

L. DOILLET & P. R. FAURE.
 STEAM MOTOR VEHICLE.
 APPLICATION FILED SEPT. 16, 1909.

997,654.

Patented July 11, 1911.

2 SHEETS—SHEET 1.

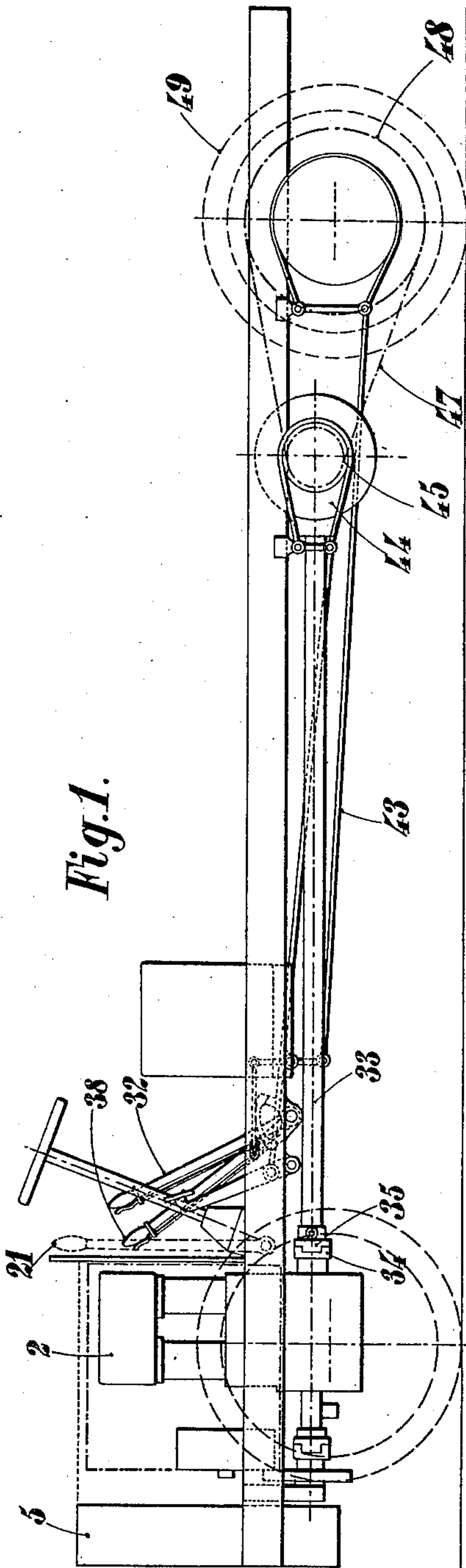


Fig. 1.

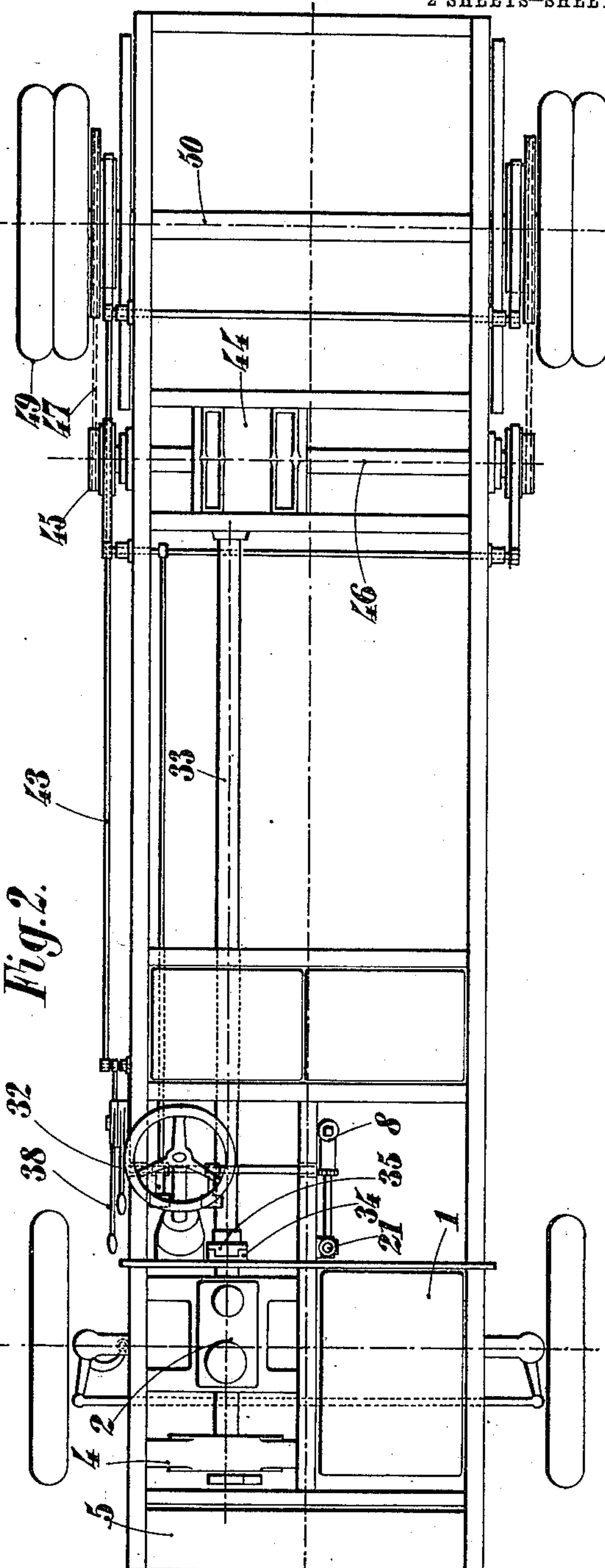


Fig. 2.

Witnesses:
 Norris L. Sumby.
 C. H. Kessler

Inventors
 Louis Doillet
 Paul Robert Faure
 James L. Norris & Co.

L. DOILLET & P. R. FAURE.
STEAM MOTOR VEHICLE.
APPLICATION FILED SEPT. 16, 1909.

997,654.

Patented July 11, 1911.

2 SHEETS—SHEET 2.

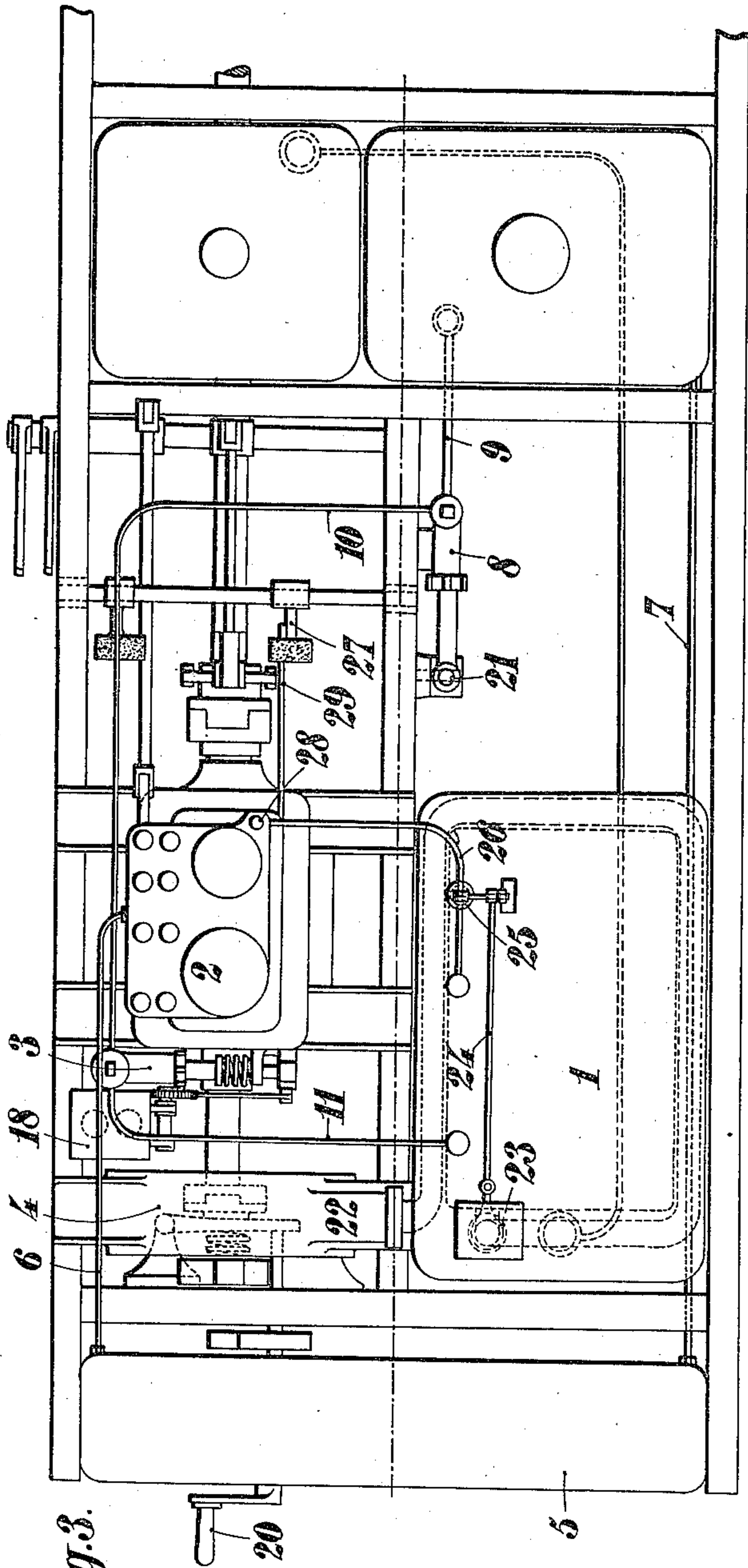


Fig. 3.

Witnesses:

Norris L. Sumby.

C. B. Kesler

Inventors
Louis Doillet
Paul Robert Faure

James L. Norris & Co.
attys.

UNITED STATES PATENT OFFICE.

LOUIS DOILLET AND PAUL ROBERT FAURE, OF PARIS, FRANCE.

STEAM MOTOR-VEHICLE.

997,654.

Specification of Letters Patent.

Patented July 11, 1911.

Application filed September 16, 1909. Serial No. 518,068.

To all whom it may concern:

Be it known that we, LOUIS DOILLET and PAUL ROBERT FAURE, citizens of the French Republic, residing at Paris, Department of the Seine, in France, have invented certain new and useful Improvements in Steam Motor-Vehicles, of which the following is a specification.

With the steam cars which are actually used for commercial purposes, it is difficult to inspect the power plant and the transmission system and it is sometimes necessary to remove the body. Furthermore, the power plant is located at a distance from the transmission system, resulting in considerable loss of power, which is due to the drop in temperature and the fall of pressure in the piping. The present invention obviates these inconveniences by assembling the engine and the boiler side by side within the bonnet at the front part of the car, as a result of which the shaft which transmits the motion of the engine to the wheel will be located upon the same side of the frame as the engine, as opposed to its ordinary central location.

In the annexed drawings: Figure 1 is a side elevation of the car. Fig. 2 is a plan view. Fig. 3 is a plan view showing the different parts of the power plant.

The boiler 1, which is of the type producing instantaneous vaporization, and the engine 2 are located near each other in the front of the car. The engine actuates the pump 3, which distributes water to the boiler, and the fan 4 which forces air into the combustion chamber.

A radiator 5 is located in front of the boiler and of the engine; this radiator is designed to condense the exhaust steam flowing from the engine 2 through the pipe 6; the condensed water returns to the tank through the pipe 7. The piping connecting the boiler to the engine and the engine to the condenser is, therefore, very short. The boiler is fed with water in the following manner: On starting the engine an auxiliary pump 8 actuated by the lever 21 sucks the water from the tank through a pipe 9 and drives it into the feed pump 3 through a pipe 10. During the running of the engine,

the pump 3 forces the water to the boiler through the pipe 11. This pump is driven in any preferred manner from the engine 2.

The fan 4 may be operated manually by the crank 20 to effect the initial rise of pressure. The air impelled by the fan flows into the combustion chamber through a conduit 22. A gate valve 23 mounted on conduit 22 is operated by a rod 24 which is in turn operated by a thermo-regulator 25 branched on the pipe 26. Steam from the boiler 1 flows to the engine through pipe 26 and acts upon this regulating device. Valve 23 is thus enabled to automatically regulate the temperature of the boiler in accordance with the temperature of the steam.

The supply of steam to the engine is controlled by a valve 28 having a suitable connection 29 with an actuating pedal 27. The reversal of the engine is effected by means of a lever 32 located near the engineer.

The connection between the engine and the driving wheels is obtained by a longitudinal shaft 33 which can be coupled with the crank shaft of the engine; this last shaft carries a fixed claw 34. Shaft 33 is provided with a movable claw 35 shifted by a lever 38 which has suitable operating connections therewith and is located near the reversing lever. Shaft 33 drives the differential 44. The two sprocket wheels 45 keyed on the ends of the two transversely arranged sections of the differential shaft 46 are connected by chains 47 with the sprockets 48 secured to the driving wheels 49 which are mounted on the arms of the rear axle 50. The power plant, such as it is here described, leaves free that part of the frame located at the rear of the tanks on which can be placed the seat for the engineer.

We claim as our invention:

A steam motor vehicle having its engine and boiler located side by side within the hood at the front end of the frame thereof, a radiator also located within said hood in advance of said boiler and engine and in pipe communication with the latter for condensing the exhaust steam flowing therefrom, a fan operated by said engine and interposed between the same and said radiator, said fan having its casing communicating

with the combustion chamber of said boiler
for supplying air thereto, and a direct shaft
transmission drive from said engine to the
rear axle of the vehicle, said shaft being
5 located on the same side of the frame as the
engine.

In testimony whereof we have hereunto

set our hands in presence of two subscribing
witnesses.

LOUIS DOILLET.

PAUL ROBERT FAURE.

Witnesses:

H. C. COXE,

GEORGES BOUJE.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents,
Washington, D. C."
