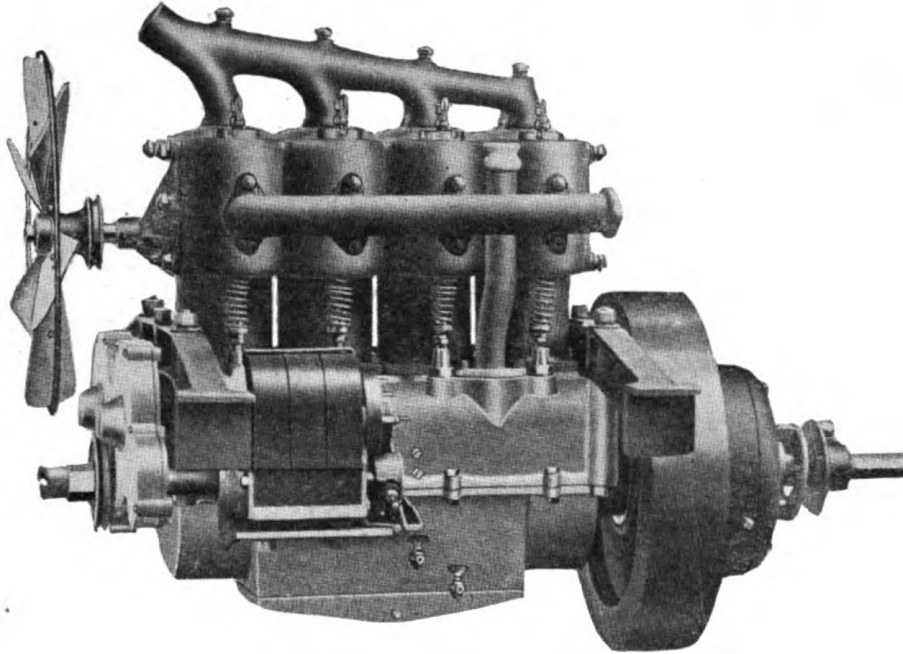


The various models are known as the Gaylord demi-tonneau, Gaylord roadster and the above mentioned Gaylord Utility model, a brief description of which is herewith given for the first time. As will be seen from the body construction this car is intended to fill the gap between the strictly pleasure model and the commercial car, yet without using in its construction or in the design any features or parts which are entirely new or untried in motor car practice.

This case is of special aluminum alloy, the drop-forged crank shaft as usual is carried in five bearings which are supported by the upper half of the case, the lower half forming the oil well. The motor used in the Utility model is 4 by 5, those used in the other models are of the same type, but that in the demi-tonneau having a bore of 4 inches and stroke of $4\frac{1}{2}$, while the roadster motor is $3\frac{3}{4}$ by $4\frac{1}{2}$. These later models have only 105-inch wheel base, while the



Motor of Gaylord Utility Car.

Fig. 2. This engine with separately cast cylinders, owing to its bolted together construction, possesses most of the features of the en bloc type. The crank case is of special aluminum alloy mounted directly on the frame by heavy cast steel girders fore and aft. The fly wheel is mounted on an integral crank shaft flange and encloses a multiple steel disc clutch.

The Demi-Tonneau model sells for \$1,150 and the Roadster for \$1,000. The company also manufactures a special roadster with high clearance for the use of lumbermen and land agents who go into the interior of Northern Michigan and Northern Canada, where they have to negotiate log roads. This machine is powered by a 4 by $4\frac{1}{2}$ -inch motor, and is fitted with 36 by $3\frac{1}{2}$ -inch tires; it sells for \$1,175. The following description pertains to the Utility Model:

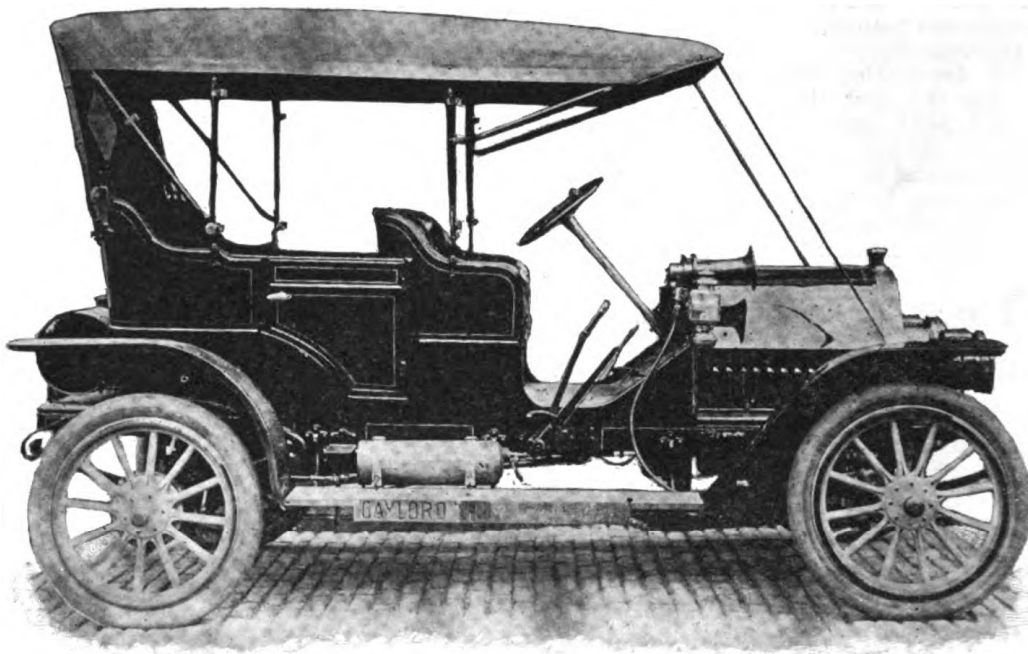
The Motor.

The motors used have been for some years in successful operation and are known as the Oswald. The T-type cylinders are cast separately, but as shown in the accompanying illustration they are flattened on their adjacent sides and are assembled by means of six tie rods, giving practically all the advantages of rigidity and compactness of the "en bloc" type. This compact unit, including the 19 steel disc clutch encased in the flywheel, is mounted directly on the frame by two cast steel I-section girders which carry the crank case slung beneath them by means of four large through bolts.

Utility car has a base of 112 inches. All the models are fitted with 32 by $3\frac{1}{2}$ -in/h tires.

All parts of the motor are interchangeable. The large nickel steel valves are all interchangeable and are operated by hardened steel lifters fitted with 1 in. diameter 3 in. face hardened steel rollers, running on $\frac{3}{8}$ in. hardened pins. The valve lifter guides are of bronze, with long bearing surfaces; the cams are tool steel tempered and drawn, pin and keep retained on the cam shafts which run in 3 bronze bearings each. The intake is of aluminum while the exhaust manifold is of cast iron with easy curves. The crank shaft carries on an integral fly wheel flange a special fly wheel of good quality cast iron which encloses the multiple steel disc clutch.

Lubrication is by a self-contained system, the oil being drawn from the base and distributed by a plunger pump to the chambers beneath each of the cylinders, splash taking care of the interior. All bearings are provided with large feedways to insure positive oiling. The regular system of water circulation is of thermo-syphon type,



Gaylord Demi-Tonneau Model.

Fig. 3. This car has a four cylinder 4 by 4½ motor, 105 in. wheel base, 32 by 3½ in. tires and as shown carries the gasoline tank at the rear, yet in a protected position.

but for slight extra expense a water pump can be supplied if desired. The engine is supplied with mixture from a model D Schebler carburetor.

A conventional 3 speed and reverse change gear is mounted on the rear axle, the main and counter shafts are of vanadium steel mounted on annular ball and Timken roller bearings. The gears are of chrome nickel steel.

The frame is of pressed steel 5-32 in.

stock, 4 in. greatest depth, and of special design to take the convertible body with its two surrey type seats. The rear seat can be quickly removed immediately converting the car into a handy light delivery wagon.

The equipment of all models consists of 2 headlights, generator, 3 oil lamps and horn, and all models are guaranteed for 1 year against defects of material or workmanship. This Utility model sells for \$1,250.

The Rockwell Light Delivery Wagon

An interesting type of light delivery wagon is that manufactured by the New Departure Manufacturing Company, of Bristol, Conn., and more so for the reason that the same chassis may be used for a taxicab body if so desired. The motor is of four cylinder vertical water cooled type, valves located on one side, water jackets being integral. The bore is 3½ inches and the stroke 4½ inches. Cylinders are cast en-bloc. The valves, of nickel steel, are 1½ inches in diameter, worked from a single cam shaft and are interchangeable. The connecting rods are drop forged steel, 10½ inches long, and the crank shaft of the three bearing type is a chrome nickel steel forging, 1½ inches in diameter, the crank webs being ⅞ of an inch thick. The crank case is cast in two sections of aluminum, parted on the center line of the bearings which are plain members, and the motor is supported at three points, the forward single member being of the swiveling type. A three plate floating ring clutch is used. Cooling is by water from a cellular radiator in conjunc-

tion with a belt driven fan and centrifugal water pump.

Ignition is by Bosch high tension magneto, with spark fixed and the four spark plugs are located over the inlet valves. Lubrication is by force feed and splash and the oil is circulated by a gear pump driven off the motor gears. The lower crank case section is the oil reservoir and the lubricant is stored in a false bottom, the bottom proper being the crank pit.

There are three forward and one reverse speeds in the transmission, which is of the selective type, the control levers being placed in the center of the aluminum floor boards on the right of the driver, the vehicle being steered from the left. All shafts and gears are of chrome nickel steel and all gears are of ⅞ inch face.

Final drive is through a universal jointed propeller shaft, of nickel steel, 1½ diameter, to a full floating rear axle, the gears and shafts of which are chrome nickel steel. The driving axles, which are of large diameter, are fitted with hub driving clutches,