# FIRESTONE INSTALLS 66 TRUCK BUREAUS

Ship-by-Truck Movement Fast Spreading Over Country.

BUSINESS FOOTING SOUND

Coming of Transportation by Motor Truck Brings New Life Into

The automobile, which history presents as the father of the railway locomotive, was legislated off the roads of England in 1820. Its wheels were breaking up the highways.

The situation is quite different today. Its wheels are building up the highways—making hard roads of the type that will endure for many generations.

The passenger car came and the farmer desired good roads as an aid in breaking down his social isolation. Finally, now that the freight truck and the express truck are coming into their own, the farmer, the business man and the ultimate consumer are demanding good roads in many sections of the country as a means of breaking down the last economic barrier between pro-

ducer and consumer.

Incidentally, it may be interesting to know that the reason the automobile with its steam engine, outlawed in 1830, was able to come back upon the highways with a gasoline engine three-quarters of a century later was that a process had been discovered by which rubber could be vulcanized. This meant a layer of protection for both, between wheel rim and built-up highway.

Giant Presumatic Bis Factor. ducer and consumer.

Giant Pneumatic Big Factor.
The development of the giant pneumatic cord tire and its use by motor matic cord tire and its use by motor express and freight operators, who want it because it means a quicker trip and more protection to the goods hauled, has taken away the last possibility that the motor vehicle will injure the road more than does any other means of road transportation.

It was the army's experience in France that caused the American people to awaken to the possibilities of motor transportation combined with good roads. It was only because of the splendid webwork of hard roads in France that the fighting army of America was fed by a wonderfully efficient system. These improved roads have the big army trucks an avenue of away the big army trucks an avenue of gave the big army trucks an avenue of

Meanwhile, in America the railroads Moanwhile, in America the railroads found themselves much overworked. The trucks came to the rescue here as on the battle front. They relieved the railroads by carrying freight long distances in those sections where there was need and stretches of good highway could be connected up. Because speed was highly essential and demand raquired even the gleanings of production, they also acted as feeders of the tion, they also acted as feeders of the

Patriotic civic agencies aided the efficient functioning of the motor truck during this period by keeping shipper in touch with truck operator. After the war it became apparent

after the war it became apparent that if motor truck transport was to attain its real development and perform its real service in the national scheme of transportation, in a permanent way, it must be guided along sound business lines and placed on a sound business footing.

Sixty-six Cities Have Branches, To assist in this work, the Firestone ship-by-truck bureau was established.

Today the central bureau at Akron has branches in the 66 largest cities of the United States.

The branches bring shipper and op-brator together on a basis of mutual

The central bureau is searching throughout the country for those routes which will support the motor axpress. It is finding many of these routes already have good roads. But also it is finding many routes with the stance, vary according to the width of the thoroughfures.

On roads between 12 and 18 feet wide machines may run 8 miles an hour, between 18 and 36 good possibilities of profit both to shipper and to truck operator, but the stance of the st ithout road improvements sufficient afford fast and economic operation such cases, when the fact is pointed nut, producers and consumers who

would benefit most are not slow to de-mand highway improvement.

The bureau is finding old communi-ties brought back to life by the motor truck. For example, by good roads and the motor truck Sykesville, Md., is being put back on the map. As many Sykesvilles must be revived in the United States as possible, the ship-by-truck interests declare, and they are backed by townspeople and farmers in thousands of communities in the United States.

The Portland branch of the bureau is.

Portland branch of the bureau is at 65 Park street, north. Its director declares that this section of the coun-try is keenly alive to the possibilities of the ship-by-truck movement.

REAL TENT FOR MOTORISTS

Roadside Home Makes Long Distance Touring a Pleasure.

The up-to-date cross-country motor-The up-to-date cross-country motorist may now equip himself with a most elaborato roadside home, described and pictured in the August Popular Mechanics magazine. Weighing complete only 124 pounds, the entire equipment may be lashed to the running board; yet, when erected, it will furnish four bedrooms, a 7x11-foot dining room, with a similar room for general purposes, and a 20x6%-foot garage. Screened windows with storm flaps keep out mosquitoes and bad weather. Another feature which recommends this new accessory is the fact that the this new accessory is the fact that the tent is not dependent on the auto for support. Hence the family may take an evening tide to the local movies or other trip, after the labor of pitching the tent and cooking supper.

NO JACKS NEEDED FOR CHAIN

Chain Invention Can Be Put On in Mud.

A quick detachable non-skid tire chain that is said to be the first tire chain improvement in 17 years has been patented by the Bear Manufacturing company, Eock Island, III. This new chain can be put on or taken off in a few seconds without the use of a jack or an other tools and it makes no difference whether the car is already in the mud or on a dry road. A sales organization is now being formed to cover the hardware and automobile ac-

CORN PLASTER GOOD WASHER

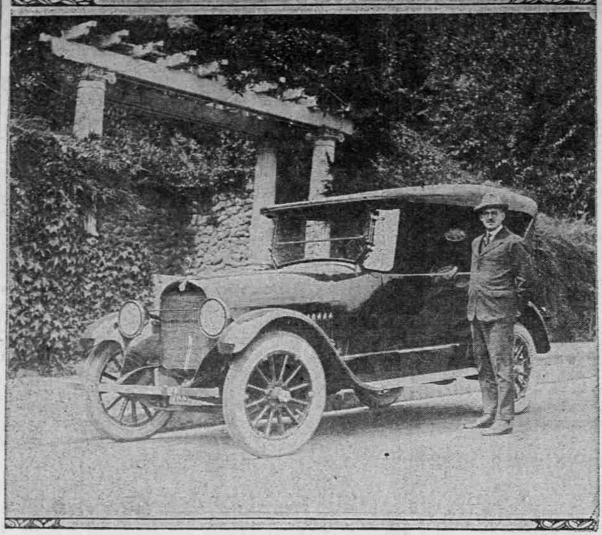
Placed Under Iron Washers, Keep

Threads From Stripping. Most car owners know that the use of felt washers under the iron washers in certain instances is a useful idea. The felt washer gives an elastic hold, allowing for expansion or contraction, and may keep the threads of an overtight bolf from stripping.

However, most of them do not know the ordinary corn or bunion plasters make acceptable felt washers and are always easily obtainable.

always easily obtainable.

CAR OWNERS, MEET THE STUDEBAKER BOSS FOR THE NORTHWEST.



The pleasant-looking gentleman in the picture is E. H. McCarty bimself, northwest manager for the Studebaker corporation of America, with headquarters in Portland. The car is one of the new Studebaker light sixes.

### DODGES MONEY MAKERS

DELIVERY CARS BRING IN DIVI-

"Most of us look upon the practical delivery car about as we would an old plug horse-nothing beautiful, possibly

company.

"As a real passenger car, though, it makes a stripped chasis owned by a 12-year-old boy look like a tin rattle in the hands of a bank president. The owner of a fleet of modern delivery cars expresses his pleasure in meditative smiles and an intermediate series of thrills as his eye peruses his monthly balance sheet. A return to the horsedrawn delivery would at this time seem more than one step backward and would, even in these few years, be a return to primitive methods.

"Light delivery cars have practically displaced the horse in every branch of industry and the service to the home

industry and the service to the home is at least 100 per cent better than a

HOW THEY DO IN JAPAN.

WASHINGTON, Aug. 23.—Regardless of how one feels toward the Japanese, he must admit they do things in an original way. Speed limits for motorists, for in-

Within the city limits machines must not travel on streets less than 18 feet wide. They may run at 12 miles per hour on streets between 18 and 36 feet wide and on those wider than 36 feet 16 miles an hour is the limit.

few years ago—supplies of all kinds, especially milk, fresh bakery goods and garden truck, are received in less than ne-half the time from the point of production. Department store deliver-les and laundry service are more than satisfactory. Mailed letters are gath-ered and speedily started towards their

destination. "Sometimes known as the 1000-

Give us a trial.

Testing

Recharging

SELL THE BATTERY

One laundryman said the other day that he had never been able to show a reasonable profit until he had installed an automobile delivery system.

"One-half of each team's time was formerly consumed in going and coming on the delivery route; it did not take long to pick up or deliver a load after the team had arrived at its particular section of the city. The first few cars put on by this business man were used to carry the loads to the wagons on their respective routes. The saving Issues Publication Codifying

on their respective routes. The saving was so evident that soon many more cars were bought, until now he has no horses in use, for any purpose. Many Dodge cars are making dividends for Portland firms today and the number

is constantly increasing."

FACTORY RESUMES PRODUC-TION FOLLOWING WAR.

Many Improvements in Car of Medium Price Handled by Moltzner-Westcott Motors Here.

cause the cars themselves take care of try cutting through the bushing longitudinally with a hacksaw, in two places.

The distribution of the spindle bushing of a Ford car, try cutting through the bushing longitudinally with a hacksaw, in two places.

When this has been done it will be prepared to show performance, comfort and economy in the New Elgin of the bushing.

The starter should not be about the spindle bushing of a Ford car, try cutting through the bushing longitudinally with a hacksaw, in two places.

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The starter should not be about the spindle bushing of a Ford car, try cutting through the bushing longitudinally with a hacksaw, in two places. comfort and economy in the New Eight six that cannot help making the pros-pect an Elgin owner. In its price class the new Englin six not only maintains its past splendid reputation, but offers many new features and re-

finements in construction. "In short, we believe the new Elgin six will give to the average motorist that real car satisfaction that makes motoring actual joy."

Battery Connector.

A very convenient battery connector may be made from a piece of heavy steel coil spring. The spring wire at each end is fashloned into a hook and pound delivery, speed wagon, commer-cial car or business car, the light de-livery car is successfully fulfilling a task that has confronted manufac-turers and retailers for many years. fect contact.

It Might Pay

Starting Battery

We will give you an honest answer one way

or the other. It's often cheaper to buy a

new battery, but if a repair job is possible

and really economical, we will recom-

Our policy is to make "satisfied customers"

-to help you keep your battery out of the

repair shop-to do a good repair job when

needed-to sell a good battery when wanted.

We Recommend the Battery With the DREADNAUGHT Plates

RATHKEY

Battery Co. Expert Repairing and Recharg-ing on all makes of

Batteries

389 Oak St. Bdwy. 2604

SERVICE STATION.

Repair Service

Issues Publication Codifying Rim Data and Prices.

An announcement of interest to the automobile trade has been made by C. S. Orand, Portland manager of the Keaton Tire & Rubber company, to the effect that his company has just pub-lished a 48-page text book and price catalogue on rims and rim parts of all

This rim book will fill a long-felt want. It is the first attempt systemat-ically to codify all standard rim in-formation under one cover. Hereto-fore fragmentary price lists and manu-

facturers' separate and individual rim prices, highly techincal in text description, have been a wilderness of infor-mation wherein the dealer soon became helplessly lost.

The Keaton rim book is written in

The Keaton rim book is written in plain, clear style, with illustration of cert Motors, Washington and Burnside at Sixteenth street, announces arrival here within the next few days of a shipment of Elgin sixes. Owing to demoralized production conditions in the automobile industry, incident to after-war problems, the Elgin factory, like all other auto plants, has had a trying time getting back into the swing of production. The result has been here, as elsewhere, practically a complete suspension of Elgin sales activity, but now that factory deliveries have been resumed, with good promises of plenty of cars to meet local demands, Mr. Moltzner says that he will push mr. Moltzner says that he will make the supervision of the saturation of several months in the supervision of the keaton of the such make the rims are arranged alphabetically, with exclusi

## When Better Automobiles Are Built BUICK Will Build Them **Howard Automobile Co.**

FOURTEENTH AND DAVIS STREETS

Buick Seven-Passenger Touring Car

THE BUICK Model-K-Six-49 is a big, roomy, open car for seven persons, with a range of service in keeping with its

powerful Valve-in-Head motor. The long wheelbase, the extra size tonneau, the completeness of all details making

for comfort and convenience give it an air of unlimited

capacity that is amply borne out by its continued and

This body is divided by a double cowl, into which the folding scats disappear when not in service. These extra seats

are so arranged as to give liberal space to all occupants in the tonneau, thereby avoiding any possible crowding.

The slanting windshield braces form the front support for the high-grade top, which is also equipped with well-

made side curtains that swing open with the doors.

Phone Broadway 1130

the engine does not start on the first few turns stop and look for trouble. Do not keep cranking until the battery is badly run down. Usually the difficulty is something simple. Lack of gasoline or a switch-off are common causes.

consistent performance.

SOUTH PORTLAND SECTION TO HAVE REPAIR FACILITIES.

Shop Opened by S. D. Bornstein to

Models

have been resumed, with good promise of plenty of cars to meet local demands, Mr. Moltzner says that he will push the Elgin with a view to reviving general interest in the car.

"Owners of Elgin sixes need not be nursed by us," said Mr. Moltzner, "be nursed by

The starter should not be abused. If

gasoline or a switch-off are common Have mud boils cleaned out and re-aired at once. Speckled Varnish. The varnish on the new car fre



The Spark Does the Business!!

If the spark is not there you can't run

Don't neglect your electrical troubles -let us correct them for you.

-We Can Do It! and promptly—that is our business

450 Stark near 13th

Diamond Tires Sales

Kelly-Springfield Tires Sales

Drive In for a Tire or Electrical Service



DON'T FORGET OUR NEW ADDRESS

Service First Advice Second Sales Third There's our policy in a nutshell.

First-When the customer comes in, find out what HE wants. Give him satisfac-tion at the lowest charge consistent with a good, thorough job.

tery trouble. We're not anxious to repair his battery, except to make it last longer. Third-When he really needs a new

Second-Tell him how to prevent bat-

battery we want him to buy it from us, naturally, and to buy a Willard with Threaded Rubber Insulation-because that battery will last longer and give him less occasion for expense on repairs than any other battery he can buy.

Come in and find out the wonderfui service records of Willard Batteries with Threaded Rubber Insulation,

Willard Service

NINTH AND EVERETT

