

GARFORD ROAD BUILDING TRUCK

Meets Demand For Modern Apparatus; Company Strong Good Roads Booster

In order to fully answer the ever present demand for more modern road building machinery, the Garford Motor Truck Company, of Lima, Ohio, has introduced a new model which is known as the Garford road builder and is specially designed to build and maintain roads of all types at a lower cost than ever before. It is most fitting that the Garford Company should be an important factor in the manufacture of road building trucks, in view of the fact that it was a pioneer in the good roads movement, and since its formation, has been one of the country's staunchest advocates of road improvement.

At an expenditure of many thousands of dollars, this company has waged unceasing campaigns for the construction of good roads, and the announcement of the most practical and economical road builder ever produced will be of more than ordinary interest.

The Garford road builder will operate over any kind or condition of road, as it is so designed that it will perform work on roads under construction on fills or sub-grades.

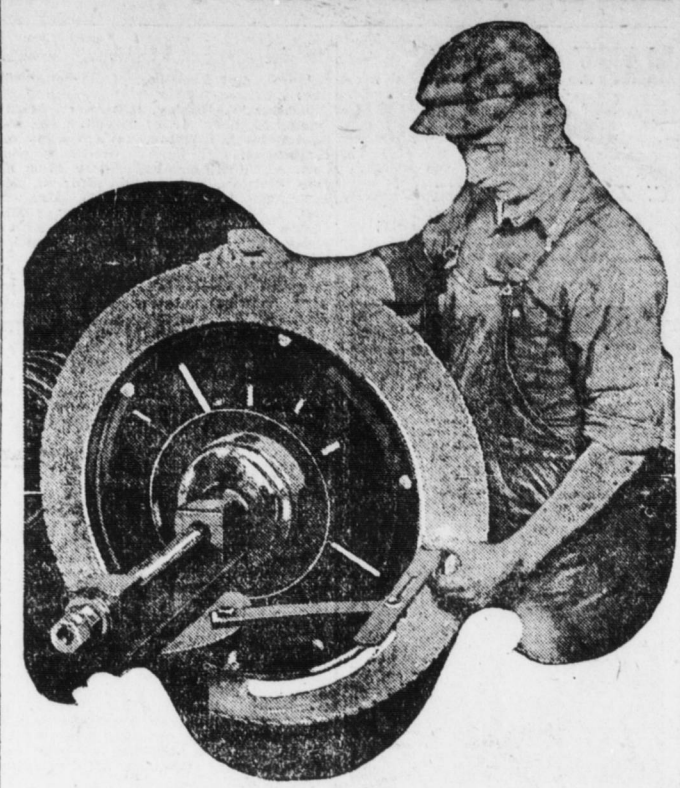
This modern vehicle for road building and road maintenance has a body capacity of five cubic yards, equivalent to six tons, and its strength is insured by its heavy type of steel construction. The body is flanged at the top and at the corners, and is reinforced with extra heavy gusset plates. It is supported on two four-inch I beams running lengthwise and connected by five four-inch I beam cross sills. The body is ten feet long, twenty-four inches deep and is six feet wide at the front and six and one-half feet wide at the rear end, making impossible any binding of the load while being dumped.

An important feature of the body construction is the regulation of the tail-gate opening for the spreading of material to any desired thickness. The entire mechanism is controlled from the driver's seat and is so simple that any truck driver can quickly become accustomed to it.

The standard equipment of the Garford road builder includes two draw bars, one of the double spring type for trailer work, and one rigid drop bar for pulling plows, scarifiers, graders and scrapers.

The front wheels are equipped with wide center rims and the rear wheels with cleats of the herring bone type, all of which may be easily and quick-

SIMPLE BUT EFFICIENT DEVICE USED TO TRUE OVERLAND TIRES



As an example of the thoroughness and accuracy with which even the minutest details are performed in the automobile industry no better illustration can be furnished than the inspection of tires at the factory of the Willys-Overland Company. Each tire, after the wheel has been assembled, is thoroughly inspected and tested for alignment. It must be lined up evenly with the rim before it can be placed on a chassis.

The inspector mounts the wheel on a pivot, then swivels a roller into place against the rim of the wheel. Along-

ly detached. The herring bone cleat gives better traction in mud or on sub-grades with less vibration.

The chassis carries out the well-known Garford design, the exclusive and popular feature of short wheel base—only 128 inches.

This is secured by the motor under-cab construction. The engine being in front of the driver's seat, is accessible for adjustments without leaving the cab.

The short wheel base makes turning possible on very narrow roads and cramped quarters, where such trucks usually have to go for loading. At the same time a short frame length reduces weight and adds sturdiness to the construction.

The four cylinder, heavy duty motor affords simplicity in construction with greatest efficiency in operation. Its three heavy plain bronze bearings provide for any readjustments. Speed of motor is controlled at all speed changes through a Garford governor of ball or centrifugal type.

Transmission of power through work drive jack shaft to rear wheels through sprocket and chains provides for greater gear reductions, thereby giving a maximum of power.

This jack shaft construction is unique and at the same time highly efficient. A worm of hardened steel, operating in conjunction with a bronze gear gives high power producing possibilities and insures long life to these parts. The jack shaft is splined into the differential, which is carried inside the worm gear. Drive sprockets at the outer ends of the jack shaft carry chains to the rear wheels.

All of the wheel bearings are of special design of heavy roller Timken type, permitting readjustment when necessary on account of natural wear.

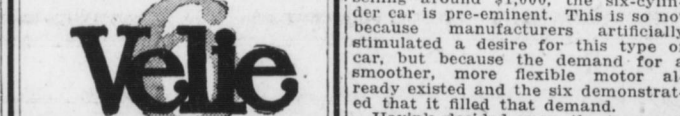
The transmission has four speeds forward and one reverse with direct drive on fourth. This gives proper gear reductions for pulling under all conditions with the necessary speed in fourth for the better stretches of road.

Other details of design and construction are in full accord with Garford practice and up to the usual high standard of the Garford Motor Truck Company.

The road builder has been tested thoroughly and has exceeded expectations. Its pulling power is astonishing, and being constructed for operation over all kinds of roads, it fulfills a multitude of the needs of contractors in this and other lines.

AUTO STORAGE—First class, fireproof garage, open day and night. Rates reasonable.

Auto Trans. Garage—27-29 North Cameron St.



Velie

-for service-day-in-and-day-out

Spring days give a wonderful thrill to motoring after the long, dreary season indoors—and if you wouldn't miss a day of it, order Velie at once.

Velie-Harrisburg Co.
Sixth and Herr Sts.

Finds South America of O. Henry in Six Months Trip Through Countries

The South America of O. Henry, with its barefoot-soldier, revolutions and yellow fever, and the South America of wondrously beautiful cities, rich in art and culture and splendid architecture, peopled with diplomats and genteel folk, were found by Fred Cardway, who has just returned from a six-months' visit.

His trip was made in behalf of the Packard Motor Car Company, the purpose being to discover methods American businessmen would best follow to establish a good, friendly footing of trade relations.

Cardway says the American desire to make business dealings prompt and entirely practical, from the American point of view, will not do in South America. The man who attempts to sell goods in that manner invariably fails, for the English, German and French people who have extensive trade interests in the South American countries do things more to the liking of the people.

"Your Frenchman, Englishman or German goes to Buenos Aires or Rio, and makes his home there. He becomes a citizen and takes an active interest in the welfare of the city and the nation," said Cardway. "Yet there is no doubt that goods of American manufacture will be welcomed in South America."

"I found many of the wealthy, educated people of Rio de Janeiro, Buenos Aires and Montevideo, who were astonished to know that there was such a thing as a twelve-cylinder motor car, or that America produced a motor car that surpassed the cars made in Europe."

"Since the beginning of war, practically no high gradecars have been sold, because of the difficulty of getting them from Europe. It really had not occurred to the majority of South Americans to even consider American-made cars for high class usage."

Cardway was accompanied on his trip by Mrs. Cardway. They were received everywhere with cordiality, especially in Brazil, which has the friendliest feeling for the United States. Government officials were exceptionally kind and made it a point to make their visit pleasant. They were given a short undersea voyage in a Brazilian submarine, and were taken for a flight over the harbor at Rio de Janeiro in a naval airplane.

On their return they traveled from Buenos Aires 800 miles across the continent to Valparaiso, Chile, on the new railroad, which has been completed only two years. This road crosses the Andes and reaches an elevation of 18,000 feet, far above the timber line.

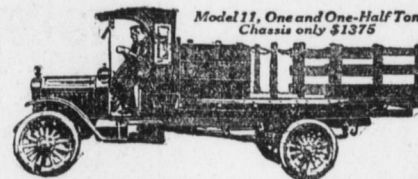
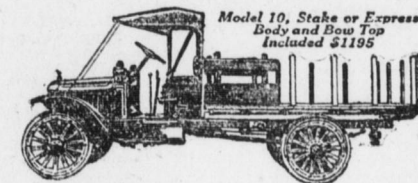
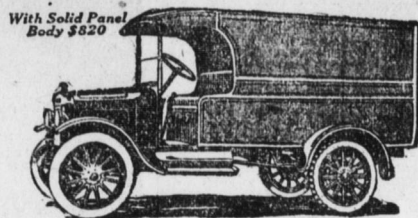
They stopped for a day at Callao, Peru, and made a trip inland to Lima, the capital. There they obtained a number of Incas relics, some of which Cardway values highly. There, also, they found a revolution in progress, and got into the yellow fever zone. Their return was through the Panama canal to Colon and via Jamaica, to New York.

A monkey and two parrots that were presented to them in Buenos Aires was included in their return luggage.

D'Orey & Company, bankers and steamship agents in Rio de Janeiro, were appointed Packard dealers, and in Buenos Aires a company was formed to handle the American car. Louis Mitre and his brother, publishers of "La Nacion," the foreign newspaper of Argentina, Carlos Alfredo Turnquist, a banker, and Gustavo Landivar, manufacturer of the famous "43" cigars, are the chief stockholders in the company.

In the short time Cardway was in South America, he cabled to Detroit and brought with him personally orders for 25 Twin Sixes. He believes this is an indication that if American manufacturers in various lines will establish friendly and dignified trade relations with South America, a splendid field will be opened to them.

REPUBLIC TRUCKS



All Your Hauling All the Time At Less Cost

THIS is the Republic idea of Quality—proved by more than 10,000 Republic Internal Gear Trucks operating in every State of the Union.

With these sturdy trucks goes our complete service. At your command every day and every hour of the day.

Five Republic Sizes

Republic Dispatch Model 9, maximum capacity 1500 lbs., furnished complete, express body with canopy top, side curtains, glass front, electric lights with generator and storage battery and electric horn, \$795; or with solid panel body, \$820; Model 10, 1-ton, with stake or express body and bow top, \$1195; Model 11, 1½-ton chassis, \$1375; Model "A," 2-ton chassis, \$1785; Model "T," 3½-ton Dreadnaught, \$2675.

Penn Mar Auto Co.
M. K. THOMSON, Manager
East End Mulberry Street Bridge,
Harrisburg, Pa.
Representing
Republic Motor Truck Co., Inc., Alma, Mich.

DEFINITE FIELD FOR \$1,000 CARS

By Hugh Chalmers

Probably the most important development of the automobile industry during the past few years has been the gradual defining of price classification among those manufacturers turning out a large volume of cars annually. It has been fairly well settled, for instance, that the four-cylinder car is destined to lead in the lowest priced fields. And the sixes, eights and twelves have their markets almost as sharply defined.

Because the \$1,000 field offers the automobile manufacturer an opportunity to incorporate improved features of construction with quantity production, I believe the future of the car selling near that price to be already assured. When we pay \$25 or \$30 for a suit of clothes, we do not expect to obtain the quality of goods for which we pay \$50 or \$60. But as our worldly prospects increase, we gladly pay the difference to obtain long wearing qualities in our apparel. For exactly the same reason, we know that the buyers of cars in the \$1,000 field are recruited to a great extent, each year, from former owners of cheap cars.

From time to time we hear the pessimists haul out and dust off their little talk on the "point of saturation" in the automobile industry. To the men who have followed the automobile industry from its inception, this view point appears ridiculous. In the first place we must remember that the industry has been passing through a steady process of evolution for over ten years. Hundreds of thousands of automobiles have been turned out in that time, but I will venture to say that a big majority of cars now on the road are proceeding of the past four years. Each succeeding year sees thousands of cars relegated to the scrap-heap. Which answers conclusively the question, "What becomes of the old cars?"

We were not familiar in the early days with the heat-treating processes or the metal combinations which make for long life. If we had been, our first models would still be doing yeoman duty on city streets and country roads. This natural process of elimination has made room each season for a fresh crop of better motor cars, and the probabilities of over-production, it seems to me, are largely confined to the cheap car field.

Briefly, the more difficult problems in the automobile industry of what kind of car of cars to build, at what prices and how many. Due to the rapid development of the engineering and changes in the automobile industry have been kaleidoscopic in the past. Severity of competition and caprices of public demand have caused changes of policy not always for the best.

There was a time when automobiles had but one cylinder, then two, three and four. When fours first came out we often heard the remark that a four simply multiplied your troubles by four. Yet when fours were perfected, the old types were thrown away. To-day the four is practically relegated to the very low priced cars or to racing creations. In the field selling around \$1,000, the six-cylinder car is pre-eminent. This is so not because manufacturers artificially stimulated a desire for this type of car, but because the demand for a smoother, more flexible motor already existed and the six demonstrated that it filled that demand.

Havink decided upon the type and price car he intends to build, the manufacturer is at once confronted with cost of manufacture. The Chalmers Company was one of the first to concern itself with that manufacturing from the raw material was the only plan by which the middlemen's profits could be eliminated from the selling price of the car.

We have for a long time manufactured the big majority of parts for the Chalmers cars under our own roof. But during the coming year we plan to still further increase our activities along this line. Operations are under way whereby we will operate our own drop-forging shop, painting and trimming departments and several other important branches of our business now being taken care of by outside concerns.

With \$5,000,000 recently added to our working capital, we are planning a production of 28,000 to 30,000 cars for 1917 on a basis that keep our big Detroit plant working at full speed for the next twelve months. We have just achieved a record year's business entirely independent of war profits or other outside considerations, and our manufacturing schedule will go through regardless of whether the European war is settled next month or next year.

FREE

Tests and Water For

STORAGE BATTERY

and

EXPERT REPAIRS

at

FRONT-MARKET Motor Supply Co.

109 Market St.

Prest-o-lite Battery Service



5-Passenger Touring \$695
3-Passenger Clover Leaf Roadster \$695

Ensinger Motor Co.
THIRD AND CUMBERLAND STS.
Bell Phone 3515



--the efficiency car
more miles—
less gasoline—
more comfort—
less weight—

E. W. Shank
107 MARKET ST.

Pedigreed!



Big Four \$850
Light Six \$985

Prices Effective April 1st, 1917

Light Fours

Touring . . . \$669
Roadster . . . \$699
Country Club . . . \$793

Big Fours

Touring . . . \$850
Roadster . . . \$885
Coupe . . . \$950
Sedan . . . \$1450

Light Sixes

Touring . . . \$985
Roadster . . . \$1,035
Coupe . . . \$1,395
Sedan . . . \$1,995

Willys-Six

Touring . . . \$1,225

Willys-Knights

Four Touring . . . \$1,395
Four Coupe . . . \$1,650
Four Sedan . . . \$1,950
Four Limousine . . . \$2,950
Eight Touring . . . \$4,950

Advance in price, Big Four and Light Six models, May 1st next—deferred until that date unless too late to consider adjustments appearing in magazines circulating throughout the month of April.

All prices f. o. b. Toledo Subject to change without notice "Made in U. S. A."

Nine years of continuous, consistent development, improvement, refinement!

Each year a better car and a better value!

Over three hundred thousand now in use!

That is the history of the car that built Overland because it represented integrity of value.

And as steadfastly as this car has represented original integrity of value, so also has The Willys-Overland Company sustained that integrity of value throughout its service in the hands of those who purchased it.

The Overland Big Four of this season and its twin—except for the motor—the Overland Light Six, are the direct outcome of all this development.

More than three hundred thousand owners and more than four thousand dealer and factory-branch organizations have assisted this development by their experience with these cars and their helpful suggestions of improvements.

In their new beauty, in their perfected easy riding qualities, in their proven sturdiness and mechanical excellence, in their admitted tire, fuel and oil economy, these cars are worthy of the confidence we have, that they will further enhance Overland prestige.

The prices are \$850 for the Big Four, \$985 for the Light Six, while we have them to deliver until May 1st—thereafter \$895 and \$1025.

The Overland Harrisburg Co.

Open Evenings 212 NORTH SECOND ST. Both Phones



The Willys-Overland Company, Toledo, Ohio
Manufacturers of Willys-Knight and Overland Automobiles and Light Commercial Cars