

HE OWEN MAGNETIC CAR is in principle, an exceptionally well designed and constructed six cylinder gasoline automobile. Its principal distinction as compared with other high grade gasoline cars, lies in the fact that it is more flexible in the transmission of its driving power than can be possibly attained by any gasoline car with a multiplicity of cylinders. It not only combines all of the principal, vital and important characteristics of the conventional high grade gasoline car and electric car, but in addition, presents various functions hitherto unknown.

In place of the fly wheel, clutch, transmission, starting and lighting device and auxiliary parts, there has been substituted an electric generator, motor and controller.

The principle of this transmission of power is simple and may easily be understood by anyone who has elementary electrical knowledge. Let us use as a basis the ordinary horseshoe magnet, so familiar to all in childhood days. Instead of holding the magnet flat and stationary, suppose we now rotate the magnet, and hold in close proximity of the magnet a piece of steel. Due to magnetism there would be a tendency for the magnet to drag the piece of steel around

What is known as a generator field and generator armature act somewhat on the same principle as the elementary horseshoe magnet and the piece of steel. If we substitute the generator field for the fly wheel of the gasoline engine and attach the generator armature to



the propeller shaft we shall, if we revolve the generator field by means of the engine, create a magnetic drag, or tendency to revolve the armature, and hence propel the car. The driving power from the engine is transmitted to the wheels of the automobile in just this manner.

Now, it is easy to see that the generator field may be revolved very rapidly if the gasoline engine is run at a high speed, yet the armature will be retarded because its speed of revolution depends on the movement of the car according to load or obstructions. This difference in speed between the generator field and armature produces an electric

current. This current applied to an electric motor furnishes additional driving powers.

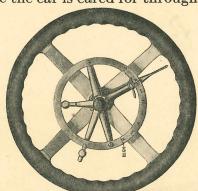
By means of the controller different relations between generator and motor are brought about. From first to high position Generator and Motor are doing their share of the work resulting in the car moving slowly with a great deal of pulling power

similar to the ordinary low gear position or moving very fast but with less pulling power compared with the high gear position of the conventional gas car.

The successive running positions together with the variation of speed obtained from the engine through the accelerator, result in practically an infinite number of speeds at which it is possible to operate this car.

The lever on top the steering wheel operates the controller at the bottom of the steering column. No exertion is needed in moving this lever from one position to another as there is no clutch to throw and no gears to shift. Every action to operate the car is cared for through the movement of this control lever. As

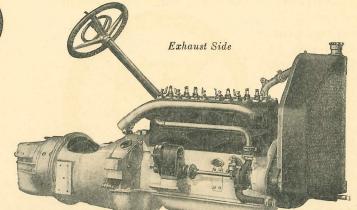
the movement of this control lever. As the chart designates, the various positions are marked on the steel ring in the center of the steering wheel, making it a simple matter to know exactly at which speed the controller lever is placed. With a very little practice the driver soon learns to handle his car automatically with freedom that is not only delightful but exhilarating and enthuses as is not possible with any other type of transmission. Exactly how this multiplicity of speeds is so



Steering Wheel with Controlling Lever and Spark and Throttle Levers







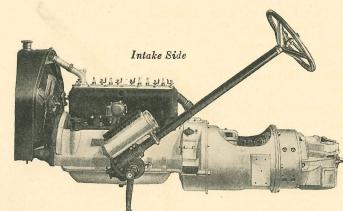
readily attained is brought out more clearly by reference to the chart and explanations following.

The chart, on cover, is a reproduction of the steering wheel, showing spark, throttle and controller levers. Also a design of the six cylinder engine and chassis employed.

These views are combined to graphically show the unique electric action which takes place in this car as the controller lever is moved into the various operating positions.

The chassis is the conventional design, without fly wheel, clutch, forward change gears, operating lever, clutch pedal and starting and lighting mechanism.

On the movable disc is shown, in the cut-out space, the electric



generator and motor completely replacing the parts mentioned above. The different shadings shown on diagrams as the controller lever is moved into the operating positions indicate the relative electric action taking place.

The generator con-

sists of generator field, serving as a fly wheel, and generator armature connected to the propeller shaft. The motor consists of motor field, fastened stationary to the chassis frame and the motor armature, also connected to the propeller shaft.

SHADINGS. Absence of shading in the neutral positions shows no electrical action is taking place.

The shading of the generator fields in starting position shows the

generator as an electric starter.

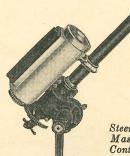
Shading of the generator armature and motor armature diagrams on first and second positions shows generator and motor action in transmitting engine power to the propeller shaft.

The gradual deeper shading of the generator armature on positions three, four, five and six shows generator assuming more driv-

shows generator assuming more driving power and the decreased shading of the motor armature shows the motor gradually doing less work.

On high speed, or sixth position, the motor fields are shaded, as the motor is working only as a generator for charging the starting and lighting battery.

The shading of the generator fields



Steering Wheel, Mast, and Controller



on charging position shows how the starting and lighting battery may be charged with the car stationary, should such action ever be required.

An incidental though important feature is an electric brake. When controller lever is placed in neutral position with car moving fast, the motor acts automatically as an electric brake, controlling the car speed to an approximate maximum of fifteen miles per hour. The power of this brake depends on the car speed when applied. As a result the brake is most powerful when most needed, reducing danger of skidding to a minimum. Not noticeable at slow speeds when car may be more readily controlled by the usual foot and hand brake.

The usual accelerator pedal is found in this car in order to give a

variety of speeds on the different control settings.

To obtain reverse speeds it is necessary to employ a single reverse gear connection operated in the usual manner. Car may then be operated with the same flexibility backward as forward.

This car is unquestionably the smoothest performing, most flexible, easiest operated car built—not excepting any car with a multiplicity

of cylinders.

In brief the story of the Owen Magnetic car is an automobile as easily controlled as the electric with the mileage radius and touring possibilities of the gas car. It is a car of infinite speeds and with its method of power transmission is so simplified that practically the majority of wearing parts have been eliminated. It has made unnecessary the changing of speed gears with its cumbersome nerve racking work and its disagreeable noises.

In presenting this car a strong appeal has been made to the discerning buyer who desires the utmost in riding qualities, in comfort, in luxury, with a minimum of exertion in handling the car in congested territory.

For many years we have been building chasses for electrically propelled cars and have an advantage in this particular type of electric transmission in that we have had the experience which is so essentially

a part of the building of every successful car.

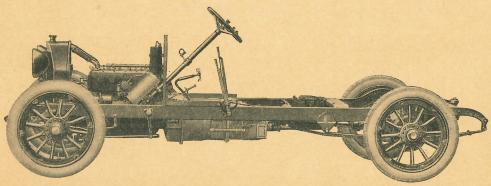
The exceptional body work which has placed the product of the Baker R & L Company in the foremost ranks of American automobile manufacture is the result of sixty years experience, manufacturing high grade vehicles for the first families of America. This experience is now placed for the first time at your disposal in the purchase of a gas car, a car so simple in operation, so smooth in running, so wonderful in its performance, so luxurious in its appointments, so beautiful in design and so perfect in its finish that you will want this Owen Magnetic car, the most remarkable product of the Automobile Industry.

Make your appointments for demonstrations.

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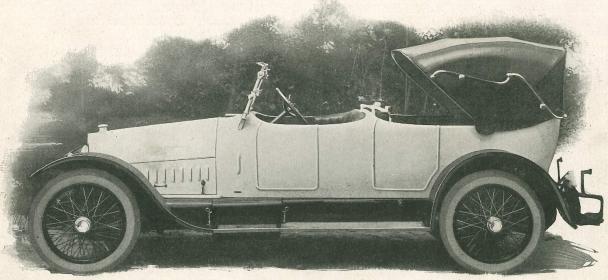




Chasses 125-inch and 136-inch Wheel Base



"The Owen Magnetic"



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