


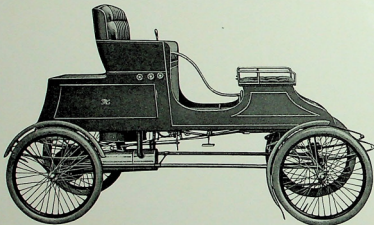
Stanley



HE OBJECT OF THIS PAMPHLET IS TO
GIVE TO THE INQUIRER AS COMPLETE
AN IDEA AS PRACTICABLE OF THE
PRINCIPAL FEATURES OF THE STANLEY STEAM
CAR. AS MAY BE SEEN BY THE ACCOMPANY-
ING CUTS, THESE CARS ARE BUILT IN TWO
TYPES, WHICH FOR CONVENIENCE WE WILL
CALL THE RUNABOUT AND THE SURREY. ✕ ✕

STANLEY MOTOR CARRIAGE CO.

NEWTON, MASSACHUSETTS

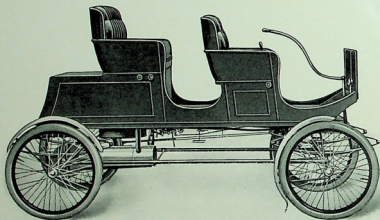


Runabout with Solid Seat.

Length of wheel base, 78 inches. Width of wheel base, 52 inches.
Approximate weight, 720 pounds. Price, \$670.

THE leading idea in designing the "Runabout" was utility.

A neat car with graceful lines and long wheel base, powerfully driven, adapted to carry either two or four people; an excellent touring car for two persons with ample baggage facilities;—these are the features of the runabout.

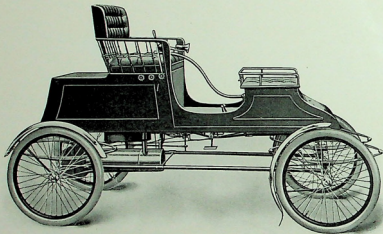


Surrey with Solid Seats.

Length of wheel base, 82 inches. Width of wheel base, 52 inches. Approximate weight, 750 pounds.
Price \$750 with stick seats; — \$790 with solid seats.

THE special features of the "Surrey" are its equipment with the down draught, and the dropping of the front seat making this seat much lower than the rear seat, thus giving the occupants of the rear seat a much better view of the road and scenery in front.

This machine is a powerful hill climber and capable of making a speed nearly equal to that of the runabout.



Runabout with Stick Seat.

Length of wheel base, 78 inches. Width of wheel base, 52 inches.

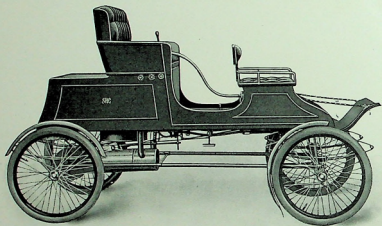
Approximate weight, 700 pounds. Price, \$650.

Some Important Features of the Stanley Steam Car

NO simpler, more direct, or safer method of power transmission was ever brought into practical use than the method used in these cars. This is accomplished as follows: Instead of a large sprocket-wheel between the compensating gear on the rear driving axles,

Chainless we substitute a plain phosphor bronze spur gear of practically the same diameter. On the crank shaft of the engine is a hardened steel pinion. The engine is placed horizontally in such a position that the steel pinion engages the bronze gear, thus forming a direct power transmission. The front end of the engine is suspended from the body of the carriage and partakes of its up and down motion. The rear end of the engine is connected radially to the rear axle, thus keeping the gears always perfectly adjusted.

The following are some of the advantages of this method of power transmission: First, no chain to break, fly off, require constant tightening, or wear out. Second, the whole driving mechanism is perfectly encased, protecting engine and gear from mud and dust. Third, by removing the case of the engine, which can be done in less than one minute, the engine is just as accessible as though it were lying on a bench in a machine shop.



Runabout Open, for Four Passengers.

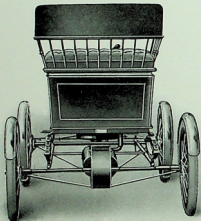
Some Important Features of the Stanley Steam Car—Continued

THE engine used in the Stanley Steam Car is of our own design and manufacture and is patented, the patent number being 672,337.

The engine is two-cylinder double acting, of the locomotive type, with plain slide valves and link motion reverse.

Engine

This engine is more completely a ball-bearing engine than any other engine in use in an automobile. Even the crossheads run on balls. This particular feature has been in use by us more than three years and is one of the greatest improvements ever made in automobile engines. The use of balls in the crossheads does away entirely with the sliding friction, thus saving the loss of power by such friction. One of the chief advantages of this construction, furthermore, is in the matter of lubrication, as it is only necessary to give the balls sufficient lubrication to keep them from rusting, as they run quite as well dry as when well oiled.



Runabout, Rear View.

Some Important Features of the Stanley Steam Car—*Continued*

THE use of superheated steam is desirable in two ways. First, it saves water. While water practically costs nothing, it has to be carried, and this adds to the total load. Second, it saves fuel. This costs money. By our method of superheating we completely avoid one of the

Super- heated Steam

dangers attending the use of superheated steam, viz., overheating and consequent burning of the cylinder oil, thus injuring valves, cylinders and pistons. Our system, while securing a high degree of superheat, renders it impossible to overheat.

A Stanley Car with a load of four persons can easily be run on a good road two miles on one gallon of water. As the water tank holds twenty gallons, practical experience shows that these cars can be run from thirty to forty miles on one tank of water.

Some Important Features of the Stanley Steam Car—Continued

THE use of superheated steam necessitates much more perfect cylinder oiling than the use of wet steam.

All our cars are equipped with a mechanical cylinder oiler which delivers a definite quantity of oil to the steam chest each mile the vehicle is run. The ordinary gravity feed oil cup generally feeds in all the oil in about the first eight or ten miles of the journey. After this the cylinders run dry. Not so with ours. Just as much oil goes in the last mile of the run as the first. This mechanism is very simple and reliable and can be reset after a trip of fifty miles without soiling the hands.

Cylinder Lubrication

Some Important Features of the Stanley Steam Car—Continued

A WATER glass to show the height of the water in the boiler is a nuisance. It is sure to break, in some cases many times on one trip, and the liability of breakage greatly increases as the steam pressure under which the car is run is increased. When the boiler pressure reaches between three hundred and four hundred pounds a glass water gauge is thoroughly unreliable. As the carrying of high steam pressure is very desirable, since it means economy in water consumption and increased power, it became necessary to find a substitute for the water glass. This we have in our water indicator. It is more reliable than a glass, cannot break, never needs repacking, and is so constructed that the height of the water in the boiler can be determined by the sense of touch as well as sight, so it is not necessary to illuminate for night running.

Some Important Features of the Stanley Steam Car—*Continued*

ABOUT the only objection to a fire tube boiler is the liability of being "burned out." While such an accident is attended with no danger, it is a nuisance, as it means that the boiler cannot be used again until it is repaired.

Fusible Plug

All accidents of this kind are avoided by the use of our fusible plug. When the water in the boiler gets too low, the plug melts out and warns the driver, who at once shuts off the fire, and the boiler is protected.

This plug is so situated that it can be quickly removed and a new one put in its place, and after pumping water into the boiler the fire is relighted, and in a few minutes the vehicle is under way again.

Some Important Features of the Stanley Steam Car—Continued

ALL the products of combustion together with the exhaust steam are discharged wholly downward and at the rear of the carriage. The advantages of this method are as follows: First, having no opening at the top into which air can be drawn, a much better draught is maintained when the car is running, and as a result the boiler steams better.

No up Draught

Second, the absence of the upper opening prevents an upward draught of air through the boiler when the fire is shut off, and as a result the steam pressure will hold much longer. Another great advantage is the fact that having no upward opening, currents of air, no matter in what direction or how strong, have no effect on the burner. Certainly leaving off the chimney makes a neater looking car.

This construction is made possible by the peculiar features of the Stanley burner, which operates like a blowpipe, giving sufficient force to the flame to force the products of combustion up through the boiler tubes and down through the smoke pipe at the rear of the car.

Some Important Features of the Stanley Steam Car—Continued

THE burner is so constructed that it secures perfect combustion and intense heat, is not affected by air currents and never blows out or back-fires.

It is provided with a pilot light which is not shut off by the automatic, but burns continuously after being lighted until shut off by the hand valve at the seat, and is just strong enough to hold the steam pressure and relight the main burner after the latter has been shut off either by the automatic which controls the steam pressure or the valve at the seat. The car can be left standing for from one to three hours with the main burner turned off and still have steam enough to run.

The Stanley Burner

The pressure on the fuel which supplies this burner is maintained automatically when the machine is running and can be pumped up by hand before starting, and since there is never more than one pint of gasolene under pressure it takes but a short time to pump up the pressure by hand. This makes the system a very safe one as compared with the old-style machines where the entire gasolene supply is under pressure.

The main supply tank holds thirteen gallons in the runabout and fifteen gallons in the surrey, and is sufficient to run the cars from one hundred and fifty to two hundred miles.



