

MODEL ROADS AT CORN SHOW

Uncle Sam Shows the Best Way to Prepare Country Roads.

GOVERNMENT STEAM ROLLER

Experiments Made in Different Sections of the Country Demonstrated at Exposition Now in Progress.

Uncle Sam is taking a deep interest in road building and in the government exhibit at the National Corn Exposition, now in progress in this city, and has quite an extensive exhibit on roads.

The office of public roads was established by the government for the purpose of collecting and disseminating useful information in regard to road building.

The exhibit consists of a number of models built on the scale of one and a half inches to the foot and illustrates the construction of fifteen standard types of roads in use in various parts of the United States.

One of the most important features of the exhibit is that which shows the use of asphalt, oil, tar and similar compounds as dust palliatives and preventives, and for the preservation of macadam roads subject to fast automobile traffic.

The model earth road illustrates the effects of good and poor drainage as well as the benefits resulting from the use of road machines for construction and splitting drags for repair.

Models of Roads.

A model of an oiled earth road shows how this kind of road is built and includes a section of old dusty road, another section where the road has been plowed and ready for oiling, another where the oil has been spread on the plowed surface, one where the oil and earth has been mixed together ready for rolling and another section showing the finished road.

This method of construction is adapted especially to the far west and southwest, where asphaltic oil can be easily secured.

The sand-clay road model shows the building of a sand-clay road, and represents a section of old sandy road treated with a mixture of sand and clay.

This method of construction is cheap and inexpensive and is especially adapted to the office of public roads in the southern and southeastern states, where sand and clay are found in close proximity.

Two models are used to illustrate the construction of gravel roads, one where the gravel is placed on a foundation prepared in the same manner as for a macadam road and the other where the gravel is spread on the prepared road surface from ditch to ditch.

The Telford model represents a stone road built with a foundation of heavy rock set on edge lengthwise across the road and having regular macadam surface.

A special type of construction in use for several years in Massachusetts, and which is intended to take the place of Telford construction is shown by another model. This is known as the V-shaped foundation road, on account of the fact that the foundation slopes toward the center instead of towards the sides.

The foundation is built of field boulders, or any kind of inferior rock available. It is surfaced with crushed stone as in macadam construction.

Burnt Clay Roads.

The burnt-clay model shows the various steps taken in the building of this type of road. The burnt clay road was designed by the office of public roads for the Mississippi and other sections of the country, which have an abundance of gumbo or buck-shot soil and where stone, gravel, and other road materials are scarce.

A model fourteen feet in length and three feet in width is used to illustrate the construction of the macadam road according to the standard fixed by the office of public roads. This model shows the prepared foundation, the first layer of crushed stone, properly rolled, second layer of smaller material thoroughly rolled, and the finished surface sprinkled with water and thoroughly rolled with a steam roller.

An exact model of a steam roller is in operation on this section of the road.

Near the macadam road model stands the miniature crushing plant with a quarry face in the background. This model includes crusher, elevator, screens and bins for three sizes of stone. The crusher is in actual operation.

On account of the fact that fast automobile traffic is injuring macadam roads throughout the country the office of public roads has devoted considerable attention to the study of various substances which can be used to prevent dust and to preserve the surface of such roads. Four models are devoted to this subject.

One showing the surface treatment of an old macadam road, one the penetration method, another the macadam sand-tar method, while the fourth shows the Gladwell method which is in extensive use in England.

Sections of tar macadam road built in Washington, D. C. in 1872-73-74 and which are still in use represent the life of this class of construction.

A series of enlarged photographs, arranged on the walls shows roads and bridges of various types of construction throughout the United States.

Mr. M. O. Eldridge, who is in charge at the exhibit, will give illustrated lectures in the biograph room on road building. These lectures will be given daily.

WATCH THE GEARS CLOSELY

See that the Teeth Mesh Home as They Should.

A periodical examination of the gears should be made from time to time to ascertain if on all speeds—forward and reverse—the teeth of the gears and the mesh home as they should do.

If the change-speed system is one in which the position of the lever is controlled by notches in a quadrant it is a fairly easy matter to correct the mesh by filing the fresh notches and closing up the old ones, although in reality the proper place to adjust matters is to make good the parts which have actually worn. This last is, however, an expensive affair and involves taking the gears right out in most cases, although it is sometimes possible to move the sliding forks, and either set them if they are strained) or thicken them up by riveting a piece of steel plate to their sides if they or the grooves they work in are worn. In any case do not tolerate gears which do not mesh fully into mesh.

After the notch, or make good the defect otherwise as indicated in time, or you will, sooner or later, be faced with the expense of paying for renewing a set of gears which otherwise might have lasted for a long period of hard service.

Keep the Valves Tight.

A waste of fuel will result from a lack of synchronization in the action of the valves of a gasoline motor, and not only that, but a falling off in power output as well. A careful adjustment of the valve tappets to compensate evenly for wear on the end of the valve stems and tappet heads should at all times be maintained. Another cause of waste fuel is in leaky valves or piston rings, resulting directly in lost compression.

Garden Show

Has More Space for Automobiles

With Seven Thousand More Square Feet, There is Still No Space to Spare.

That the Tenth National Automobile Show in Madison Square Garden, January 8-13, will eclipse any former exhibition of motor cars, motor-cycles and accessories ever held in the famous building is positively asserted by the official list of exhibitors just issued by the Association of Licensed Automobile Manufacturers, under whose auspices the show is held.

The list shows a total of 222 different displays of which there are fifty-four exhibits of complete cars, besides 284 exhibits of accessories and parts, and twenty-three motorcycle exhibits.

Even with an increase over last year of more than 7,000 feet of exhibition space, which the show managers by ingenious methods were able to squeeze out of the garden interior, there is not one foot of space available for exhibition purposes to be had in any part of the building at present and there is a long waiting list of manufacturers who are anxious to "climb over the garden wall."

This situation is indeed a striking commentary on the growth of the industry, when it is recalled that at the first automobile show in the country, in 1900, there were only sixty exhibitors who displayed their product in the garden.

As in previous years, this show of the standard makers of licensed cars has been departmentized so that visitors may find more readily those things which most interest them. On the main floor and elevated platform will be found only gasoline pleasure cars. Electric pleasure vehicles are to be exhibited in the "exhibition hall," off the foyer at the Madison avenue end.

The basement will be occupied by commercial vehicles, motorcycles and the overhead accessories. The concert hall, balconies and elevated platform will accommodate the exhibits of accessories. Visitors to the garden will be agreeably surprised at the distribution of exhibits, which will give the impression of a vast space not uncomfortably filled with cars and allowing plenty of elbow room.

REDUCED RATES TO GARDEN AUTO SHOWS

Railroads Have Announced Reduced Fares During Two Weeks of Automobile Exhibition.

Announcement is made by the American Automobile Association that open meetings will be held at National headquarters, 25 Fifth avenue, New York, during the two great automobile show weeks, and that reduced round trip railroad rates of a fare and three-fifths has been granted by the Trunk Line association for members of the association desiring to attend these meetings.

The meetings are scheduled for December 21 to January 7, inclusive, during the week of the automobile show at Grand Central Palace, under the auspices of the American Motor Car Manufacturers' association. Members of the American Automobile Association can, therefore, take advantage of the big reduction in railroad fares to attend these meetings, as well as the show, which opens on New Year's eve and continues until January 7.

Meetings will also be held from January 8 to 15 inclusive, during the week of the automobile show at Madison Square Garden under the auspices of the Association of Licensed Automobile Manufacturers, which opens on January 8, and continues until January 15.

Tickets and certificates may be obtained not earlier than January 5 nor later than January 10 for the trip to New York, which certificates, when duly validated, will entitle the holder, up to and including January 15, to a return ticket to the city of his choice upon which the going journey was made.

Only members of the automobile clubs affiliated with the American Automobile Association and individual members will be entitled to these reduced fares. Automobile dealers desiring particulars regarding membership in the American Automobile Association should make application to Mr. Frederick H. Elliott, secretary, American Automobile Association, 427 Fifth avenue, New York.

AUTO TOGS ARE NOW BECOMING

Change is Made Over the Old-Fashioned Style.

The old days when the motoring woman was dubbed a "sight" and appeared to go out of her way to make herself unrecognizable to her friends, says a dispatch from London.

This winter will be remembered as having introduced the daintiest motor fashions which have ever been seen. An example of the improvement which has been made is afforded by the motor coats. Delicate furs, such as mink or seal skin, are not considered hardy enough by the women who make a hobby of her motor car and drives hundreds of miles a week.

The most up-to-date coats are made of tiger, panther, lion or leopard skins.

"Motoring outfits nowadays are almost regal," according to a dealer on auto row. "Every one can realize how hard one a leopard skin coat will be if the markings are arranged to the best advantage. Some clients are having their coats made in the smartest tailor-made designs, so that they can be worn in or out of the car."

"It is not so long since the motoring woman was supposed to wear a small cloth cap with a wide peak, which was not becoming to every face. Motor bonnets followed in due course, and this pretty old-worn headgear has been brought to perfection this season. The bonnets are circular, fitting closely to the head and made of mink, marmot or sable, but preferably musquash lined with soft, pale-colored satin and the chin with satin ribbons to match the fur."

"Fur scarfs are very cozy for the motorist. They must be long so that they can be crossed over the chest and fastened at the back with a gold safety pin."

"Another novelty is a waterproof or leather-peaked hood which can be drawn over the fur bonnet in the event of rain."

"Fur bags will be useful to give to the motorist for a Christmas present. They are fitted with a couple of large pockets, so that the bag can do duty for a muff."

"Fur-lined boots and gloves and fur-bordered veils are among the latest accessories which every up-to-date woman must have in her wardrobe if she owns a car."

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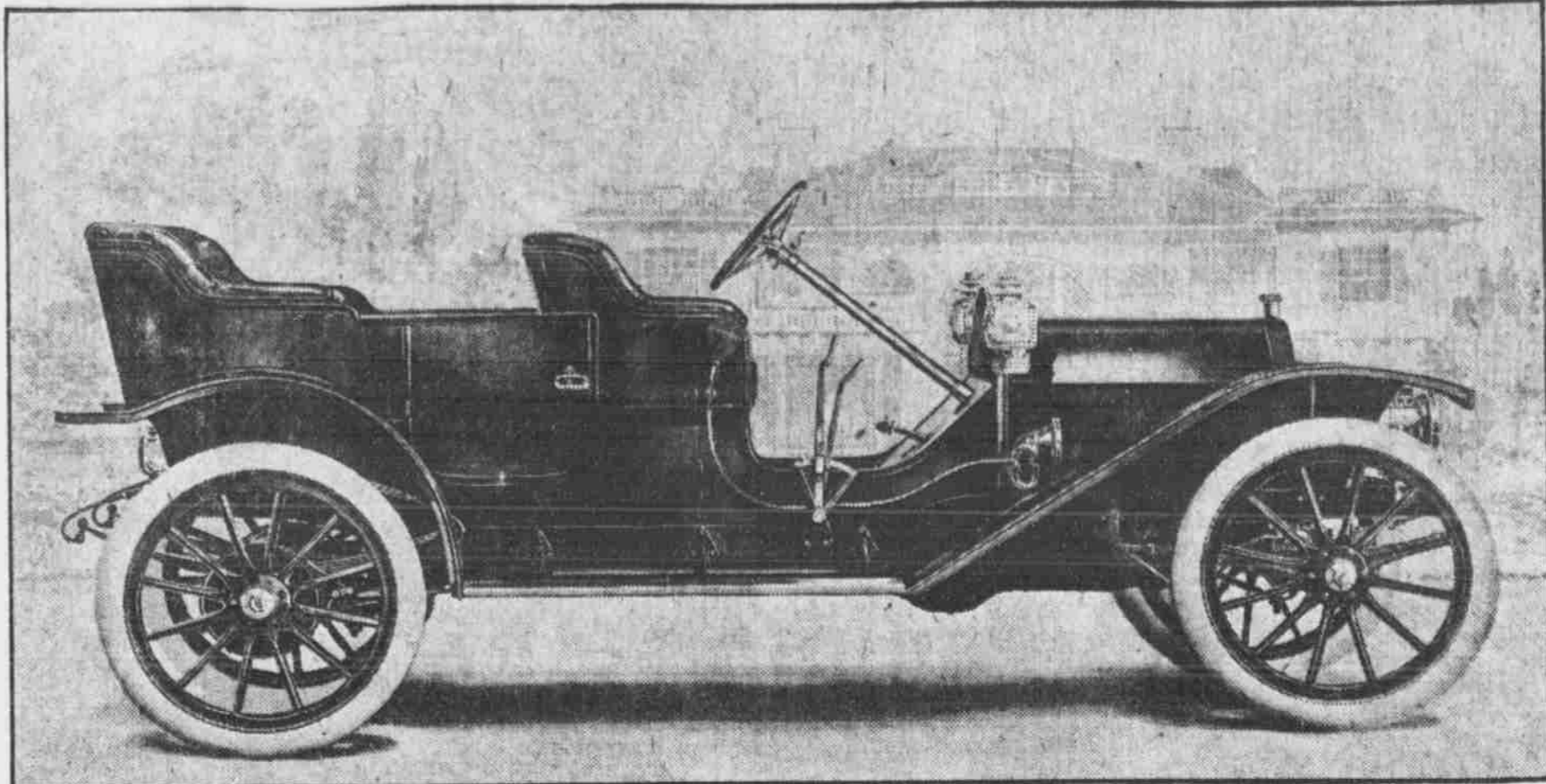
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EXTRA! EXTRA! EXTRA! THE "EVERITT 30" \$1350

Standard Equipment 5 Lamps, Generator, Magneto and Full Set of Tools



Standard Equipment 5 Lamps, Generator, Magneto and Full Set of Tools

The coming out of this car at \$1,350 is the biggest event in the automobile world.

You can't understand the full force and scope of this statement until you know what has gone into the making of the "Everitt 30."

The newest factory and the oldest builders tells the story in a single phrase.

Experience in building is the only left-over factor that has gone into the construction of this car—everything else brand new! No old machinery has been used in the building of this car, merely because it was on hand, and had to be utilized.

The Metzger Motor Car Co. starts out with a clean slate.

Its officers are the pioneers of the automobile business. Mr. Wm. Kelly, who designed the "Everitt 30," worked on the first automobile built in Detroit.

The officers of this company have been foremost in every movement which has made Detroit the greatest automobile manufacturing city in the world. The machines made by these men have made good on every road and every kind of a road in this country. Their names are on the maker-plates of the leading American successes.

They saw that a change was coming in the automobile business. They recognized two things of prime importance.

First, that the demand of 1910 was not for a cheap car, but for a high-class car at moderate—yes—at low cost.

Second, that the time had about passed when the automobile manufacturer could dictate to the public, owing to the excess of demand, and say: "Here is the car you get—take it or leave it."

Seeing these two things clearly, these pioneers sold out their old connections, lock, stock and barrel, and started a new factory to make the "Everitt 30."

Perhaps you don't realize what a brand new factory means to you. Machinery has to be specially built to make the parts of any automobile model. This machinery is surprisingly expensive. Naturally manufacturers hesitate about improving any part of their models, because any change, however small, means the change of costly machinery—the throwing out of an expensive machine into the discard, and replacing it with a still more expensive one.

That is why old established automobile factories often cannot see

their way to making improvements in their cars which would lessen the original cost to those who buy them, lessen the cost of operation, and make the cars better in many ways. So, you see, the manufacturer's stock of machinery is a big element in blocking progress of improvements, both for himself and for you.

But the Metzger Motor Car Co. made a clean, new start without this handicap of old machinery. They were not loaded down with a bolt or a screw that had to be used, because they hated to throw it away. They made their plant and their machinery to fit the model which they wanted to produce.

Then these progressive pioneers woke up to another important angle of the situation. They saw that in the new condition of things the public must be represented. So they sent out to the various parts of this country and called in twelve of the foremost distributors and sellers of automobiles in the United States. This move is bound to become historic in the automobile business.

It is the first instance of the public invited to participate in the manufacture of an automobile.

You know these men. If you do not know them personally you know them by reputation.

They are the largest automobile sales agents and distributors in this country. They have sold annually for the last ten years an average of eight million dollars' worth of automobiles.

They know every success and every failure in the business—every kink and quirk, and every kink that the public has made on every car from the most expensive foreign importation to the cheapest American model.

These men, whose names appear below, were invited to come into the enterprise with their knowledge of conditions, their knowledge of cars, their knowledge of men and their capital. They were invited because the prime movers in this enterprise believed the knowledge of these men was necessary to the making of the ideal moderate priced car for 1910.

The "Everitt 30" is the result of the combined focused knowledge and experience of all these men.

It means simplicity and ease of operation.

The "Everitt 30" is so simple that any man can run it; that the hiring of a chauffeur is not a matter of necessity, as with a car of complex mechanism, but a matter of convenience only. To save a chauffeur's wages means in many cases the difference between having and not having a car.

Again, this simplicity means greatly reduced liability to injury to parts and greatly increased ease in making repairs.

The machine of many parts—and that means our nearest competitor—is a bewildering puzzle to the ordinary garage mechanic, to say nothing of the man in the car. But it is different—decidedly different—with the "Everitt 30."

Suppose one of the connecting rods needs attention you do not have to spread down a cloth and establish a picnic machine shop by the road side. By removing just eight bolts, the lower half of the crank case is taken off, and immediate access given to all of the working parts of the engine, the connecting rod and piston.

Detroit, Mich. Security Auto Co. Cithens Brothers Co. Chicago, Ill. The McArthur-Tillars Motor Co. Minneapolis. The Kilburn Motor Car Co. Kansas City, Mo. Johnston-Petche Motor Sales Co. Denver. The Lincoln Automobile Co. Lincoln, Neb. H. O. Harrison Co. San Francisco

There is nothing marvelous about its production. It is only logical and simple—and this is the reason why it can be sold to you at \$1,350 in the year 1910. Probably in a year or two from next January it will be produced or paralleled by every automobile manufacturer in America, but that cannot happen this year.

For 1910 this car will stand out as the King and Standard of its class.

Until the other manufacturers can discard their old machinery and overtake the "Everitt 30," it must remain the car by which all others in its class are measured and judged.

With present equipment no other manufacturer can produce it or anything like it for its price of \$1,350.

Every "Everitt 30" that can be turned out in 1910 has already been demanded and allotted to the men whose names are below.

And what are the special merits of this car made by the oldest builders in the newest automobile factory in America?

Simplicity is the key note of this car. Its mechanism has been simplified at every possible point. Things which could not be eliminated to the clear working advantage of the car have been consolidated. The "Everitt 30" motor contains 150 fewer parts than its closest competitor.

THINK of it—150 less parts. What does this element of simplicity mean to the man who buys the car and runs it? A much lower original cost without any cheapening in the quality of materials—for the manufacturer can and does put the same materials into this machine that you find in \$5,000 machines.

removed without disturbing the cylinders.

One casting for the upper half of the crank case, the four (4) cylinders and the water jacket!

And this element of simplification or consolidation, of combining two or more parts into one casting is consistently carried out through the car.

The repair bill and the irritating delays of the road are reduced to a minimum with the "Everitt 30" because it is so simple and so sound in its parts.

The double drop frame is another important feature. Some expensive machines have it, but none has carried it to quite the perfection of the "Everitt 30"—which has a five inch drop, as against a 3 1/2 inch for any other competitive car.

This puts the weight of the "Job," the load, the center of gravity, close down to the ground—so that the car will stick to the earth, and not skid or overturn.

The road traction is an important matter, and in no other car is it so perfected as in the "Everitt 30."

On the other hand, the man who runs on country roads wants a free clearance. This is accomplished by designing our axles and steering mechanism, so that they are not as near to the ground as are those of our competitors. In a word, this car is made for every kind of driving. It has a geographical adaptability that no other car of any price possesses.

Take the matter of weight—that, too, is important in more ways than one. The "Everitt 30" does not weigh to exceed 2,300 pounds—or about 300 pounds less than its nearest competitor. Tire manufacturers prescribe weight limits for cars without their loads.

The "Everitt 30" will take its load, and still be almost under the prescribed limit of weight. You know what that means—it costs a lot less for tires. And, by the same token, this light car will run the same distance in the same time as the heavier car, and at much lower cost for fuel.

In no other car on the 1910 market

Color Setting Capacity Royal Blue Two, four and five persons. Count 110 inches. Wheel-base 56 inches. Gauge 50 inches. Tire Dimensions 24 1/2 inches. Brake Systems Two sets contracting and expanding on both rear wheels.

Horse-power Cylinders Arranged Thirty Four Vertically under hood. Cast Iron Stroke Cooling Radiator Ignition Electric source Drive Transmission Shaft Selective sliding gear on rear axle. Gear Changes Three forward, one reverse.

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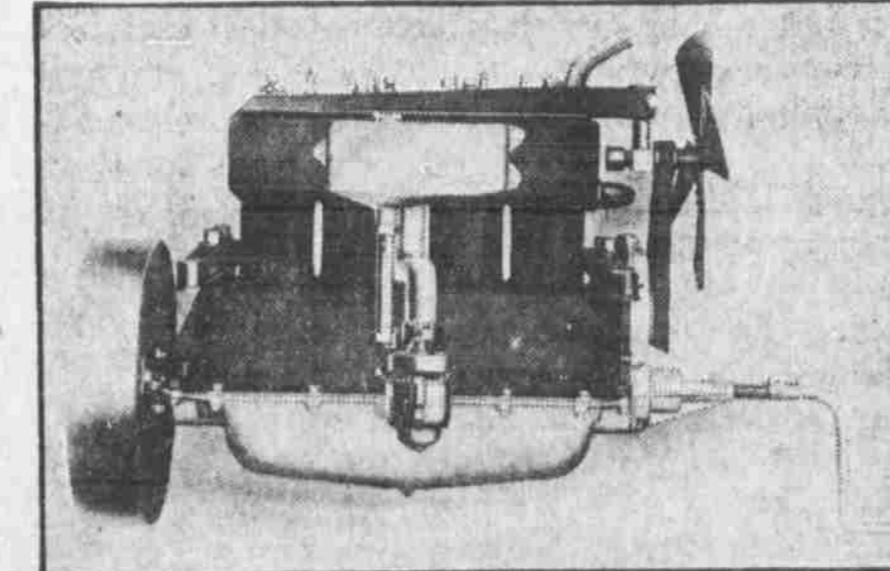
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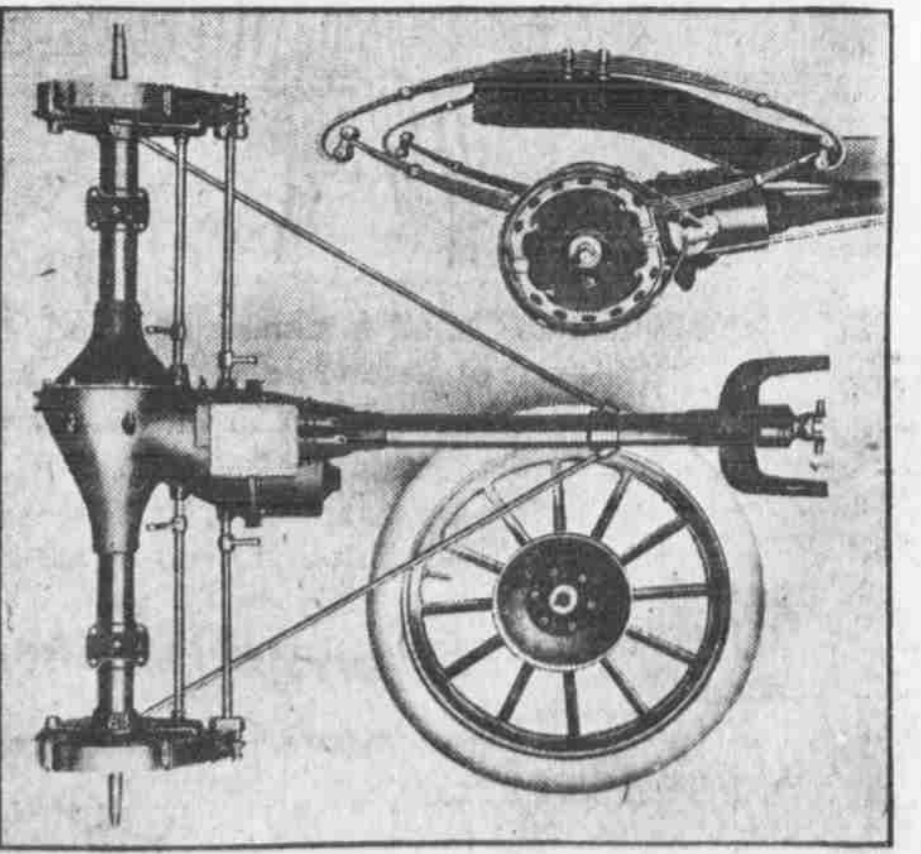
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Right side of engine, showing extreme simplicity in construction.



Rear axle assembly, showing transmission, incorporated on rear axle. The two brakes on rear wheel operating internal expanding and external contracting on brake drum. In the upper right hand is shown the spring suspension.

DETROIT, MICH. METZGER MOTOR CAR CO. DETROIT, MICH. THE LINCOLN AUTOMOBILE CO., 118-126 N. 13th Street, LINCOLN, NEBRASKA. Distributors and Factory Representatives for Nebraska.