

The Incomparable WHITE



THE CAR FOR SERVICE

CATALOG
of the
MODEL "F" SIDE-ENTRANCE
WHITE STEAM CAR

THE SIXTH MODEL OF THIS FAMOUS CAR
TO BE OFFERED THE PUBLIC. IN THE
JUDGMENT OF EXPERIENCED MOTORISTS
THE MODEL "F" WHITE LEAVES NOTHING
TO BE DESIRED IN MOTOR CAR
CONSTRUCTION ♪ ♪ ♪ ♪ ♪

WHITE SEWING MACHINE COMPANY

CLEVELAND, OHIO

BRANCH
OFFICES

42-44 West 62d St., New York City
1878 Market St., San Francisco, Cal.
629-33 N. Broad St., Philadelphia

320 Newbury St., Boston, Mass.,
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74 Farrer Street, Detroit, Mich.

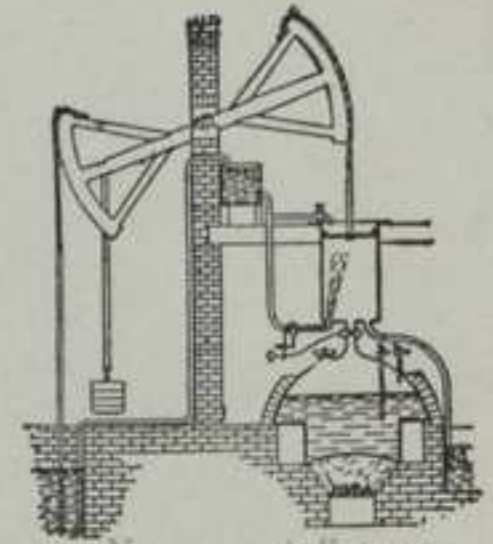
35 King Street-Regent Street; London-West, England

SECOND EDITION

The Development of Steam Machinery

The Earliest Practical Steam Engines • • •

During the seventeenth century, a number of philosophers (as those who dabbled with the sciences were then termed) experimented with crude devices which were designed to pump water by the alternate expansion and condensation of steam in chambers of various shapes and descriptions. There is evidence to show that a few of these early machines were actually put to some practical use. In 1705 Newcomen devised an "atmospheric" engine which consisted of a cylinder open at one end and provided with a piston which was made to travel outward by the action of a counter-weight, steam being meanwhile admitted beneath the piston. For the return or working stroke, the steam within the cylinder was condensed by means of a jet of water and the piston was forced down by the atmospheric pressure above it, the process being then commenced anew. Newcomen's engine, inefficient and wasteful as it was, was largely introduced for pumping mines, and with a few improvements and refinements in detail, it held its place as the great "prime mover" for three-quarters of a century.

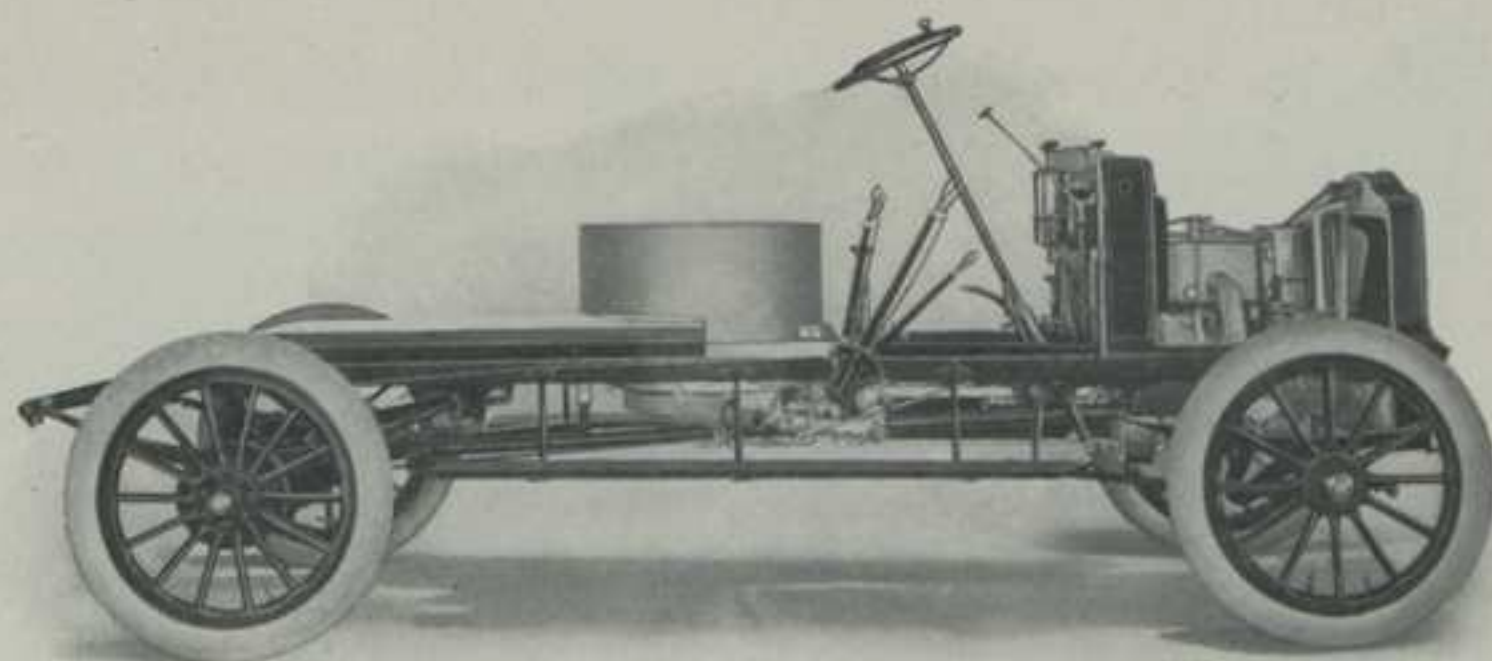


Newcomen's "atmospheric" Engine, 1705.

The Work of James Watt •

In 1763, James Watt, an instrument maker of Glasgow, began a series of experiments which speedily resulted in a number of improvements to the crude atmospheric engine. By successive inventions extending over a period of twenty years, Watt finally evolved the double-acting condensing engine with throttle valve, governor and other appurtenances. He manufactured these engines in large quantities, and so fundamental and unassailable were his patents, that his firm had practically

¶ In the New-York-Rochester endurance run of 1901, 80 cars started, of which 20 received first-class certificates. Four Whites started and four Whites received first-class certificates.



M O D E L " F " C H A S S I S

Weight	-	-	-	-	-	-	-	1700 lbs.
Height	-	-	-	-	-	-	-	5 feet, 4 inches
Price	-	-	-	-	-	-	-	\$2,200

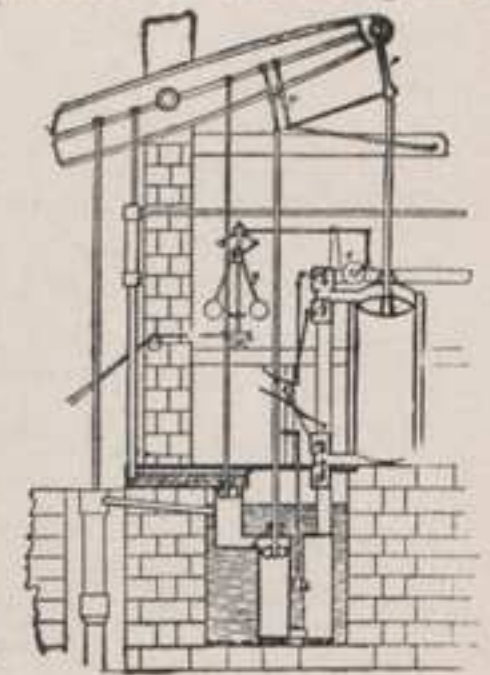
F.O.B. Cleveland, complete with tires and tool kit.

no competition. However, other inventors were in the meantime contributing to the development of the engine. Most important of these was Jonathan Hornblower, who, in 1781, constructed the first compound engine. This construction was revived by Woolf in 1804, in whose engine, furthermore, the steam was used expansively, i. e., the supply to the cylinder was cut off before the expiration of the stroke.

The Steam Engine Highly Perfected

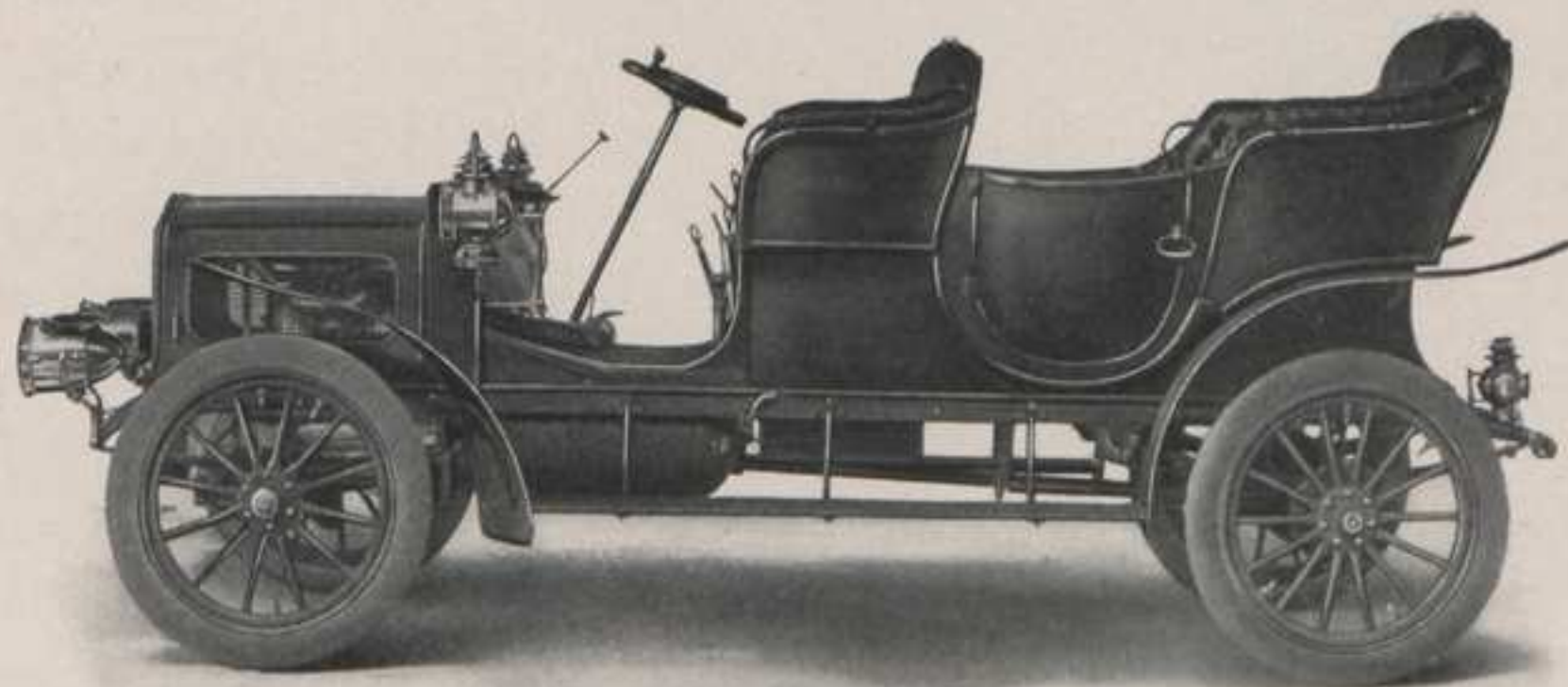
Since the days of these early pioneers, the steam engine has enjoyed nearly a century of development. Constant experiment and study by several generations of engineers, aided by a thorough understanding of its underlying principles, have brought the steam engine to a very high state of perfection. On land and on sea, steam power is at once the most reliable, the simplest and the safest. No power other than steam is seriously considered by engineers for important work, except where some extraordinary natural conditions, as at Niagara Falls, render the use of fuel superfluous. Although in most of our communities, electricity is the power used for lighting, for traction and for other purposes, it must be remembered that the source of all this electrical energy (that is, the prime mover) is the steam engine. In New York City, for example, where "electrification" has been very completely carried out, the great dynamos which supply electrical power for a myriad of purposes are kept in motion by steam engines ranging up to 10,000 H. P. each. In short, any thought given to this question must inevitably lead to the conclusion:

STEAM IS THE WORLD'S STANDARD MOTIVE POWER.



Watt's Double-Acting
Engine, 1782.

¶ In the Long Island 100-mile non-stop contest of 1902, 66 cars started, of which 37 received certificates. Three Whites started and three Whites received certificates.



MODEL "F" STANDARD TOURING CAR

Weight	-	-	-	-	-	-	-	2260 lbs.
Height	-	-	-	-	-	-	-	5 feet, 9½ inches
Price	-	-	-	-	-	-	-	\$2,800

F.O.B. Cleveland, complete with tires, oil lamps, horn and tool kit.

Early Steam Automobiles

Naturally, when self-propelled vehicles started to come into vogue, a decade or more ago, designers turned to steam as a motive power, just as they would in designing any other kind of machinery. Precedent also favored this choice as the first motor vehicles were steam driven and steam omnibuses were seen on the highways in England even before Stephenson had perfected his locomotive. ¶ But the designers of the steam automobiles of a few years ago made the mistake of simply taking the ordinary engine and boiler, as developed for other purposes, and installing them in a motor carriage, without making allowances for the difference in service and in supervision which would befall a steam power plant in such a vehicle. Charity demands that we should pass quickly over the subject of these early steam automobiles. *Requiescant in pacem.* Suffice to say that they created a prejudice against the steam vehicle which even to-day lingers in the minds of some who have not watched the development and the achievements of the cars to which this pamphlet is devoted.

Rollin H. White • • attacks the problem

Among the purchasers of these early steam automobiles was Rollin H. White. His experience with his machine soon led him to conclude that a successful steam car would have to be designed along radically different lines than those which were then followed. Being an ardent believer in the inherent advantages of steam power, he set to work to design a machine which would comply with the following requirements:

1. The boiler to be of such a nature that no combination of conditions could cause an explosion, which meant practically that no combination of conditions could cause its impairment or deterioration.
2. The whole mechanism to be of such a nature that the machine could be readily operated by those without any previous mechanical experience.
3. Economy in the use of fuel and of water to be far greater than that of any steam automobile before designed.

¶ In the Automobile Club non-stop contest of 1902, 55 cars started, and 28 received non-stop certificates. Three Whites started and three Whites received non-stop certificates.



MODEL "F" TOURING CAR with Cape Top

Weight	-	-	-	-	-	-	-	2320 lbs.
Height	-	-	-	-	-	-	-	7 feet, 10 inches
Price	-	-	-	-	-	-	-	\$2,950

F.O.B. Cleveland, complete with tires, oil lamps, horn and tool kit.

¶ The whole trend of improvement in steam machine design had, during the closing years of the nineteenth century, been along the lines of higher pressures and of superheating the steam. No marked progress in these respects had been recorded, but Mr. White determined to conduct his researches along these lines.

Invention of the White System •

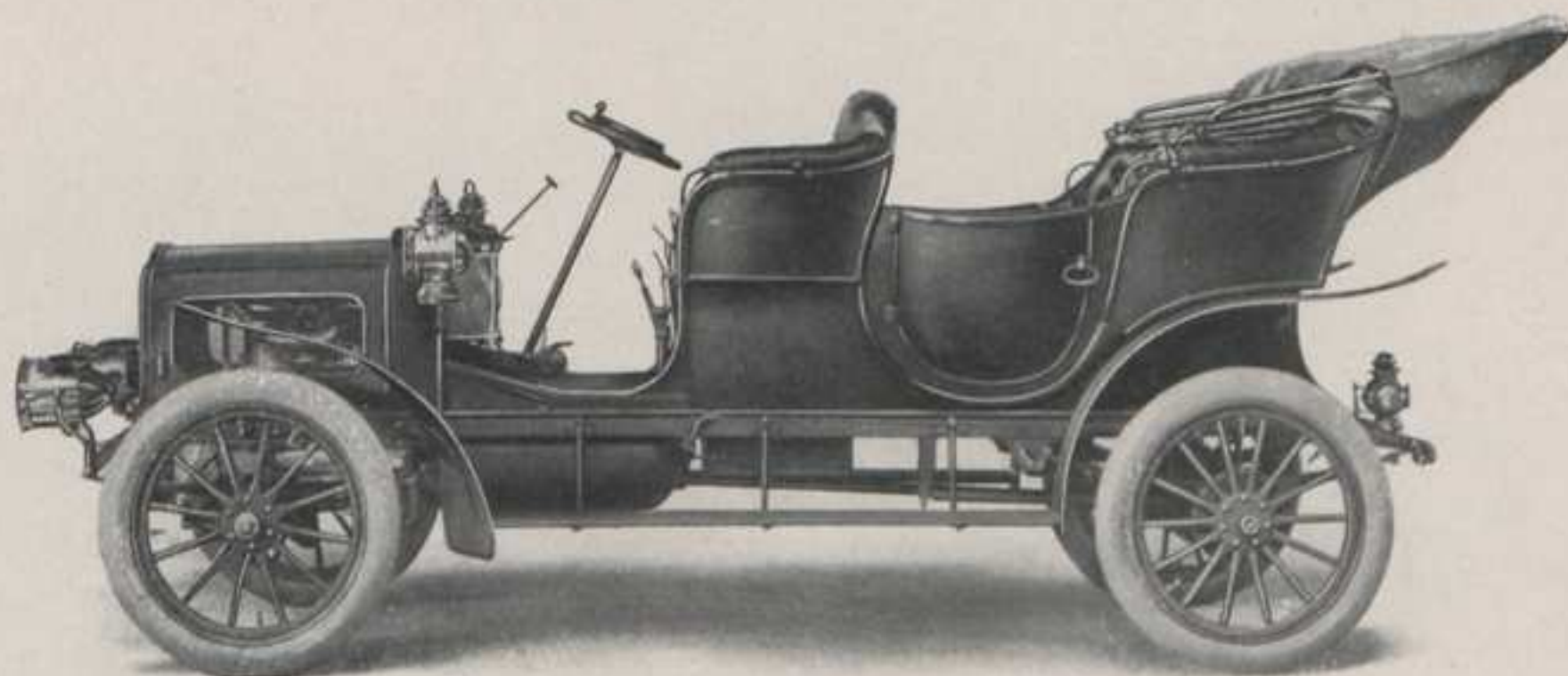
The result of his study and experiment was the invention of the White system of steam generation and utilization. The completeness with which this system, as applied to automobile construction, fulfilled the requirements above outlined was demonstrated by the success of the very first White cars which were offered to the public. These were put on the market in 1901 and they immediately achieved an enviable reputation for superior reliability and general excellence which each successive model of this make has sustained and strengthened.

White system has undergone no fundamental change • •

To see the little White Stanhope of 1901 side by side with one of the Model "F" cars described in this booklet, one would hardly imagine that the two machines had anything in common. A critical examination, however, would reveal the fact that the mechanism of the one represents a logical and consistent evolution from that of the other. The generators and the automatic devices in the two cars, the most vital features, except for difference in capacity, could almost be regarded as interchangeable. What better demonstration could there be that the White system of steam generation, as originally conceived, is the proper power plant for an automobile, than the fact that five years' service by thousands of owners, under every known condition, has necessitated no change in the fundamental principles of construction! Of what other system can this be said?

¶ Thus the White cars which are now offered have behind them a record of five years of successful service, as is known to everyone who has taken note of public competitions and of the activities of private owners.

¶ In the New York-Boston-New York 500-mile reliability run of 1902, 75 cars started and 17 qualified for the President's Cup. Five Whites started, four of which qualified for the President's Cup, and the other earned the score of 99.8 per cent.



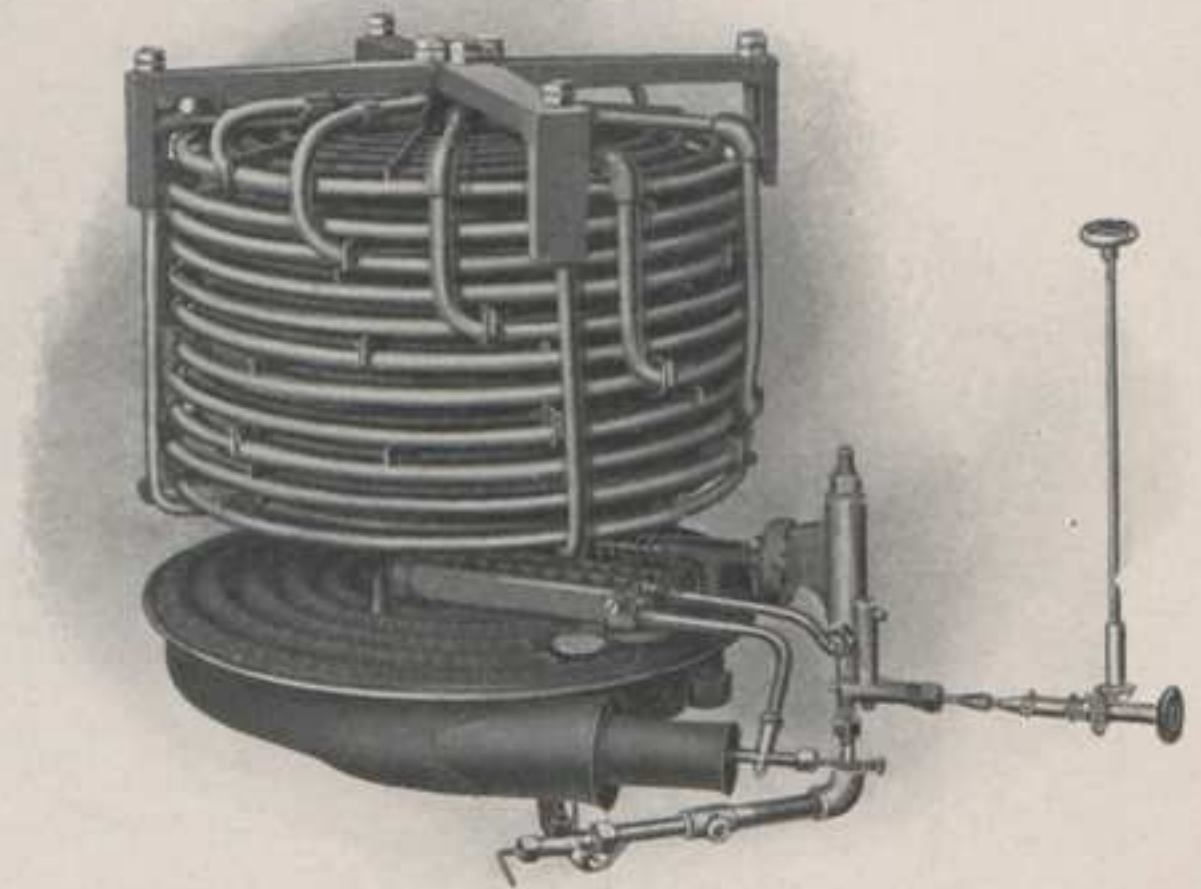
MODEL "F" TOURING CAR with Cape Top

¶ This is the same car as shown on folio seven, but it is here illustrated with the top folded down out of the way and enclosed in a neat tight-fitting cover.

Description of the White Steam Car

The White Generator

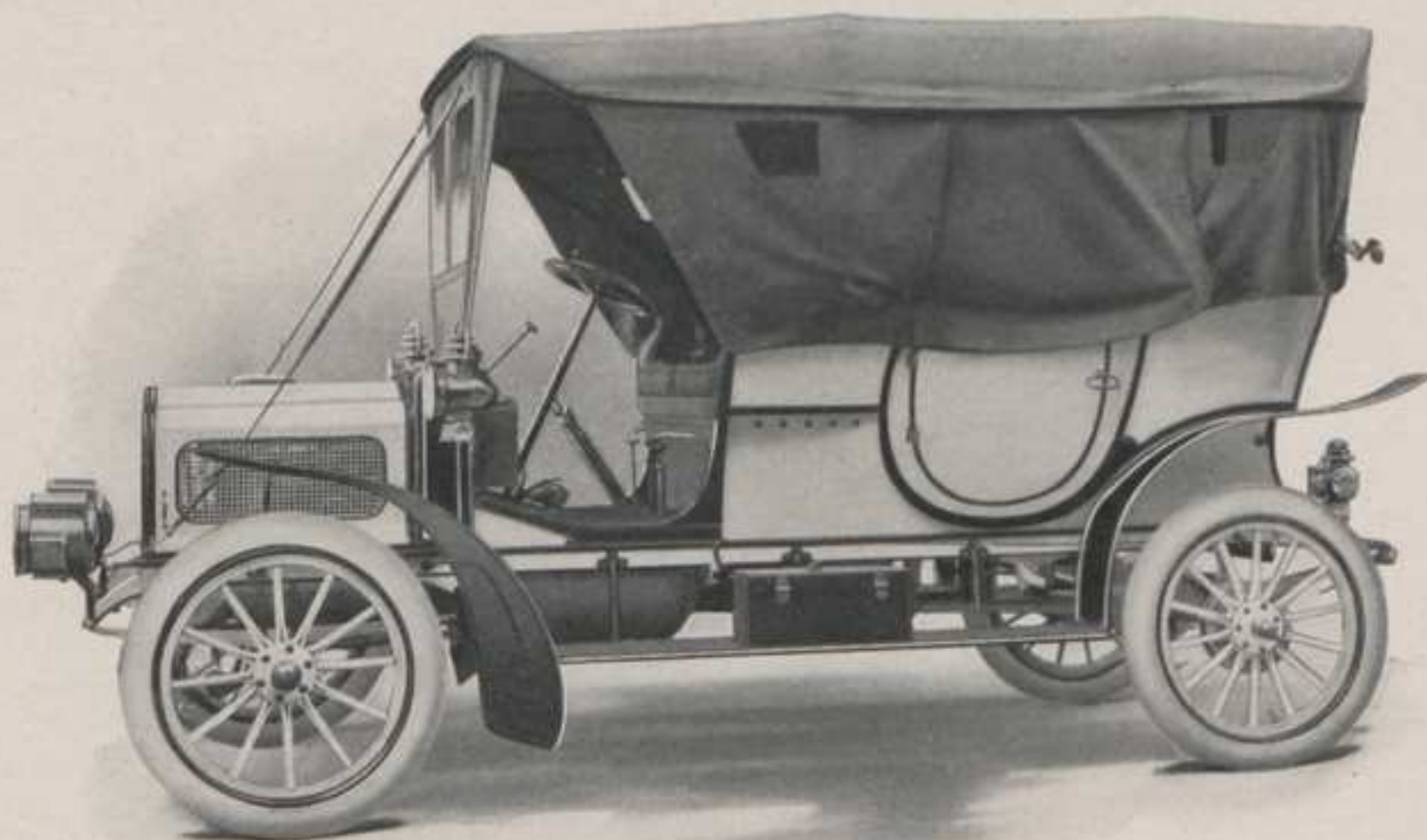
Any description of the White Car must necessarily commence with a description of the generator, as this is the feature which, more than any other, distinguishes it from all other automobiles. Furthermore, there is no other make of car embodying any of these principles of generator construction, thanks to the protection afforded to the inventor by the patent laws of all civilized countries. The generator is located about in the center of the chassis, as shown on folio three. It is enveloped by an asbestos insulating casing, which is in turn surrounded by an annular flue, through which the products of combustion are conducted downward and are dissipated into the air without their escape being in any way noticeable. A glance at the illustration on this page discloses that the White generator is radically different from any other variety of boiler ever constructed. In the first place, in every other known type of boiler the water is at the bottom and the steam at the top. In the White generator, on the contrary, the water is at the top and the steam at the bottom. This fact alone is sufficient to show the unique construction of the White generator.



THE WHITE GENERATOR

Showing also the burner, vaporizer, pilot light and gasoline connections

¶ In the English reliability trials of 1902, 70 cars started and but two gained a perfect score. One of these was a White. Thus 68 machines proved less reliable than the White.



MODEL "F" TOURING CAR with Cape Top

¶ This is the same car as illustrated on folios seven and nine. It is here shown with the cape top up and the side-curtains down. Thus arranged, good protection is afforded in stormy weather.

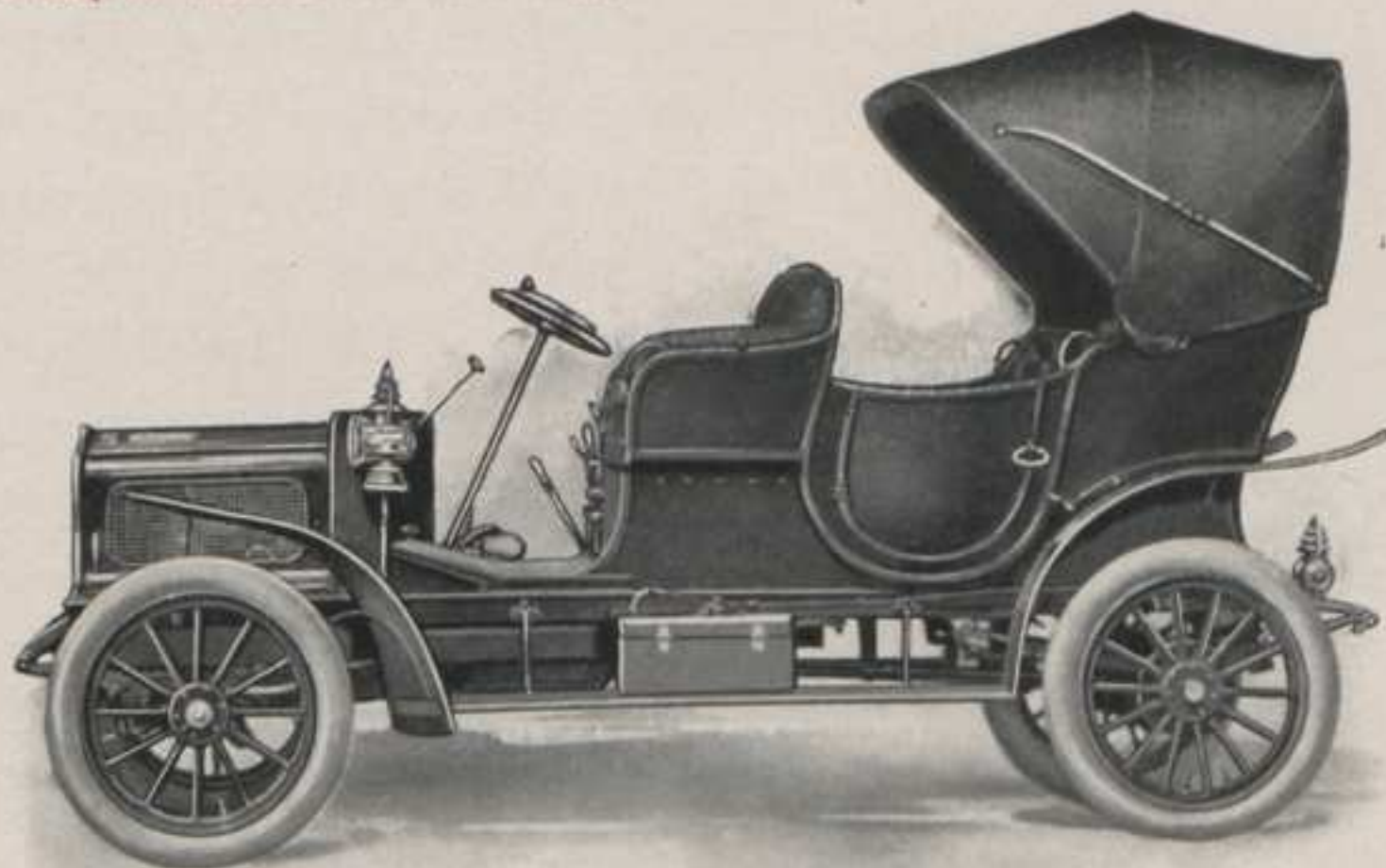
¶ The White generator consists of eleven helical coils of steel tubing superimposed upon one another, as shown in the illustration. The several coils are joined in series, and if the whole should be unwound and straightened out, the generator would be seen to be made up of a single long piece of tubing. Below the coils is located the burner in the position illustrated. The coils offer a very large heating surface so that as the products of combustion pass up between them, practically all of their heat is absorbed by the coils. This is the first factor which we note as explaining the wonderful economy of the White system.

**Totally unlike the
ordinary boiler •**

The connections between the coils are so made that the water or steam, in order to pass from one coil to that next below, must be forced up to a level above the top coil and then pass down again. The circulation in each coil is from the center to the periphery, and a careful inspection of the illustration will make clear the method of connecting coil to coil. This feature is an important element in the construction of the generator, as it prevents water from descending by gravity and renders the circulation down through the generator dependent upon the action of the pumps.

¶ The operation of the generator is as follows: water from the tank is pumped into the upper coil and, as it is forced into the coils below, its temperature gradually rises. At some variable point, about half way down, it "flashes" into steam. In the lower coils the steam receives a high degree of superheat, and in this condition leaves the generator and is conducted to the engine. To describe the operation in another way: the upper coils act as a feed-water heater; the center coils, as a "boiler" proper; and the lower coils, as a superheater. That these three functions should be combined in a single symmetrical apparatus is in itself convincing proof of the simplicity of the system and of its novelty as compared with all other steam-making devices.

¶ In the series of race meets held early in 1903, at Los Angeles, Del Monte and San Jose, White touring cars made practically a clean sweep in the free-for-all events.



MODEL "F" TOURING CAR with Victoria Hood

Weight	-	-	-	-	-	-	-	2327 lbs.
Height	-	-	-	-	-	-	-	7 feet, 10 inches
Price	-	-	-	-	-	-	-	\$3,000

F.O.B. Cleveland, complete with tires, oil lamps, horn and tool kit.

**Absolute safety
of the system •**

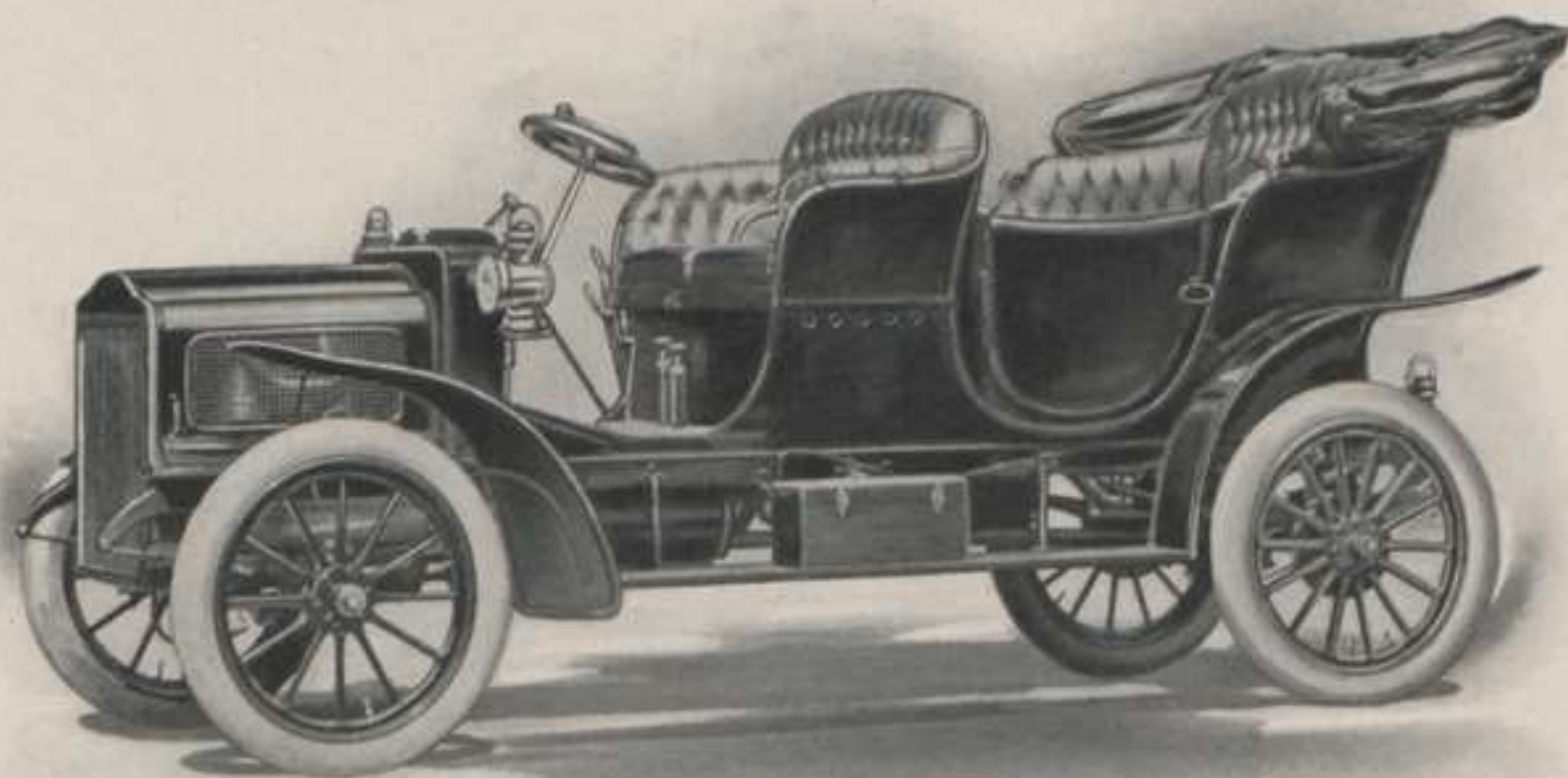
As regards the safety of the system, it should be noted first of all that there is but little water and steam in the generator at any one time and, even in the event of its simultaneous liberation, the effect would be inconsequential, as compared with the failure of an ordinary boiler, in which there is present not only a great volume of steam but also a large amount of water which passes into steam as soon as the pressure is reduced. The late Prof. Thurston, Dean of the School of Mechanical Engineering of Cornell University, in discussing this point in a professional report, said: "The tubular construction (of the White generator) permits insurance of safety against pressures of excessive amount, since these small tubes are strong enough to bear enormous pressures—pressures, in fact, many times greater than those employed. Even if rupture is effected by deliberate over-pressure to the required amount, it is not likely to result in anything more serious than a split tube, in which the rent acts as a self-provided safety-valve."

¶ Attention is called to the fact that, as there is no "water level" to maintain, there is no need of water-gauge, water-glass, float, fusible plug or other device such as are used in connection with ordinary types of boilers. The rapidity of circulation through the generator is another feature making toward its practical indestructibility. Mineral matter, whether in solution or in suspension in the water supplied to the generator, is carried through the generator and the engine without causing any incrustation, as is proven by the experience of all of our owners, especially of those who have driven thousands of miles in regions where "hard" water is invariably used.

**Automatic regu-
lating devices •**

Obviously, the water to be supplied to the generator and the amount of fuel necessary will vary with different conditions of operation. Connected in the lowest part of the generator is a fire regulator, simple in construction and positive in operation, which is subjected to the influence of the steam as it is leaving the generator. When the temperature of the steam exceeds that for which the apparatus

¶ The memorable New York-Pittsburg endurance run of 1903 was a sweeping triumph for the White steamers. Of the 33 cars to start, only eight received gold medals, two of which were Whites. In addition, the White free-lance and the White pilot car qualified for gold medals.



MODEL "F" TOURING CAR with Victoria Hood

¶ This is the same car as illustrated on folio thirteen. In the above illustration the hood is shown folded down.

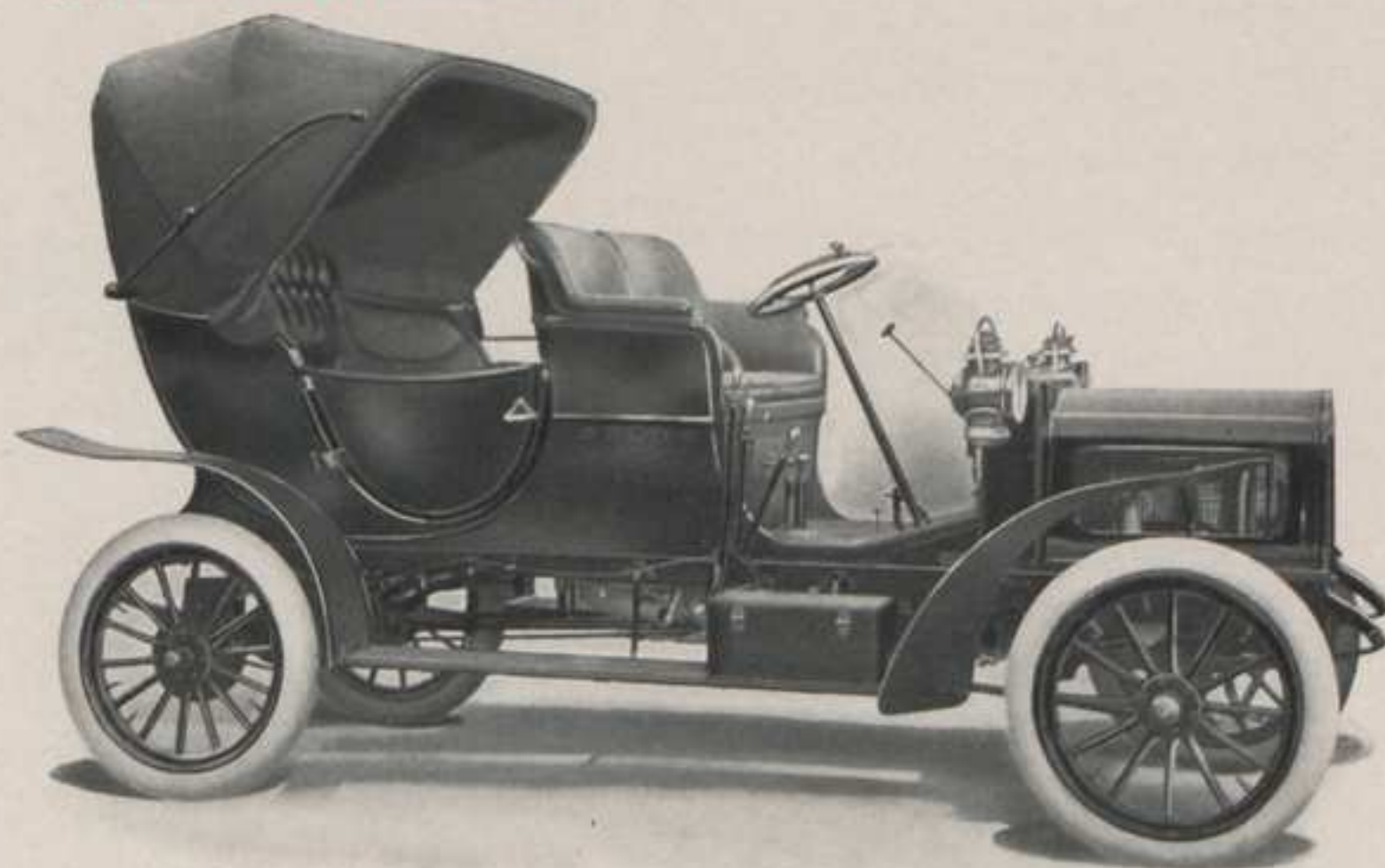
is designed, the thermostat at once shuts off the supply of fuel from the main burner. When the temperature of the steam falls below that desired, the thermostat again operates and the supply of fuel to the burner is resumed. As a result of this construction, the temperature of the coils can never exceed that desired and the coils cannot burn out. In earlier makes of steam carriages, the fuel supply was regulated by *pressure* alone, and if the boiler ran dry, as frequently happened, there was nothing to prevent it from burning out. In the White car, on the contrary, fuel supply is controlled by temperature alone. If the water supply in the tank should be exhausted and no water enter the generator, and, therefore, no steam be contained therein, the thermostat would nevertheless shut off the fuel.

¶ The steam pressure is automatically kept within close limits by a regulator of the diaphragm type. The White car is designed to operate at a steam pressure of about 375 pounds. As soon as this pressure is exceeded, the regulator by-passes the water from the pumps so that it no longer is fed to the generator and, as a consequence, the pressure at once falls off. As soon as the pressure reaches a point slightly below 375 pounds, the regulator again acts and water is again fed to the generator. In operation, the functions of the two automatic regulating devices follow one another very closely, and the result is that the temperature and pressure are kept surprisingly uniform **without in any way engaging or requiring the attention of the operator.**

The White Engine •

The engine is compound and is mounted vertically in front under the bonnet, as shown in the illustration on folio three, the high-pressure cylinder being nearest the dash. The engine is proportioned in accordance with the best theory and practice, and is surprisingly economical in the use of steam. To be exact, the combination of White generator and engine shows a greater efficiency than do the great 10,000 H.P. engines referred to in the introduction. This fact in itself should be abundant evidence that the White system is different from other types of steam machinery.

¶ In the great New York-St. Louis tour of 1904, ten White cars participated and received certificates—more than those secured by any other three makes combined.



MODEL "F" IMPERIAL VICTORIA

Weight	-	-	-	-	-	-	-	2275 lbs.
Height	-	-	-	-	-	-	-	7 feet, 10 inches
Price	-	-	-	-	-	-	-	\$3,300

F.O.B. New Haven, complete with tires, oil lamps, horn and tool kit

¶ The valve motion is of the simple Stephenson link type, and is actuated by a set of four eccentrics, working on the crank shaft and compactly placed, as shown in the illustration. In front of the low-pressure connecting rod is an eccentric, operating the air pump. Between the two sets of valve eccentrics is an eccentric which operates, through a rocker arm, the two pumps supplying water to the generator, known as the power pumps. The cross-head pin of the low-pressure cylinder extends through the casing and operates the pump which returns the water from the condenser to the tank.

¶ For ordinary running, the engine is always compound. However, there is a simpling device, operated by the pressure of a foot-pedal placed in front of the driver's seat, which admits the high-pressure steam to both cylinders. This simpling device is used only when starting, or when some extraordinary obstruction is encountered. For example, by simpling the engine, the car will pull out of a mud-hole which would be impassable for any machine not possessing this highly important feature of **reserve of power**.

¶ The cylinders are insulated by a casing of asbestos and are covered with an aluminum jacket. A metallic wind shield in front of the engine serves further to keep the cylinders warm and to prevent condensation within them. The crank case is of aluminum, thoroughly enclosing the parts within. Thus splash lubrication is made possible and the engine is rendered impervious to dust. At the same time the construction admits of ready access to all parts.

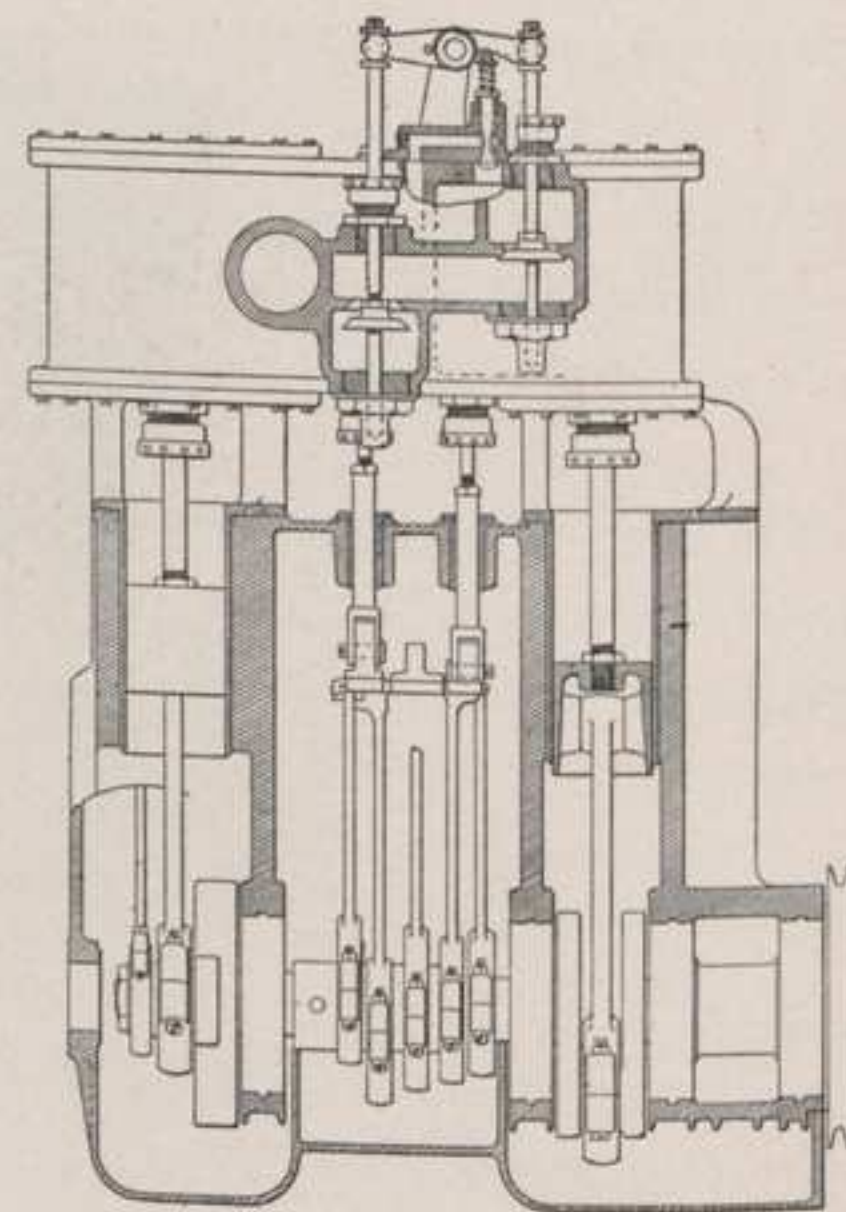


Diagram of the White Engine.

¶ During the fall racing season of 1904, White stock cars won important track events at Pittsburg, Kansas City, Cleveland and Los Angeles.



MODEL "F" IMPERIAL VICTORIA

¶ This is the same car as illustrated on folio seventeen. It is here shown with hood folded down.

¶ No handsomer body than our Imperial Victoria has ever been designed.

Condenser System • •

The steam exhausts from the low-pressure cylinder directly into a condenser which forms the front of the car. The condenser consists of a number of vertical finned tubes which offer a large cooling surface and make condensation quite complete. The water is pumped back to the tank and is thus used again and again. Under certain conditions some of the steam is not condensed and this escapes into the air through an exhaust pipe ending below the condenser.

Supply of water to the generator

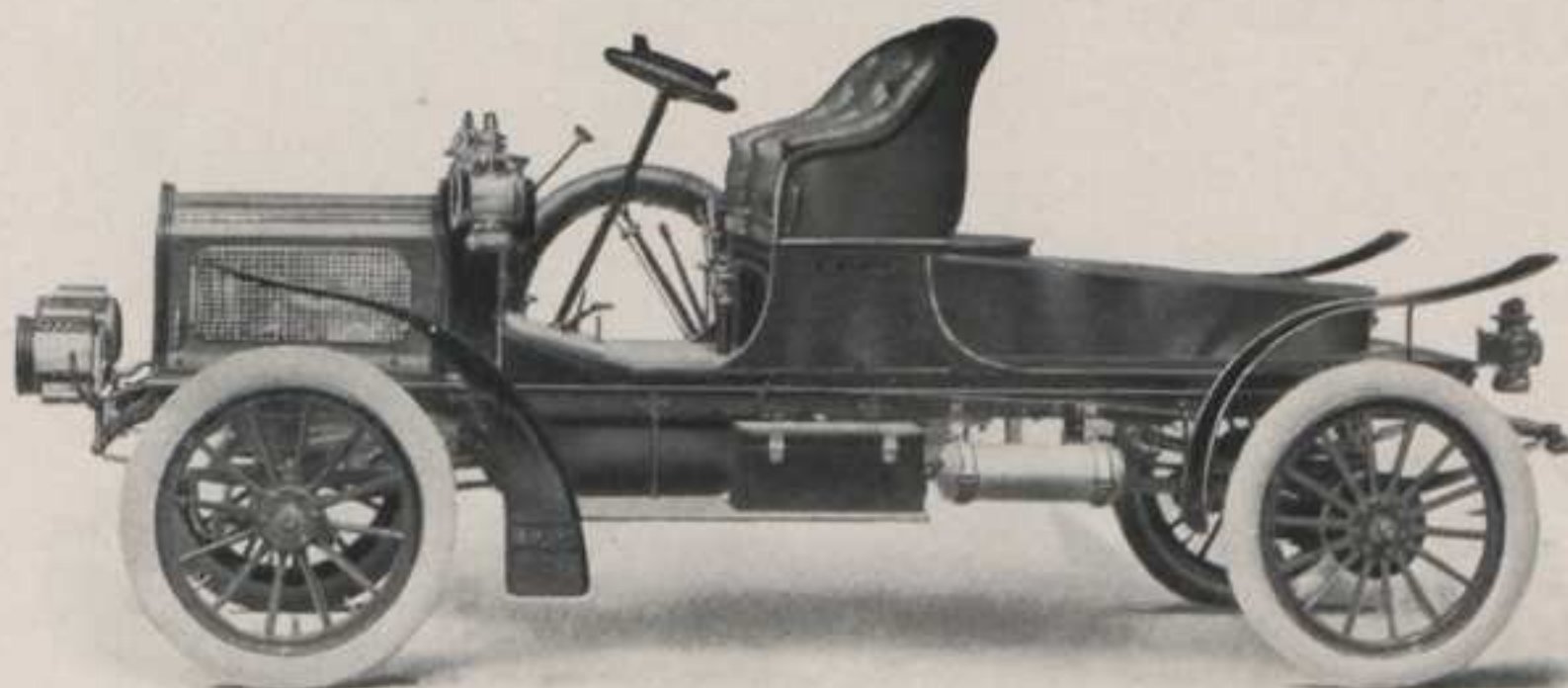
Under ordinary running conditions the action of one power pump is sufficient to furnish the generator with the amount of water necessary. When running conditions are particularly severe and a greater supply of steam is necessary, the second pump is made to feed into the generator by simply turning a hand valve which projects from the dash toward the driver. By this simple manipulation, a unique flexibility in adapting the power of the car to road conditions, is secured. It should be noted that the action of both pumps is dependent upon the automatic device regulating pressure, referred to in connection with the description of the generator.

The Burner System • •

Brief mention has already been made of the burner and the methods by which the supply of fuel is controlled. The base of the burner of the Model "F" car is without perforations and the only air admitted is that which is mixed with the gasoline vapor in the induction tube. The fire is thus absolutely protected and it is practically impossible for it to be blown out, regardless of the velocity or direction of the wind. The fuel is fed to the burner under a moderate pressure, which is maintained by the air pump attached to the engine. On being vaporized, the fuel enters the burner, where it produces a blue flame, giving perfect combustion. Incorporated with the burner, but distinct from it, is the pilot light, which performs the two-fold office of heating the vaporizer and lighting the burner. Getting up steam can be

¶ The Eagle Rock Hill climb on Thanksgiving Day, 1904, resulted as follows:

H.P.	CAR	VALUE	TIME
60	Renault	\$10,000	1 m. 20 s. (flat)
90	Mercedes	16,000	1 m. 20 3/5 s.
90	F. I. A. T.	16,000	1 m. 22 s.
90	F. I. A. T.	16,000	1 m. 22 1/5 s.
15	WHITE	2,500	1 m. 23 3/5 s.
60	F. I. A. T.	13,500	1 m. 24 4/5 s.



MODEL "F" RUNABOUT

¶ If seating capacity for two is sufficient for your needs, you will find no more desirable car than this. It is stylish in appearance and will be found very speedy.

Price - - - - - \$2,500

F.O.B. Cleveland, complete with tires, oil lamps, horn and tool kit.

done in four minutes or less from the time when the pilot light is first lighted. A match is used for lighting the pilot light which, when lighted, heats the vaporizer. The main burner valve, within easy reach of the driver's seat, is turned on when the vaporizer has become heated and in a minute or two there is sufficient steam for starting the engine. The pilot light is not turned off by the main burner valve, nor by the action of the thermostat when it shuts off the fuel supply from the main burner. Thus the pilot light being constantly lighted and the vaporizer thereby always remaining heated, the White car can be promptly started after standing for any length of time whatsoever.

The . . . Transmission

The power is transmitted from the engine to the rear axle by means of a drive shaft and bevel gear. The drive shaft is provided with two universal joints, one of which, enclosed within the fly wheel, also serves as a sliding joint and provides for the play of the springs. Combined with the rear axle is an emergency gear by means of which the ratio between the engine speed and the axle speed may be changed, or the engine run entirely free. Under ordinary running conditions the drive from shaft to rear axle is direct; but if particularly severe conditions are encountered, the ratio between the speed of the engine and the speed of the axle may be doubled. Thus, besides securing the advantage of increased torque, the pumps are working twice as fast and delivering twice the amount of water to the generator.

Every tourist soon learns that it is not enough that a car be built for *ordinary* running conditions. One can hardly tour 100 miles, even near the largest cities, without encountering some *extraordinary* conditions—for example, a road torn up for repairs. Our standard has always been to build a car able to surmount any road conditions which might be encountered. That is why the White car has an emergency gear and a second power pump. That is why the longest tours, the hardest tours, the pioneer tours, the most interesting tours, are made by White owners.

¶ The White racing car, equipped with stock engine, defeated everything else on four wheels during the 1905 racing season and placed the world's track record for the mile at 48 $\frac{3}{8}$ seconds.



MODEL "F" LIMOUSINE

Weight	-	-	-	-	-	-	-	2732 lbs.
Height	-	-	-	-	-	-	-	7 feet, 9 inches
Price	-	-	-	-	-	-	-	\$3,600

F.O.B. New Haven, complete with tires, oil lamps, horn and tool kit

Minimum of Repairs

Ball bearings of liberal size are used throughout the engine, transmission, rear axle, and on the wheels. Lubrication of the engine, including the cylinders, is automatically effected by an oiler on the dashboard, which is driven from the crank shaft by a belt. The crank case is kept filled with oil and the various crank bearings are supplied by splash lubrication, this system having proven highly efficient. The emergency gears, bevel gears, differential gears and the rear axle run in oil. The front wheels, steering connections, rear axle trunnions and driving-shaft joints are lubricated by grease, which needs only an occasional renewing. In short, the important problem of lubrication has received the most careful study, and arrangement is made so that every part of a White car liable to wear may receive its quota of lubricant. The very greatest care is exercised in the selection of material and in close inspection of workmanship at all stages of manufacture.

¶ All of the features just enumerated, together with the general excellence of design and the complete absence of fragile parts or those requiring frequent adjustment, result in giving the White car an extraordinary durability. In fact, White cars enjoy a unique reputation for longevity. It is a matter of frequent favorable remark that practically all of our early cars, even of the years 1901 and 1902, may still be seen in daily use. Finally, there is nothing mysterious about a White car. In addition to lubricant, the only "elements" necessary for its operation are fire and water, both of which act in accordance with the simplest natural laws. Even a person unaccustomed to machinery can readily master the operation of our car and thus be able, with reasonable care, to keep it in good condition.

Rated • • Horse-power

As is well-known, the standard for one horse-power in use to-day — 33,000 foot-pounds per minute — was established by James Watt. This figure was known to be excessive, but Watt purposely set the unit too high, as he explained himself, "In order that my customers may have no cause to complain of the amount of work which my engines can do." It is a pleasing historical repetition that

White cars finished first and second in the memorable Chicago-St. Paul endurance run, July, 1905.



MODEL "F" LANDAULET

Weight	-	-	-	-	-	-	-	2480 lbs.
Height	-	-	-	-	-	-	-	7 feet, 6 inches
Price	-	-	-	-	-	-	-	\$3,700

F. O. B. New Haven, complete with tires, oil lamps, horn and tool kit.

this company should to-day show a similar spirit of conservatism in the rating of its engines. We rate our cars at "eighteen horse-power." We would point out, however, that this figure furnishes absolutely no criterion by which the capabilities of our car can be judged. A better standard of comparison is the performance of our car in public competitions and in the friendly rivalries of the road. As an example, we call attention to the table at the top of folio twenty-one. Finally, it should be remembered that the relative capabilities of a steam engine and of an engine of other motive power cannot be gauged by a comparison of their respective rated horse-powers.

**Additional •
Specifications
of Model "F"
White Steam
Car • • •**

Frame---Armored Wood---proven by experience to be the best construction.

Length of Chassis---between extremes of spring horns---13 ft. 5 inches

Width of Chassis---between extremes of mud guards---varying in different types from 5 ft. 3 inches to 5 ft. 5½ inches.

Seating capacity---touring car, victoria and landaulet---Five Persons.

Seating capacity---limousine and extension landaulet(provided with drop seats)---Seven Persons.

Seating capacity---runabout---Two Persons.

Foot Brake---powerful expanding brake on fly-wheel.

Hand Brake---powerful expanding brakes acting within drums on rear wheels.

Front Springs---semi-elliptic, 41 inches long, six leaves.

Rear Springs---semi-elliptic, 46 inches long, seven leaves.

Minimum Clearance---a feature of the very greatest importance---9¾ inches.

Rated horse power---eighteen.

Tread---4 feet, 8 inches

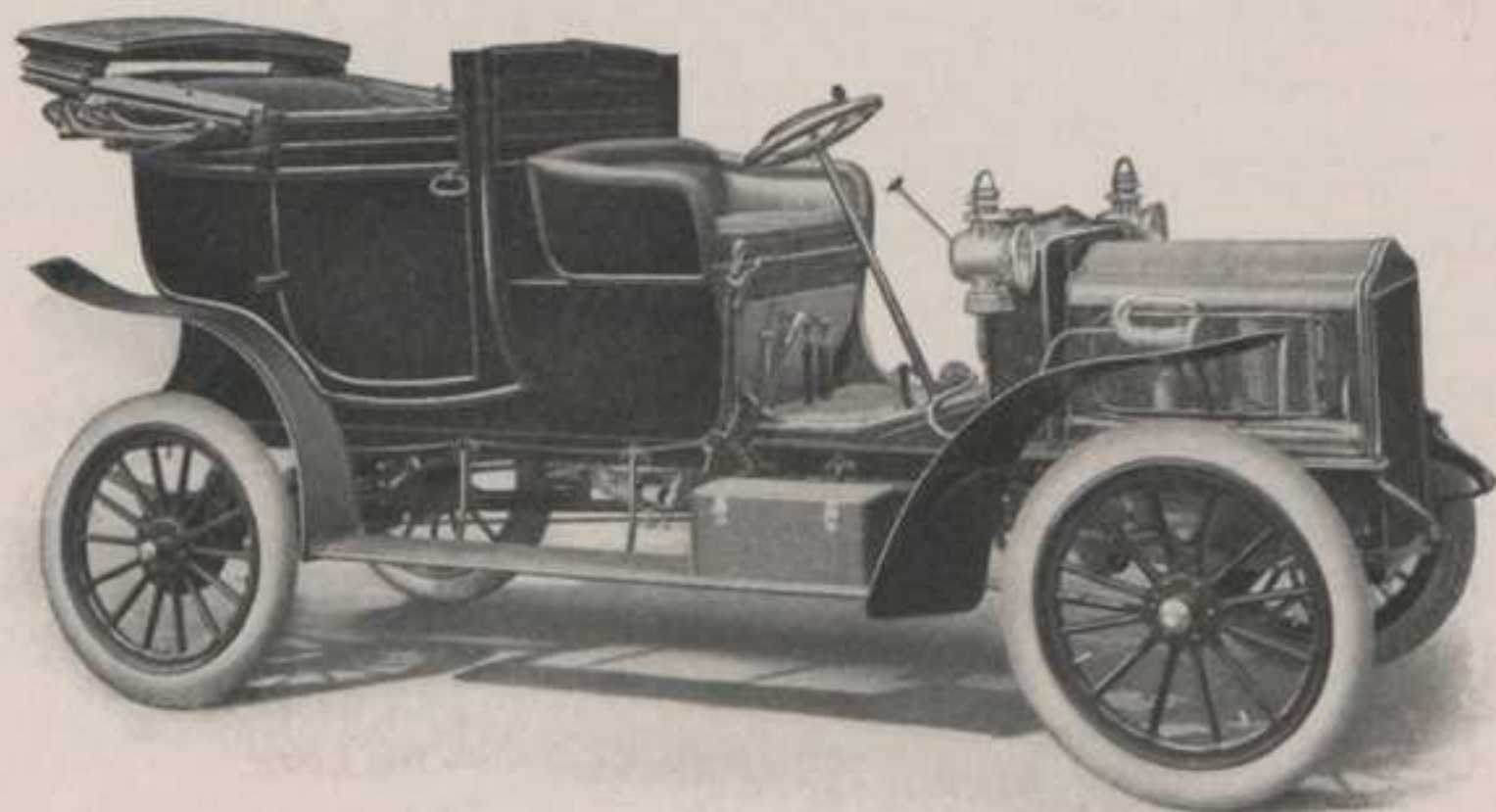
Water Tank Capacity---17 gallons

Wheel Base---9 feet, 6 inches

Tires---Clincher, 34" x 4"

Gasolene Tank Capacity---15 gallons

¶ Eight White cars participated in the second annual tour of the A. A. A. Five of these were driven by private owners, two of whom made perfect scores.



MODEL "F" LANDAULET

¶ This is the same car as shown on folio twenty-five. This illustration shows the car open, the other shows it closed. The landaulet is well adapted for all seasons and for all kinds of weather.

**Tire • • •
Equipment**

Where no specifications for tires are received, the car will be equipped, without extra charge, with a standard clincher tire of American manufacture. The car will be equipped, without extra charge, with any desired American make of pneumatic tires that will fit the standard 34"x4" clincher rim, provided the tire is specified thirty days before the date of shipment of the cars. Foreign tires that will fit 34"x4" clincher rims will be supplied on thirty days' notice as above, at an additional charge equal to the difference in the list price between the American and the foreign tires.

**Equipment • •
with Each Car** Many of the illustrations in this catalog show the cars equipped with acetylene head-lights. It should be distinctly understood, however, that the prices quoted for each car *do not include* acetylene lights. The latter are supplied at extra prices quoted on folio thirty-two. Prices for tire holders, extra seats, portfolios and luggage carriers are quoted on folios thirty-three to thirty-six, respectively.

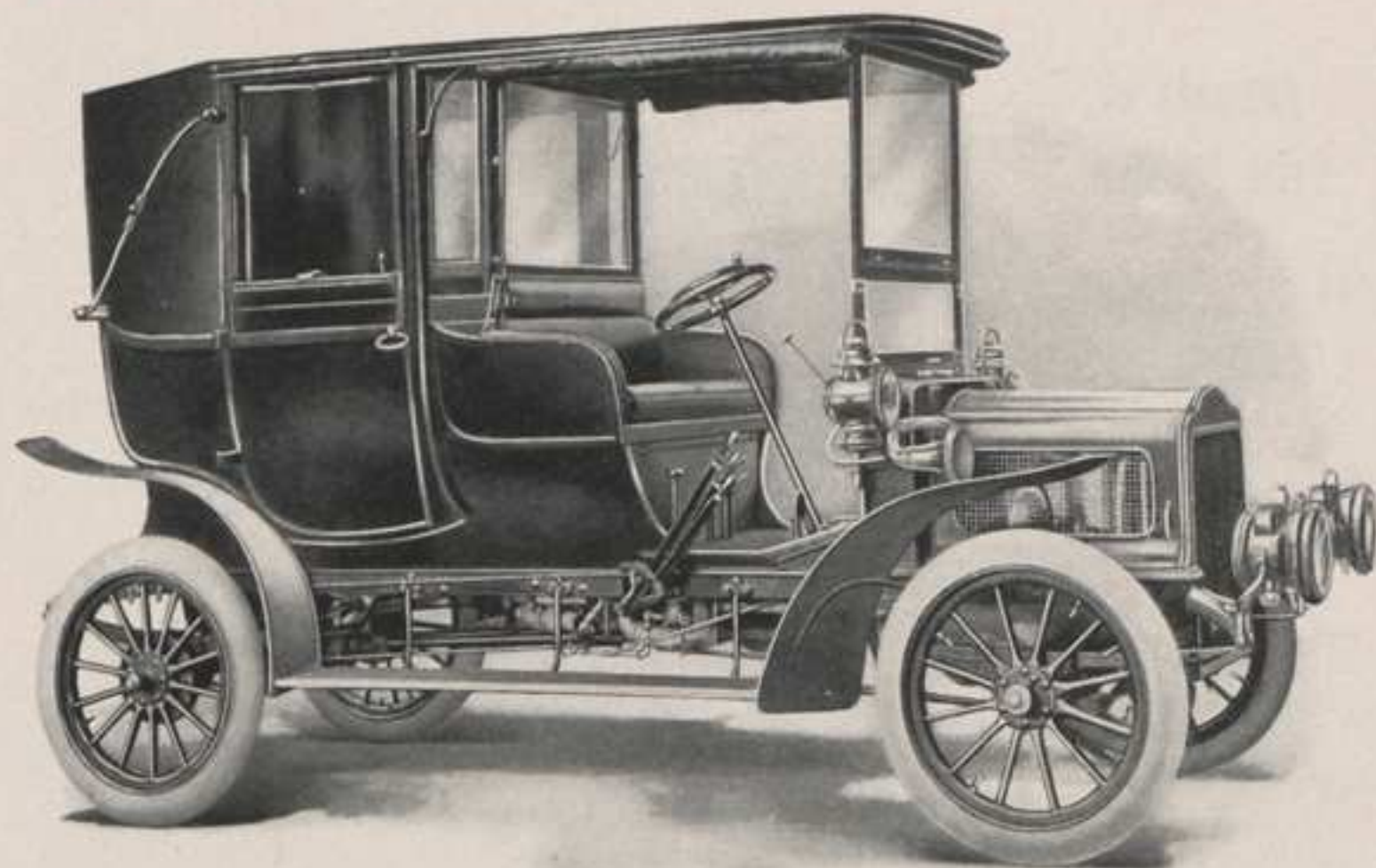
¶ The regular equipment with each car is as follows:

2 Pair of Cushions	1 Rear Oil Lamp	1 Tire Pump	1 Extra Sub-Burner
1 Pair Oil Lamps	1 Horn	1 Extra Vaporizer	

Tool box containing the following:

1 Leather Case	2 Drills	1 Box Hemlet Oil	Screws for Water Regulator
1 Bicycle Wrench	1 Dog	1 Hemlet Oil Injector	and Vaporizer
1 Auto Wrench	2 Tire Prodders	1 Tire Repair Kit	Pins
1 Trim Wrench	1 Hub Wrench	1 Topple Cover	Packing
1 File and Handle	1 Pair Pliers	1 Canister	4 Washers for Air Check
1 Packing Fork	1 4-inch Screw Driver	Cotter Pins	
1 Stuffing Box Tightener	1 6-inch Screw Driver	Screws for Sub-Burner	

¶ As in previous years, the most notable private tours of the year 1905 were made by owners of White cars.



MODEL "F" EXTENSION LANDULET

Weight	-	-	-	-	-	-	-	2800 lbs.
Height	-	-	-	-	-	-	-	7 feet, 8 inches
Price	-	-	-	-	-	-	-	\$3,800

F.O.B. New Haven, complete with tires, oil lamps, horn and tool kit.

**Annals of
the White**

In selecting an automobile, the purchaser should be largely governed by the comparative records of the various makes of cars in each year which has elapsed since their first appearance. We wish to emphasize that *every model* of the White Steam Car has achieved consistent victory and success in every kind of automobile competition. How great White success has been is set forth in the White Bulletins, of which eleven have been published. Bulletin No. 8 summarizes briefly the victories of the first four years. Bulletins Nos. 9, 10 and 11 tell of the achievements of the year 1905. No one who is interested in automobiles should fail to read these last four issues. If you have not read them, a postal card request to us will bring them by return mail. Attention is directed to the brief references to a few of the more notable White victories, which are scattered over the pages of this booklet.

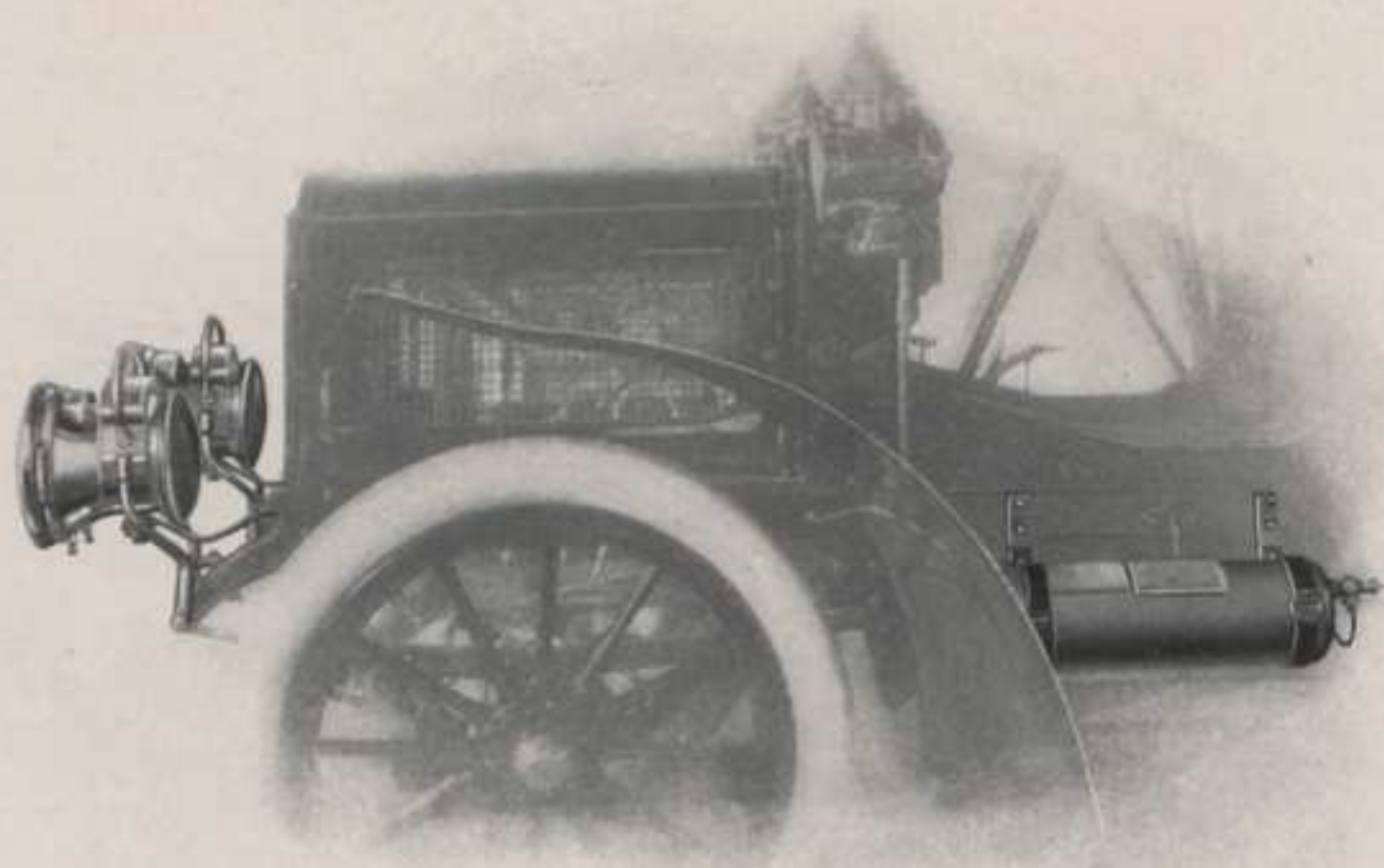
¶ On July 28th-29th, 1905, the much-coveted road record between San Francisco and Los Angeles—470 mountainous miles—was placed at 21 hours and 12 minutes by a White touring car, carrying four passengers. This record is still unapproached.



MODEL "F" EXTENSION LANDAULET

¶ This is the same machine as shown on folio twenty-nine. Here the car is shown open, while the other illustration shows it closed.

ACETYLENE HEAD-LIGHTS



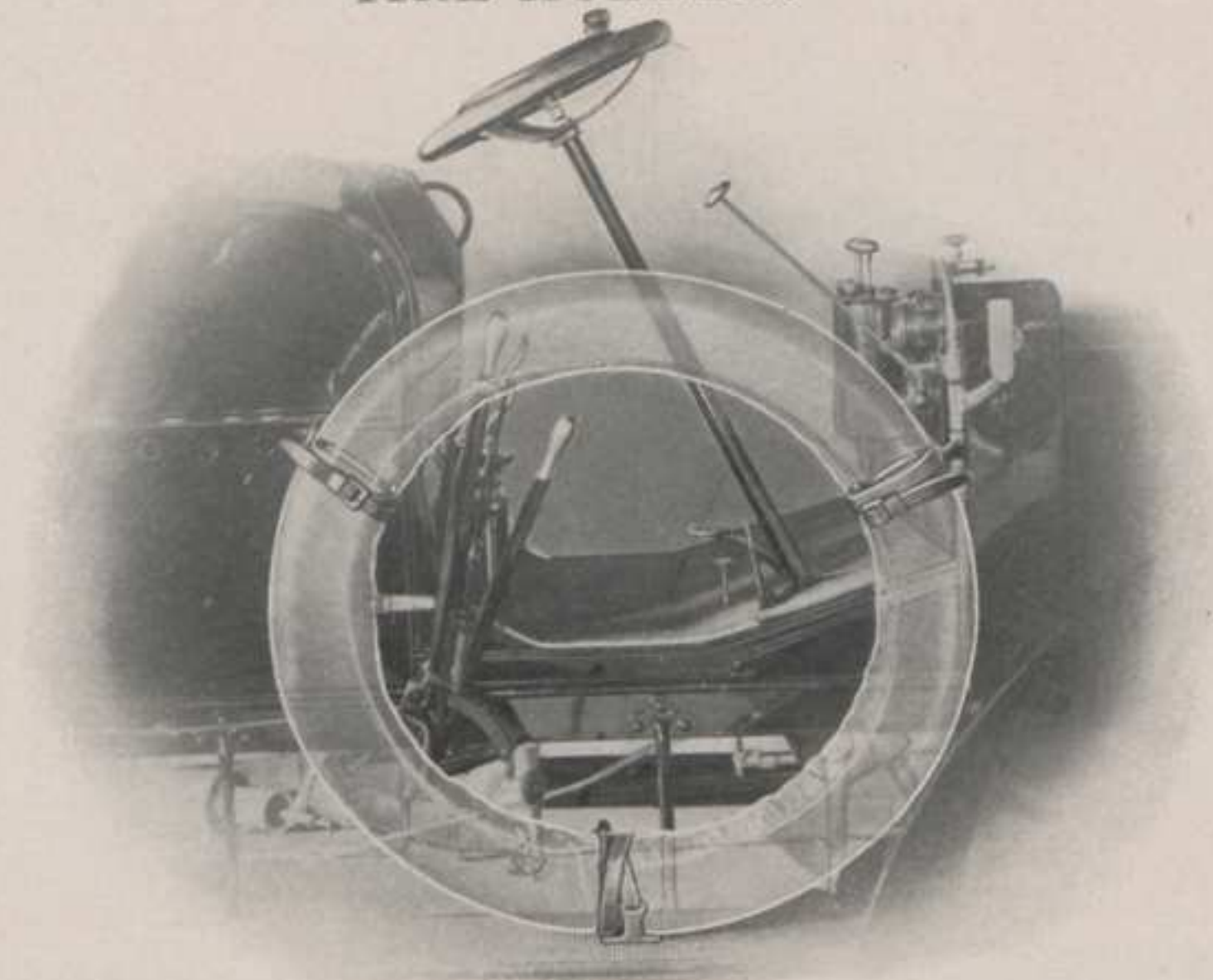
¶ As previously emphasized, acetylene head-lights are *not included* in the prices quoted in this catalog for each style of car. Our customers are, of course, free to make any selection of head-lights which they may desire, but we believe that either of the following combinations will prove to be very satisfactory :

Two Parabolens lamps (Solar) and Prestolite Tank, as shown above, \$95.

Two Parabolens lamps (Solar) and generator - - - - - 75.

The above prices include brackets and piping complete

TIRE HOLDERS



¶ The problem of properly carrying an extra tire is best solved by the use of a set of three tire holders which are attached respectively to the lamp bracket, to the step and immediately behind the operating levers, as shown in the illustration. The tire holders are of heavy polished brass, provided with strong leather straps, and the whole arrangement results in carrying the tire securely in a most accessible place.

Price, \$6.

EXTRA SEATS



¶ Many owners desire a seating capacity greater than that which the car ordinarily affords. To meet this condition we make special folding double seats which fit in the body of the car in the position shown above. The back of these seats is hinged at the top and the seats themselves are so hinged that one or both may be folded compactly behind this back, entirely out of the way.

Price, \$40.

PORTFOLIO



¶ This is a very useful device which fits on the back of the front seat, as shown in the accompanying illustration. It will be found a very convenient receptacle for wraps and for small parcels of all kinds. The portfolio is made of heavy leather to match the upholstery of the seats.

Price, \$28.

LUGGAGE CARRIER

¶ A device for properly carrying dress-suit cases and other luggage is almost a necessity to the motorist who contemplates an overnight tour (and what White owner does not?) We make a strong, light carrier which is secured to the rear of the car, as shown in the illustration. This carrier when not in use, folds up out of the way.

Price Complete, \$20.

