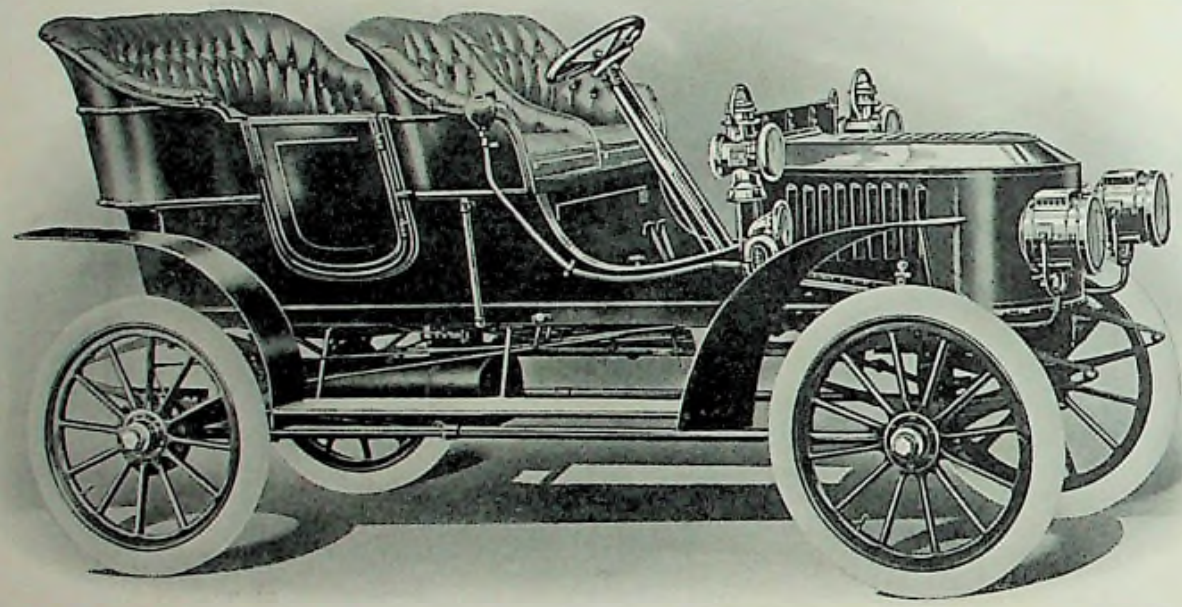
Stanley

STANLEY STEAM CARS

WITH 1907 we have completed ten years of automobile manufacturing. Our aim throughout this period has been to produce the best automobile value in the entire world, and we have done it. To achieve this end, it has been necessary to deliver the maximum speed, the maximum efficiency, and the maximum simplicity, at the minimum cost. As for speed and efficiency, we are producing a Touring Car, for instance, for $1,500 which cannot be matched by any gasolene car for less than three or four times that price. And its simplicity is proven by the fact that 75 per cent of these Touring Cars are in the hands of their owners without the aid of hired chauffeurs.

STANLEY MOTOR CARRIAGE COMPANY,

Newton, Mass.



MODEL F Touring Car, seating five. 23-inch boiler and burner in front, under hood. 3⅜ x 5-inch engine. 20 horse-power.

Divided front seat. Throttle and by-pass lever sub-imposed on steering wheel. 34 x 3½ inch tires. Wheel base, 100 inches; track, 54 inches. Full elliptical springs. Internal expanding hub brakes, in addition to band brakes on driving gear. Gasolene capacity (tank at extreme rear) 150 to 200 miles (16 gallons). Water capacity (tank under front seat) 40 to 50 miles (30 gallons). Oil lamps, gauge lamp and horn. Ironed for top. Cape top, $85.00 additional. Price net cash, F. O. B. Newton,

$1,500

MODEL F

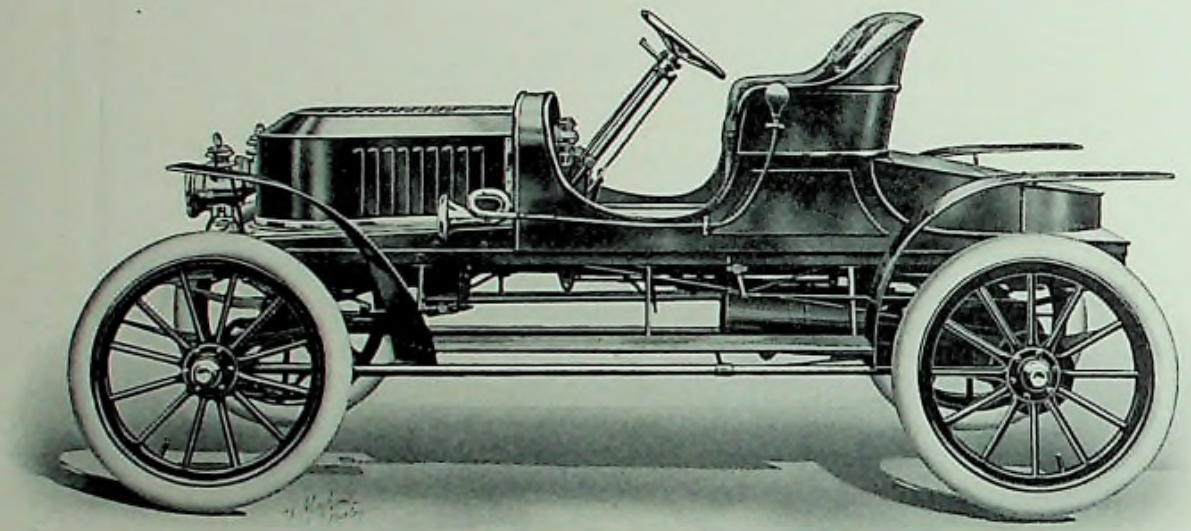
The Model F meets fully every requirement demanded of a touring car — from the one extreme of hard, fast cross-country driving; to the other, and even more exacting one, of quiet, flexible running in city streets. No gasolene car in the world will carry so many people so far, so fast and so comfortably, at so slight a cost for fuel, tires and repairs on the boulevards or in the mountains; and none can equal it for easy handling while shopping down town. In the open country, on a good road, it can hold a speed of 50 to 60 miles, and it never hesitates at mud, sand or hill; and when it reaches town, there is no need to take second speed — no over heating — no stalling of the motor.

There is no changing of gears — speed from a creeping pace to a mile a minute or more is to be had by simply opening and closing the throttle, sub-imposed on the steering wheel. When at a temporary standstill, there is no odor, no vibration, no racing engine; nor is there any cranking for a new start. The extreme flexibility and the power to get back to high speed quickly under any conditions without shifting gears remove the temptation to take chances on dangerous corners or in congested traffic.

This 20 horse-power steam motor will easily deliver in an emergency to the rims of the driving wheels more power than any 50 horse-power gasolene motor, and as evidence we offer our Ormond record of 45⅘ seconds for a mile — the fastest mile ever made by any stock touring car in the world.

The total weight of the car is about 1,850 pounds empty. This light weight and the uniform drive and lack of gear changes reduce the tire cost and tire trouble to a minimum; furthermore, they reduce the fuel cost and the repair cost to the lowest possible point.

Here is a five passenger Touring Car at $1,500, so efficient in every way that you would have to pay three or four times its price for a gasolene car to equal it; and so simple to operate and care for that three-quarters of all we have made are in the hands of their owners, without the help of hired chauffeurs.



MODEL H5. Gentlemen's Speedy Roadster, or Fast Touring Car, seating two. 23-inch boiler and burner in front, under hood. $3\frac{5}{8}$ x 5 inch engine. 20 horse-power.

Divided seat. Throttle and by-pass lever sub-imposed on steering wheel. Gasolene capacity (tank at extreme rear) 150 to 200 miles (13 gallons). Water capacity, 50 to 60 miles (26 gallons). 34 x $3\frac{1}{2}$ inch tires. Wheel base, 100 inches; track, 54 inches. Running boards and large mud guards. Full elliptical springs. Internal expanding hub brakes in addition to band brakes on driving gear. Oil lamps, gauge lamp and horn. (This car is similar to model F except as to body and engine gear.) Price net cash, F. O. B. Newton, **$1,350**

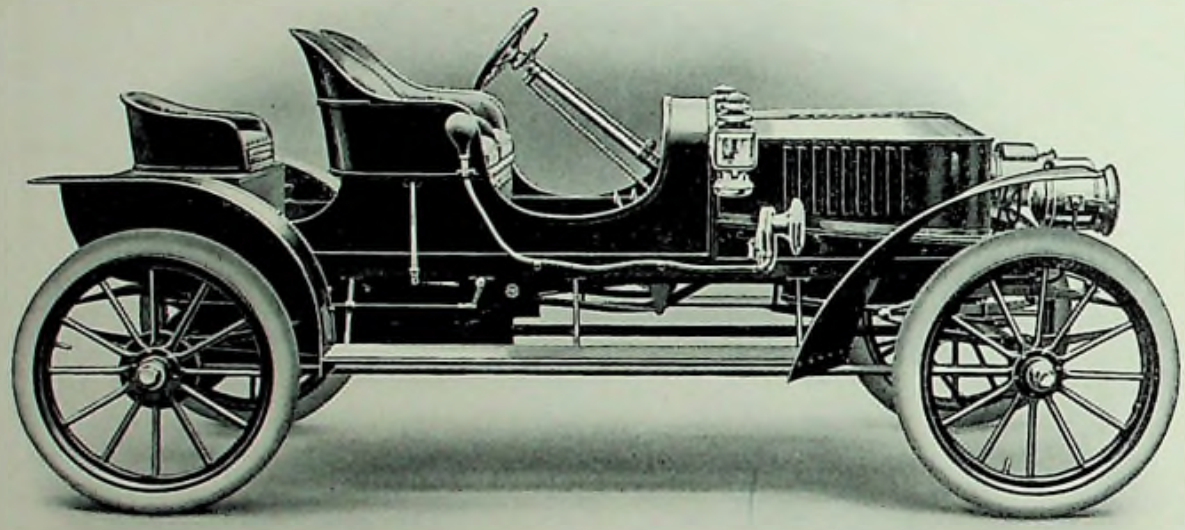
MODEL H5 SPEEDY ROADSTER

Model H5 is indeed a Gentlemen's Speeding Car, and is intended for those who wish to hit up a speed of 65 or 70 miles an hour on a good, safe road, without going to the expense of importing a $10,000 racing machine, with its noisy cylinders and high expense for tires and maintenance.

This car is equipped with the same power plant as our Model F touring car, but the engine is geared to a higher speed. The running gear, etc., are also similar to our Model F car.

It has a water capacity for 50 to 60 miles, and a gasolene capacity for 150 to 200. Its total weight empty is about 1,600 pounds. It is graceful and rakish in outline, and unlike any gasolene car that can attain a similar amount of speed, it has no odor, noise or vibration. It can be run through city streets all day without overheating, and without attracting the least attention except for its neat appearance.

STANLEY STEAM CAR



MODEL K. Semi-Racer, seating two, with rumble seat added. 26-inch boiler and burner in front, $4\frac{1}{2} \times 6\frac{1}{2}$ inch engine. 30 horse-power.

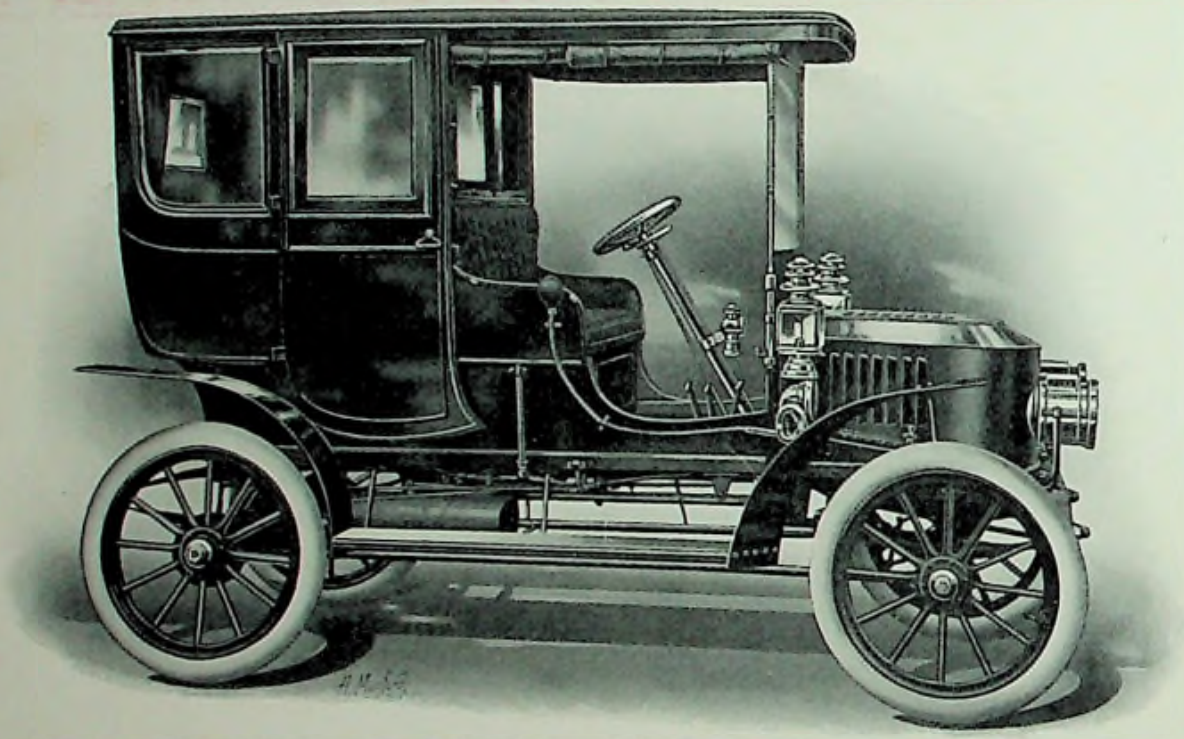
Divided seat. Throttle and by-pass lever sub-imposed on steering wheel. Gasolene capacity (tank at extreme rear), 150 to 200 miles (13 gallons). Water capacity, 50 to 60 miles (26 gallons). $36 \times 3\frac{1}{2}$ inch tires. Wheel base, 108 inches; track, 56. Full elliptical springs. Oil lamps, gauge lamp and horn. Price net cash, F. O. B. Newton,

$1,800

MODEL K SEMI-RACER

Model K is a fast stock car for two people with an extra rumble seat. It is intended primarily as a car for the fastest kind of road work, and is geared to a very high speed. It is entirely practical for everyday use, except that it is unnecessarily powerful and fast for any such purpose. It can, of course, like all Stanley Cars, be throttled down to a snail's pace; and there are no cylinders to get overheated, and no disagreeable odor or vibration while running slowly, or standing still in city streets. It is equipped with 26-inch boiler, and $4\frac{1}{2}$ x $6\frac{1}{2}$ inch engine. The boiler capacity, on account of the greater diameter, and greater depth, is fifty per cent more than that of the 23-inch boiler.

We are planning to build only a limited number of these cars.



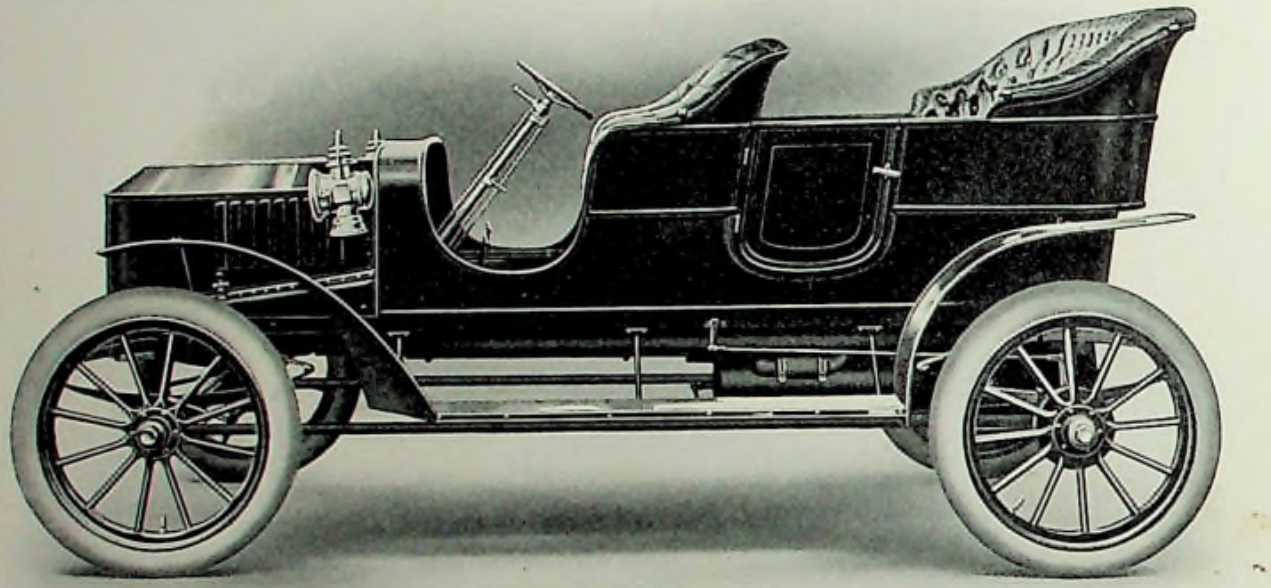
MODEL J. Limousine, seating five. 23-inch boiler and burner in front, under hood. $3\frac{5}{8}$ x 5 inch engine. 20 horse-power.

Throttle and by-pass lever sub-imposed on steering wheel. 34 x 4 inch tires. Wheel base, 100 inches; track, 54 inches. Gasolene capacity (tank at extreme rear), 150 to 200 miles (18 gallons). Water capacity (tank under front seat), 40 to 50 miles (30 gallons). Full elliptical springs. Internal expanding hub brakes, in addition to band brakes on driving gear. Oil lamps, gauge lamp and horn. Price net cash, F. O. B. Newton, **$2,500**

MODEL J LIMOUSINE

We offer our Model J car for town and suburban use. This car has the same power plant, running gear, etc., as our popular and successful Model F Touring Car. It has a luxurious and comfortable body of the Limousine type, seating five persons. It is equipped with folding glass-front, and heavy side curtains completely enclosing the driver's seat. There are in the body proper all the appurtenances that go with a well appointed town car.

The flexibility of steam as a motive power; the simplicity of Stanley control; the lack of noise, odor and vibration when at a temporary standstill; the absence of cranking, overheating of cylinders, and "stalling,"— all these contribute so greatly to bodily comfort and peace of mind, as to make this the most desirable of town cars.



MODEL M. Large Touring Car, seating five. 26-inch boiler and burner in front under hood. 4½ x 6½ inch engine. 30 horse-power.

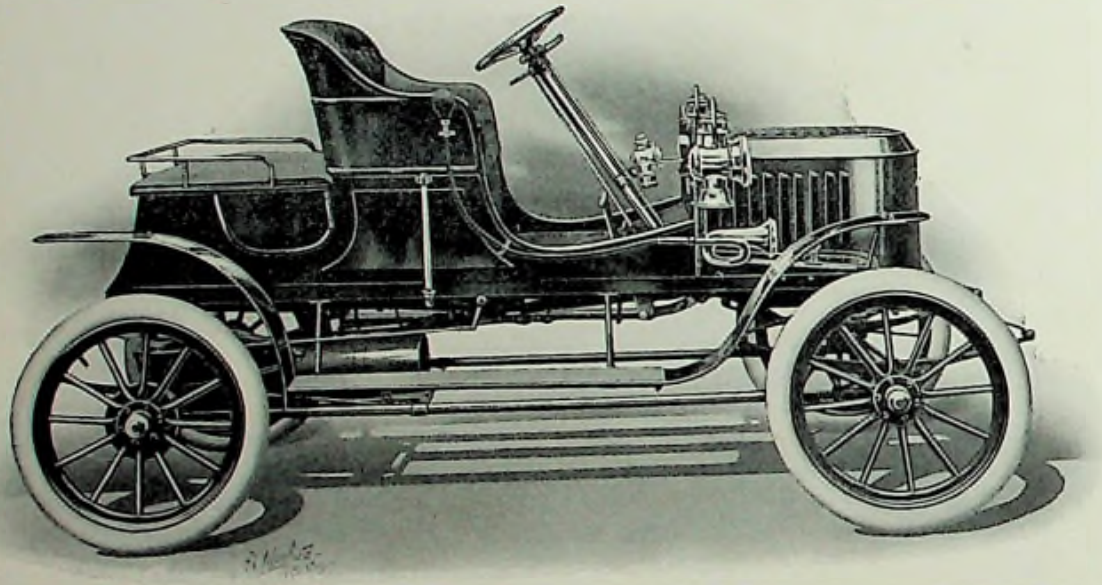
Divided front seat. Throttle and by-pass lever sub-imposed on steering wheel. 36 x 4 inch tires. Wheel base, 114 inches; track, 56 inches. Full elliptical springs. Internal expanding hub brakes, in addition to band brakes on driving gear. Gasolene capacity (tank at extreme rear), 150 to 200 miles (18 gallons). Water capacity (tank under front seat), 40 to 50 miles (36 gallons). Oil lamps, gauge lamp and horn. Ironed for top. Cape top, $90.00 additional. Price net cash, F. O. B. Newton,

$2,000

MODEL M
LARGE TOURING CAR

We beg to announce our intention of building, for 1908 delivery, a touring car equipped with a 26-inch boiler and 4½ x 6½ inch engine. This is the same engine as that in the "Fastest Car in the World." The wheel base will be about 114 inches, and the tires 36 x 4. We believe this car will be capable of doing a mile in 40 seconds with five passengers aboard, and of sustaining a speed of 70 miles an hour as long as the road will allow it. The car will weigh about 2,100 pounds empty, and will probably be equipped with folding seats for two extra passengers. It will be the most powerful stock touring car ever built in the world. The price will be about $2,000.

STANLEY STEAM CAR



MODEL EX. Runabout, seating two to four. 18-inch boiler and burner in front, under hood. 3 x 4 inch engine. 10 horse-power.

Throttle and by-pass lever sub-imposed on steering wheel. Sliding rear seat, with collapsible back. 30 x 3 inch tires. Wheel base, 90 inches; track, 54 inches. Running boards and large mud guards. Full elliptical springs. Internal expanding hub brakes in addition to band brakes on driving gear. Gasolene capacity (tank at extreme rear), 150 to 200 miles (13 gallons). Water capacity (tank under seat), 40 to 50 miles (26 gallons). Oil lamps, gauge lamp and horn. Price net cash, F. O. B. Newton,

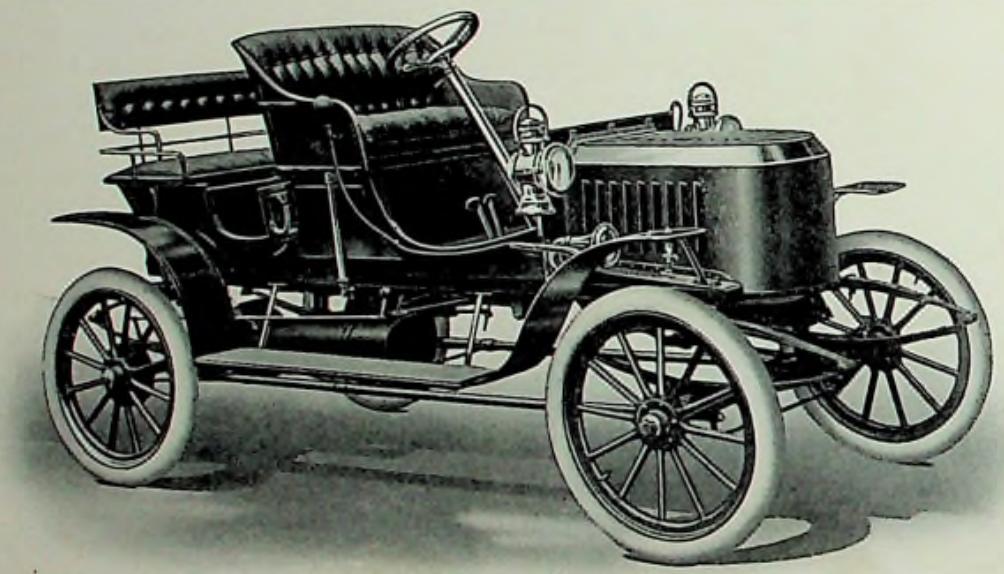
$850

MODEL EX RUNABOUT

Our Model EX car for 1908, rated at 10 horse-power, is, perhaps, the best value we have ever offered the public — as for mere speed, there is, we believe, no gasolene car in the world listing at less than $3,000 which can beat it; and it has the same famous ability to dash up a hill which is common to all Stanley cars. It is, however, as a car of all around serviceability, for all kinds of work, on all kinds of roads, that we offer the Model EX. For city use — for running around town on business — for the family man, who drives only Sundays and evenings — for a lady to drive — for those who live in the country, and want a smart, light car, sure of taking them "there and back" in any condition of roads or weather — and as a touring car for two people, it is equally satisfactory. The original cost is low; and the cost of up-keep is even lower proportionately. The ordinary driver can get 10 to 12 miles out of a gallon of gasolene — the flexibility of steam and the large tires and the long wheel base reduce the tire-cost to the minimum — it is so easily handled that nine-tenths of all we have made are cared for by the owners — and it is so sturdily built that replacements of parts amounts to practically nothing.

While the Model EX is intended primarily as a runabout, yet it has such power that with four adults in it will go faster than most people care to ride; nor will it ever falter at a hill. The rear seat, while not so luxuriously upholstered as a tonneau, is comfortable and easy of access. It takes only a minute or two to convert it from a four passenger car into a lively tourer for two, with storage rooms for tools, robes, etc., in the foot-room below the rear seat, and a flat surface above large enough for a commodious trunk.

The Model EX weighs about 1,300 pounds empty.



MODEL EX RUNABOUT. *Rear Seat Open*

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, On the differential of the rear driving axles is a plain phosphor bronze spur gear. 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 connectod radially to the rear axle, thus keeping the gears always perfectly adjusted.

DIRECT SPUR GEAR DRIVE *(Patented)*

The following are some of the advantages of this method of power transmissions: First, there is 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. Fourth, much less power is lost than when chain or bevel gears are used.

ENGINE *(Patented)*

The engine used in the Stanley Steam Car is of our own design and manufacture and is patented. The engine is two cylinder double acting, of the locomotive type, with plain slide valves and link motion reverse.

This engine is more completely a ball-bearing engine than any other engine in use in an automobile. Even the cross-heads run on balls. This particular feature has been in use by us more than seven 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 loss of power from sliding friction.

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

SUPERHEATED STEAM
(Patented)

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 patented system of superheating we completely avoid one of the 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.

CYLINDER LUBRICATION

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. Just as much oil goes in the last mile of the run as the first. This mechanism is very simple and reliable.

WATER INDICATOR
(Patented)

The new Stanley Cars are equipped with the new Stanley water indicator, a patented device of unique design, practically indestructible and absolutely certain in its operation. There are no moving parts or working joints, consequently nothing to wear out or need repair. It shows the level of the water in the boiler by means of a water glass on the dasher. The liquid in the glass, which rises or falls to indicate the water level is cold and under no pressure, as the top of the glass tube is open. It contains the three important elements — practicability, reliability and durability.

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

FUSIBLE PLUG *(Patented)*

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. 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 fire may be relighted and in a few minutes the vehicle is under way again.

NO UP DRAUGHT

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. 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.

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 STANLEY BURNER (*Patented*)

The burner is so constructed that it secures perfect combustion and intense heat, and is entirely encased, there being no air inlet except the mixing tube; consequently, it 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; and is just strong enough to hold the steam pressure and relight the main burner after the latter has been shut off by either the automatic which controls the steam pressure or the main valve. The car can be left standing for from one to five hours with the main burner turned off, and still have steam enough to run.

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

The main supply tanks hold sufficient gasolene to run the cars from 150 to 200 miles.

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

LOCATION OF PARTS

In all our cars the boiler and burner are under the hood in front. The mixing-tube, blow-off valve, fusible plug, and safety valve are at the very front, and in the most accessible place. The water tank is under the front seat and the gasolene tank is at the extreme rear of the car. The hub-brake lever and band-brake lever are both in position for the right foot, and the reverse lever for the left foot. The throttle valve and pump lever are sub-imposed on the steering gear. The burner valves, water indicator and gauges are on the dash-board. The cylinder-oil tank and water and gasolene pumps are under the front foot-board.

HUB BRAKES

All cars with artillery wheels are equipped with expanding internal hub brakes which are controlled by a ratchet lever under the right foot, and can thus be suddenly applied without reaching for a hand lever. This brake is most powerful in design and is of minimum weight.

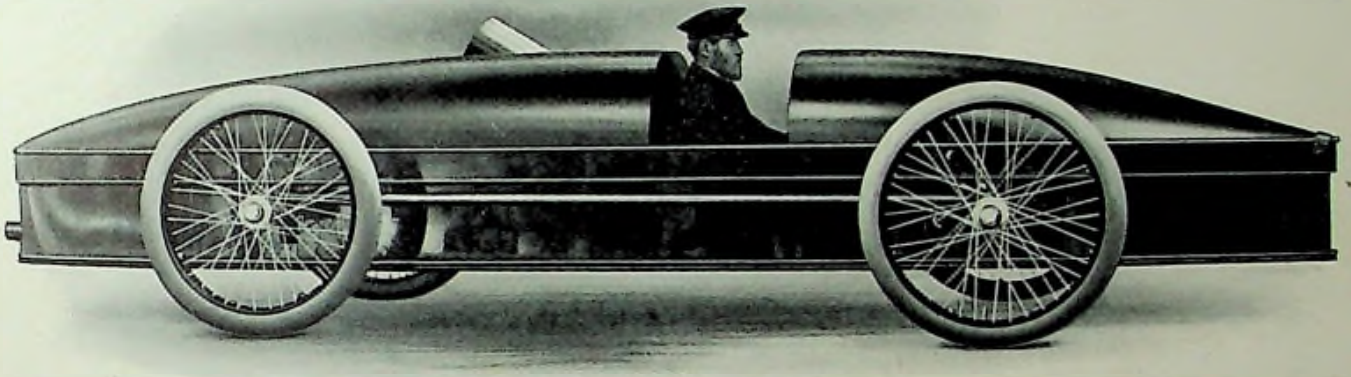
MINOR FEATURES

All our cars are equipped with wheel-steering apparatus, and all with artillery wheels; and the selling price includes two oil lamps, a full equipment of tools, and a large serpentine horn. All Models are equipped with full elliptical springs, strong enough to do their work properly, and resilient enough to insure most comfortable riding. The cars have a clearance sufficient to reduce the dust nuisance to practically nothing. We supply a syphon with each car, making it possible to fill the water tank by suction without the use of hose or bucket.

THE IMPORTANCE OF CYLINDER OILS

It is costly practice to experiment with cylinder oils. The damage is done within the engine before making itself known to the operator. Observation over a period of many years in our own repair shop has shown us that much of the cylinder, valve and piston trouble, some of which is so mysterious and unaccountable to the driver, is caused by the use of inferior or unsuitable oils.

The question of lubrication is one of vital importance to the economical operation of any car, and it is to the mutual interest of Stanley owners and ourselves that the oil best adapted to meet the requirements existing in Stanley Cars should be used at all times. After giving this matter much care and attention, we adopted, and have used exclusively for some years, the Harris Superheat Steam Cylinder Oil, furnished by the A. W. Harris Oil Company, Providence, R. I., and would urge each Stanley owner to have this oil on hand at all times, and always to run his car with this oil, feeling confident that thus the best results will be obtained.



THE FASTEST CAR IN THE WORLD

(Rate of 127.66 Miles an Hour)

This car, at Ormond, Fla., Jan. 21 to 28, 1906, established the following World's Records:

WORLD'S RECORDS		FORMER RECORDS	
1 Kilometre	.18⅝	Darracq	.21⅜⅝
1 Mile	.28⅕	Napier	.34⅜⅝
1 Mile in Competition	.31⅕		.41⅜⅝
5 Miles	2.47⅕	Napier	3.17
2 Miles (World's record for cars eligible under the rules)	.59⅜		

The 5-mile record was made in competition, with a scoring start, and was at the rate of a mile in 33⅜ seconds, which is faster than any gasolene car built according to A. A. A. rules ever made for a single mile.

The power-plant in this car is exactly like that in the regular Stanley cars, except that it is larger, of about twice the power as the Touring Cars (Model F). It weighs 1,600 pounds, and has margin enough for another boiler of the same size (512 pounds) without passing the racing weight-limit of 2,204 pounds. The boiler is 30 inches in diameter and 18 inches deep. It contains 1,475 tubes, and has a total heating surface of 285 square feet. A steam pressure of 800 to 900 pounds is carried. The engine is 4½ x 6½, and makes 350 revolutions to the mile. The wheels are 34 inches in diameter, and make 600 revolutions to the mile. They are equipped with 3-inch G. and J. tires. The body is so designed that the largest cross-section it presents, including the wheels, is only 9 square feet.

STANLEY RECORDS

The first ascent of Mount Washington ever made by an automobile of any kind was accomplished by Mr. and Mrs. F. O. Stanley in a 4½ H. P. $650 stock Stanley runabout, August 16, 1899. The time consumed was about two hours. Although several gasoline cars attempted this ascent, none ever accomplished it before September, 1902.

In the competition of August, 1904, out of over 20 starters, a stock Stanley $750 runabout ascended Mount Washington in 28.19⅖, being beaten by only a 60 H. P. Mercedes, which made the time of 24.35⅜.

In the competition of July, 1905, a stock Stanley $850 runabout made the ascent in 22.17⅗, being beaten by only one car, a 60 H. P. Napier, which made the ascent in 20.58⅘.

At Charles River Park, Oct. 11, 1898, a Stanley stock $650 runabout made a mile on a 3-lap track in 2.11. This was, at the time, the world's record for a mile.

At Readville, May 30, 1903, a Stanley racing car made a mile in 1.02⅘, making a new world's record for a mile on a track.

At Ormond, Fla., February, 1904, Louis S. Ross, driving a stock Stanley $750 runabout, made a mile in .55⅖. This is still a world's record for cars weighing less than 1,000 pounds.

At Ormond, Fla., January, 1906, the Stanley racing car won the Dewar Cup for a mile in competition, the Mile Open, the Mile Steam, and the Mile Record events; the Kilo Record event, and the 30-mile American car event; and made a new world's record for 5 miles; and the Model H Roadster won the 15-mile Price-handicap in 13.12.

At Ormond, Fla., January, 1907, a stock Stanley $1,500 Model F car made a mile in 45⅗ seconds, which is the fastest mile ever made in the world by a stock touring car. The same car also made a world's record for a mile for stock touring cars in competition — 53⅖ seconds.

At Readville, Mass., Sept. 14, 1907, a Stanley racing car made a mile in 54⅖ seconds — a world's track record for a mile in competition.

SUNDRIES.

The prices include attaching the articles to the car. These prices are subject to change.

TOPS. An excellent 4-bow touring car top, of black pantasote, similar to the illustration on the back cover, for $93.00; or one of tan colored khaki cloth, for $85.00. These prices include front and side curtains.

For the EX we can furnish a 3-bow top of either for $75.00. These prices include front and side curtains.

LAMPS. The prices for lamps, tanks and generators include piping. 7-inch Rushmore lamps for $40.00 a pair, 6-inch Rushmores for $35.00 a pair. Or we can offer excellent 7-inch lamps for $25.00 a pair, or 6-inch in similar grade for $20.00 a pair. The brackets cost $6.50 a pair. A tail lamp and bracket, $4.50.

GENERATORS. Rushmores quare, two-way generator for $20.00, or an excellent two-way generator for $15.00. Eco generator, including acetylene torch for firing up, $41.50.

TRUNKS. For the Model F car, a dash-leather or sole-leather trunk, canvas lined and steel frame, for $25.00, and a rack for the same for $10.00.

TOOL BOX. Mohogany rubber-topped, brass-finished tool box, 26½ inches long, for $10.00.

CHAINS. Weed chains for the rear wheels tor 34 x 3½ inch tires, $11.00; for 30 x 3 inch tires, $9.00.

TIRES. Extra 34 x 3½ inch Goodrich tires, complete, $49.25; shoes, $39.95; inner tubes, $9.30.

Extra 34 x 3 inch Goodrich tires, complete, $37.70; shoes, $30.95; inner tubes, $6.75.

Extra 30 x 3 inch Goodrich tires, complete, $33.10; shoes, $27.10; inner tubes, $6.00.

Ten per cent discount from list tire prices, and 5 per cent additional when cash accompanies order.

Cinch tire repair kit, $5.00.

SPEEDOMETERS AND ODOMETERS.

Veeder Odometers attached to left front wheel, any size, $10.00.

Jones Odometer Speedometer, 50 miles, $75.00; 60 or 100 miles, $90.00.

Warner Odometer Speedometer, 60 miles, $75.00; 100 miles, $85.00.