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Stewart-Coats Steam Car



THE Y. F. STEWART MOTOR CAR CO.
 BOWLING GREEN, OHIO
 PLANT NO. 1



\$1085

COATS STEAM CAR COMPANY
Indianapolis, Indiana



Come Safe Comfortable
Over Trustworthy
And Economical Artistic
Try Accessible
Steam Mighty Reliable

THE DREAM OF THE AGES RAPID, EFFORTLESS TRANSPORTATION

ONCE upon a time there lived a Prince, by name Houssain; who owned a magic carpet which would take him wherever he wanted to go. IN ancient times man dreamed of the realization of his most cherished desires. Fairy tale and fable embodied his earnest longings.

INSTANTANEOUS transportation has been the dream of the ages. For centuries man has labored to realize this dream of rapid, effortless transportation. Each century has left its marks of progress in the effort to eliminate time and space. Civilization has advanced exactly in proportion to the advancement of means of transportation. Since in the time of Nero, when the tremendous force pent up in this vapor was first appreciated, Steam, the Wonderful Power, has been recognized as the Irresistible Force.

THE horseless carriage has been the goal of man's ambition for generations. From the early chariots of the Kings, in which concealed slaves formed the motive power, to the present day, man has worked to construct a carriage which would take him where he wanted to go, without effort, and in the minimum space of time. To accomplish this end it was necessary to harness a dependable force. Vast strides have been made in the last few decades in this direction, but Houssain's magic carpet has not yet been made a reality. Gasoline has been tried. Brilliant minds have brought the gasoline car to an almost unbelievable state of advancement, but it leaves much to be desired. Electricity has been tried, but is still very limited in its field of operation. It remains for **Steam**—the Marvelous Power—as exemplified in that triumph of mechanical genius, the Twentieth Century Limited, to point out the path of advancement. It is **Steam** which has made possible the United States, Many in One, out of what would otherwise be but a number of separate little countries with diversified interests.

IN THE Automobile world, however, this tremendous force has hardly been touched. Engineers, like the rest of mankind, are very prone to follow in the beaten path. It is easier than to explore new fields. In the early days of automobile development the fancy of the Engineering Fraternity was caught by the magic of the word "Power Direct from Fuel" without first burning this fuel to make steam; and then utilizing this steam to make power. The Internal Combustion Engine came into being and flourished. It sounded simple, and in the beginning was simple. But, is there anything simple about a twelve cylinder gasoline automobile, with its three or four speed transmission, its numerous valves, its carburetor, its complicated electrical system?

SIMPLICITY still remains one of the prime virtues. But it has been lost sight of in the haze of complications surrounding the present day gasoline automobile. To return to steam is to return to simplicity.

THE CAR OF YOUR DREAM POSSESSES

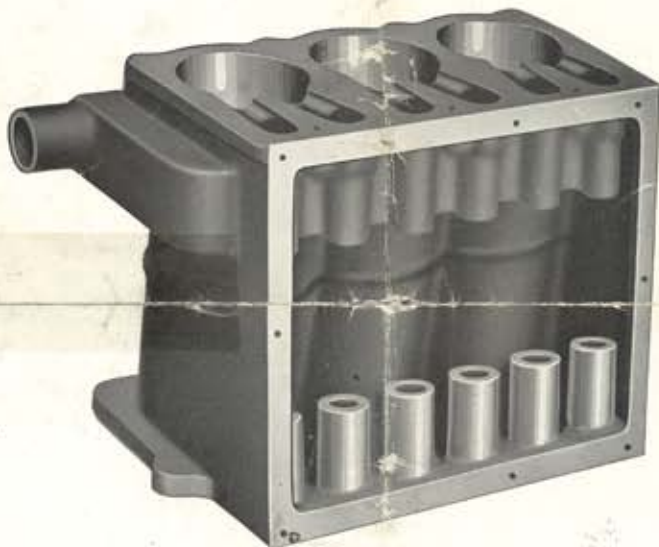
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|--------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Simplicity | The Coats Steam Car has the minimum of moving parts. You can understand its operation. |
| Power | In the Coats Steam Car there is available at the merest touch on the throttle a power amply sufficient to carry you up steepest hills, as slow or as fast as you desire, or over roughest roads, with the greatest ease. |
| Flexibility | In the Coats Steam Car you have no transmission, with three or four speeds forward, but any speed from as slow to as fast as you care to travel, with full power at even the lowest speed. (100% power at zero in torque.) |
| Dependability | Steam is a force on which you can depend, which will not fail you at the critical point when the lives of your loved ones may be at stake. |
| Quietness | The Steam Car does not depend for its power on a series of explosions, necessarily noisy, but upon the quiet, soft, cushiony expansion of steam, stored in advance for your need. |
| Comfort | In the Coats Steam Car you have a smoothly flowing power delivering such an even, steady pull as to make you believe you are indeed the owner of the magic carpet of Houssain. |
| Beauty | Twentieth century demands are adequately met in the Coats Steam Car. |
| Ease of Operation | Even a child can operate the Coats Steam Car. It is entirely controlled by the throttle on the steering wheel, responding instantly to your finger's pressure. No troublesome gears to shift. |
| Economy | Low first cost, low upkeep through low fuel cost, sturdy, reliable parts and long tire mileage are all qualities realized in the Coats Steam Car. |

COATS—THE ULTIMATE CAR

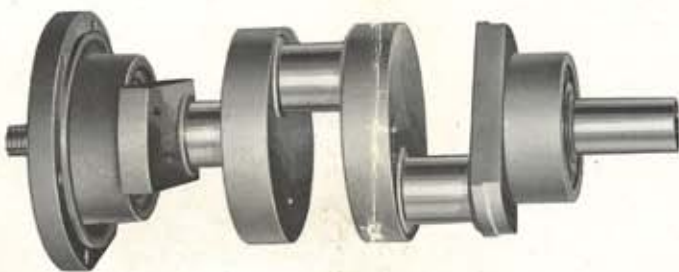
Coats Steam Car Company,
Exclusive Selling Agents
Indianapolis, Ind.



Crank Case



Cylinder Block



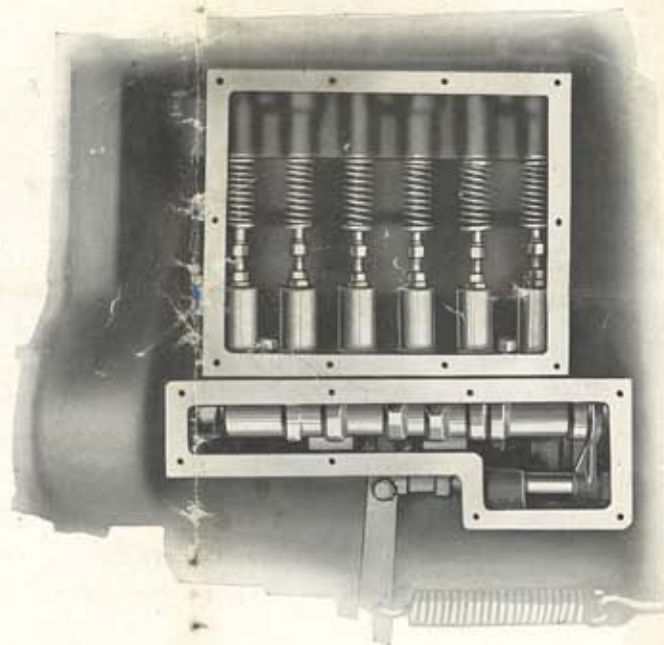
Crankshaft

3 Throw, heavy design. Special heat treated Steel. Accurately ground. Two discs in center act as fly wheel.



Camshaft

Three sets of Cams. Hardened and ground to absolute dimensions.



Engine Assembly, showing valves, cam action and accessibility

Engine

The Coats engine is a horizontal, three cylinder, single acting, counter flow, poppet valve engine. The valves being controlled by one camshaft. The camshaft handles cut-off, forward and reverse engine being of reversible type directly connected with propellor shaft.

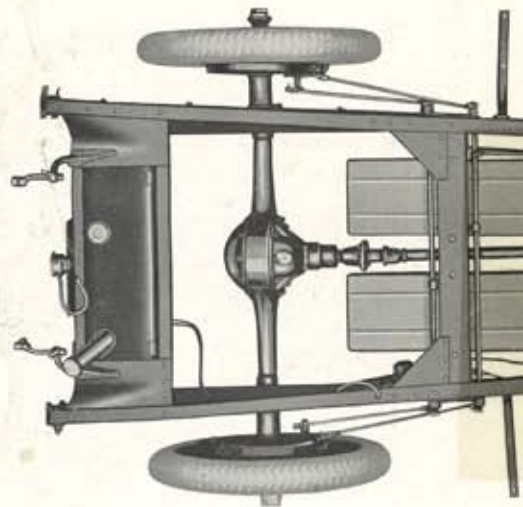
Lubrication is forced feed and splash.

The crank shaft is carried on two heavy double row ball bearings. Two discs in center of fly wheel. The crank pins are exceptional. Connecting rods are equipped with bronze babbitt bearings.

Silent chain is employed in driving camshaft electric generator.

All valve mechanism and moving parts are in dust proof housing.

The Coats engine is a work of art, the result of the best efforts of a corps of efficient engineers high in their profession.



SPECIFICATIONS

ENGINE—Coats three-cylinder, single-acting, 3 5/8 inch bore, 4 1/4 inch stroke.

VALVES—Inlet, poppet. Exhaust, poppet.

VALVE GEAR—Sliding cam type.

CRANKSHAFT—One piece, counter-balanced.

BOILER—Coats fire tube, water level type, 73 square inch heating surface.

COMBUSTION SYSTEM—Forced draft atomizing burner.

LIGHTING SYSTEM—Electric (storage battery and generator.)

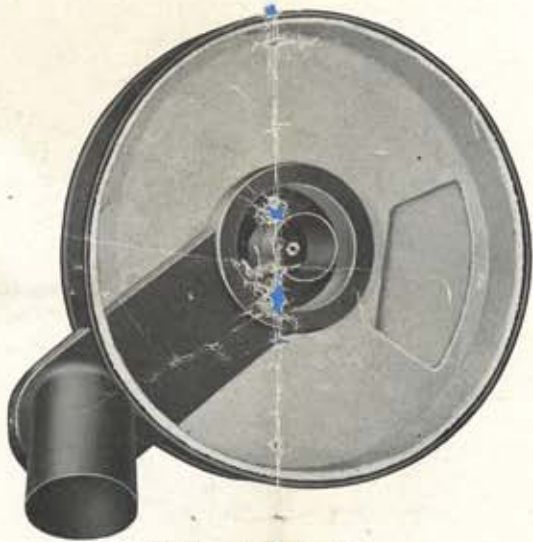
FUEL—Kerosene.

FUEL TANK—15 gallons capacity (not under pressure.)

WATER PUMP—Plunger type driven from engine.

WATER TANKS—30 gallons.

CONDENSOR—Tubular type.



Boiler (Top Inside)

Asbestos lined. Carrying atomizing nozzle for fire.

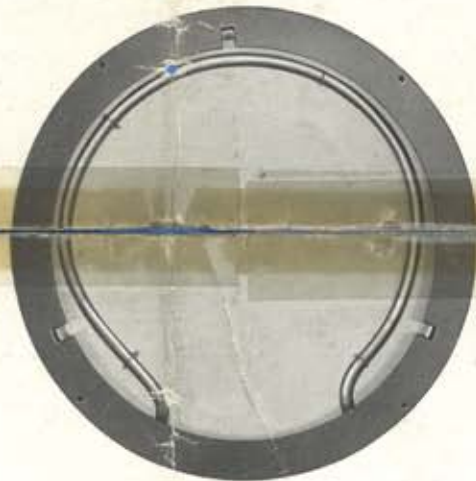


Boiler (End View)

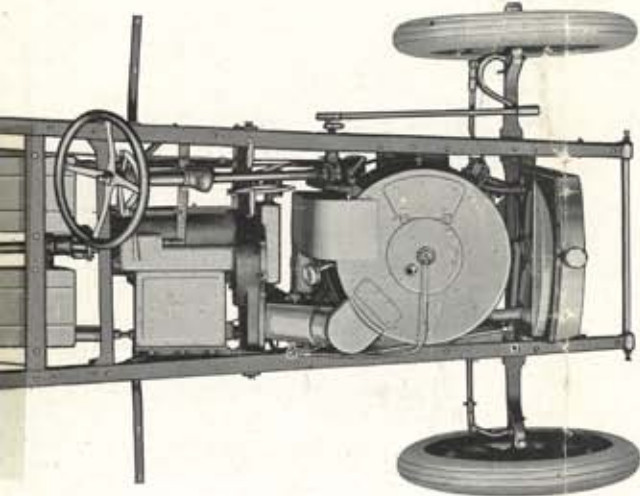
Boiler

The boiler is of the fire tube type with 73 sq. ft. of heating surface, ample capacity for the generation of a plentiful supply of steam. The firebox is a large, cone-shaped tube extending thru the center of the boiler, thus utilizing all heat units most efficiently. An inverted forced draft fire at the top of the boiler burns down thru this firebox. The hot gases are deflected by a refractory lined pan up thru the numerous fire tubes. The flame at no time comes in contact with the tubes, thus materially lengthening the life of the boiler.

The automatics that control this car make it possible to leave the car in midwinter or in summer at the driver's option instantly available for his next requirement.

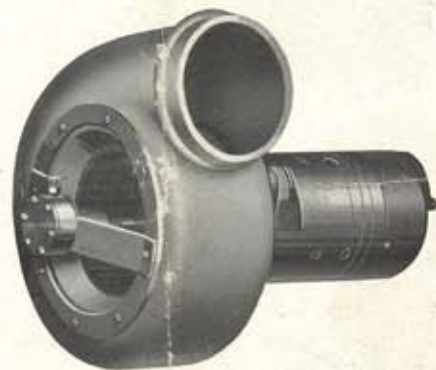


**Refractory Lined Pan
With Superheater Coil.**



IFICATIONS

- inch STEAM PRESSURE—600 lbs. maximum.
- WHEEL BASE—112 inches.
- TREAD—56 inches.
- WHEELS—Standard—wood with demountable rims. Optional at slightly additional cost—wire or disc.
- feet AXLES—Front, drop forged, tapered roller bearings. Rear, three quarter floating. 2 1-2 to 1 ratio.
- TIRES—32x4 inches.
- DRIVE—Left-hand. Brake lever left side.
- SPRINGS—Front 34x2, semi-elliptic. Alloy main leaf. Rear 56x2, semi-elliptic. Alloy main leaf.
- FRAME—Pressed steel 5 inches deep.
- WEIGHT—2500 lbs.
- BODIES—Touring and Roadster types. Closed models later.



Blower

Supplies Forced Draft to fire. Fuel pump and generator attached direct to Blower Shaft.

Engine

The Coats engine is a horizontal, three cylinder, single acting, counter flow, poppet valve type, all valves being controlled by one camshaft. This single camshaft handles cut-off, forward and reverse speed; engine being of reversible type directly connected with propeller shaft.

Lubrication is forced feed and splash.

The crank shaft is carried on two heavy duty type double row ball bearings. Two discs in center act as fly wheel. The crank pins are exceptionally large. Connecting rods are equipped with bronze backed babbitt bearings.

Silent chain is employed in driving camshaft and electric generator.

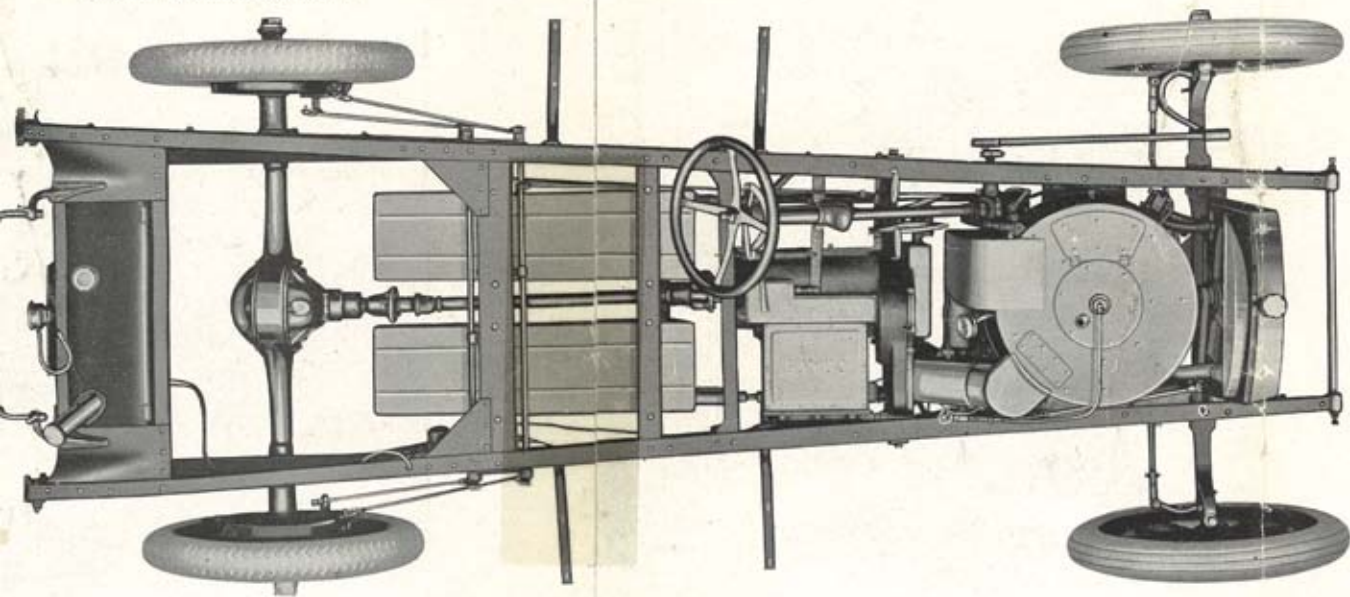
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VALVES—Inlet, poppet. Exhaust, poppet.

VALVE GEAR—Sliding cam type.

CRANKSHAFT—One piece, counter-balanced.

BOILER—Coats fire tube, water level type, 73 square feet heating surface.

COMBUSTION SYSTEM—Forced draft atomizing type.

LIGHTING SYSTEM—Electric (storage battery and generator.)

FUEL—Kerosene.

FUEL TANK—15 gallons capacity (not under pressure.)

WATER PUMP—Plunger type driven from engine.

WATER TANKS—30 gallons.

CONDENSOR—Tubular type.

STEAM PRESSURE—600 lbs. maximum.

WHEEL BASE—112 inches.

TREAD—56 inches.

WHEELS—Standard—wood with demountable rims.

Optional at slightly additional cost—wire or disc.

AXLES—Front, drop forged, tapered roller bearings.

Rear, three quarter floating. 2 1/2 to 1 ratio.

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SPRINGS—Front 34x2, semi-elliptic. Alloy main leaf.

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FRAME—Pressed steel 5 inches deep.

WEIGHT—2500 lbs.

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