer when it was hot we gave them little dishes filled with water to drink and pans of water so they could have nice, cool baths."

"Yes," said Nick, "and we put pans of water where it was nice and shady."

"Well," said Daddy, "there is one other thing you've done which you have forgotten about." "What?" asked Nick. "I can't think of anything," said Nancy.

"Oh, now, I think I know, Daddy," said Nick. "Is it really, really true? Oh, how exciting? Can I see?" "Yes, it is true," said Daddy.

For Nick and Nancy, with Daddy's help had built a little bird house, for Daddy said that maybe Mr. and Mrs. Martin Bird or Mr. and Mrs. Tree Swallow might care to have a house all ready for them.

"Yes," said Daddy, "the tree swallows have accepted our invitation and are in the house at the foot of the garden. But I think we'd better not disturb them, or bother them for a little while. They want to get used to things first and see about the white eggs. We must wait to get to know them slowly, for they mustn't be frightened."

"Yes, there are two families there," said Daddy. "Two pairs of tree swallows. The Mr. Tree Swallows are bluish green above and white underneath. The Mrs. Tree Swallows are gray and white beneath. Sometimes they build their nests out of grass and feathers for the lining, in fact that is the way they usually do, but they sometimes like to find bird homes already made for them. They stay or make a little chirping sound like their other swallow cousins do. They usually build their nests in hollow trees and like to sit on old branches, so they have been called the Tree Swallows, for their cousins, the Barn Swallows, build their homes around barns."

"These swallows like to fly high in the air, and they also love to sit on telegraph wires. They say that they wish to be modern and up-to-date, and that as they can't answer the telephones or call their friends up, they can sit on the telegraph wires and feel they are part of a nice world."

"So we will often be able to see and study them as they sit on these wires along the road-sides where the wires can be seen."

"But we will be able to study our own little tree swallows if we show them slowly and kindly and without frightening them until the babies are able to look after themselves, that we're their friends and so glad to have them with us."



They Usually Build in Hollow Trees.

Pride and Vanity. There is more than one kind of pride, and some are good. There is only one kind of vanity, and that is bad. The right sort of pride is shown in about the only of a man's actions. Vanity ever goes down and humiliates. Pride of the noble man goes up and strengthens. Vanity humiliates and weakens what others might be a strong man.

John B. Starnes