

George A. Ward

JAN 28 1904

Empire Steam Touring Car

Built by

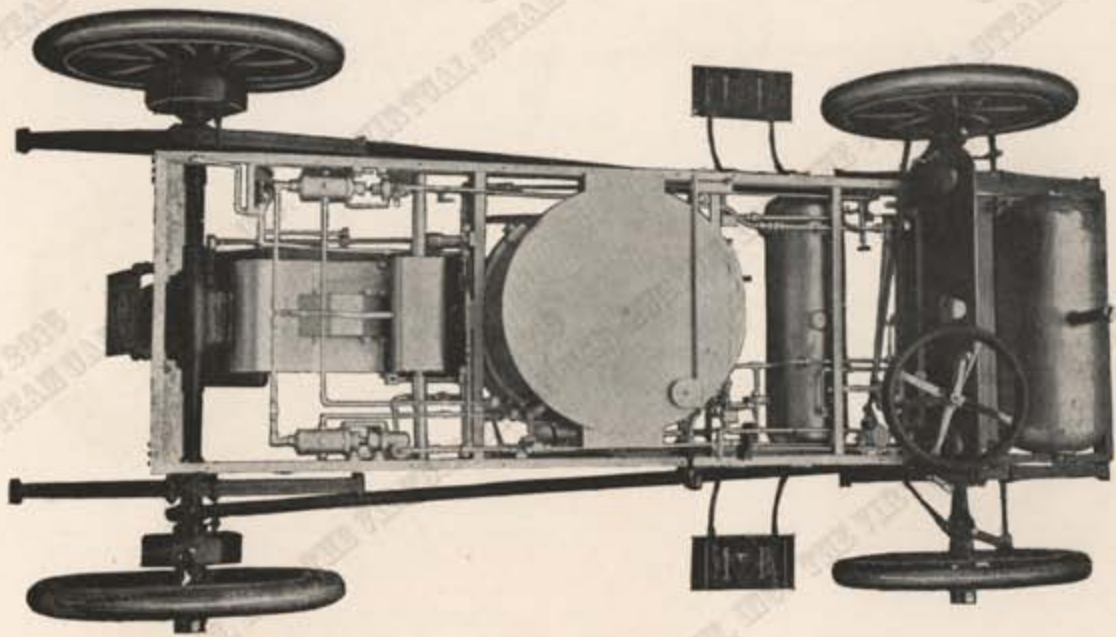
Wm. H. Terwilliger & Co.

Amsterdam, N. Y.

The Empire Steam Touring Car now offered for the season of 1904 is not an untried model. It is the result of four years of experimentation and investigation by the inventor, Mr. Wm. H. Terwilliger, who has had twenty-four years' experience in the construction of high grade machinery and who has made a life study of steam engineering. The principles embodied in the construction of the Empire Car have all been the subject of prolonged tests as to practicability, durability and reliability, and an ideal automobile for touring is the result.

The makers do not anticipate a large output this year. They will construct forty cars, each one under the personal supervision of the inventor, Mr. Wm. H. Terwilliger.

Engravings and specifications of the car will be found on the following pages.



Top View of Chassis of Empire Steam Touring Car



Empire Steam Touring Car Fitted with Tonneau Body

Specifications

Dimensions—Wheelbase, 87 in. Tread, 56 1-2 in. Weight of car 1970 pounds.

Body—Steel tonneau type, with extra large tonneau, upholstered in leather, to seat five persons.

Engine—Horizontal, fifteen horsepower, double cylinder, with Stephenson valve gear, all encased and running in oil. Engine is hung pivotally to rear axle, and the cylinder end suspended from boiler by ball and socket joint to compensate for spring action.

Boiler—Semi-flash water-tube type, suspended in the center from the main frame.

Drive—Chainless, by spur gear and pinion, the main driving gear, 4 pitch with 1 1-2 in. face, of steel, cut from solid blank. The differential is of the spur gear type.

Control—Engine is reversed by foot pedal. Throttle and air brake control are located in centre of steering wheel, both actuated by one lever. A side lever controls the air pressure in fuel tank and also the auxiliary water supply. Wheel steering gear can be tilted in any one of four positions to suit convenience of operator.

Air Brake—Internal expanding type, acting on the rear wheel hubs.

Frame—Steel channel iron with reinforced corners, and resting on four full elliptic springs.

Running Gear—Steel tubular construction. Rear axle, 2 in. No. 8 gauge tubing. Front axle, 1 7-8 in. No. 8 gauge tubing. Axle shafts, 1 1-2 in. running on American Roller Bearings. Front wheels, ball bearing of four point type, with four rows of balls. Wheels, Midgley steel tubular, with Diamond tires, 30 by 3 1-2 inches. Steering knuckles, drop forged.

Tanks—Gasoline of fifteen gallons capacity, sufficient for 125 miles, and water of 40 gallons capacity, sufficient for 40 miles, located under front hood.

Fittings—Steam, water, and fuel gauges. Forced lubrication system. Side lamps. Kit of tools. Storm apron.

EMPIRE
STEAM

1904-05

W. H. TERWILLIGER & CO., AMSTERDAM, N.Y.