No. 783,547. PATENTED FEB. 28, 1905.

C. SCHMIDT.

MOTOR VEHICLE.

APPLICATION FILED JUNE 22, 1903.

2 SHEETS—SHEET 1.

Fig. 1.

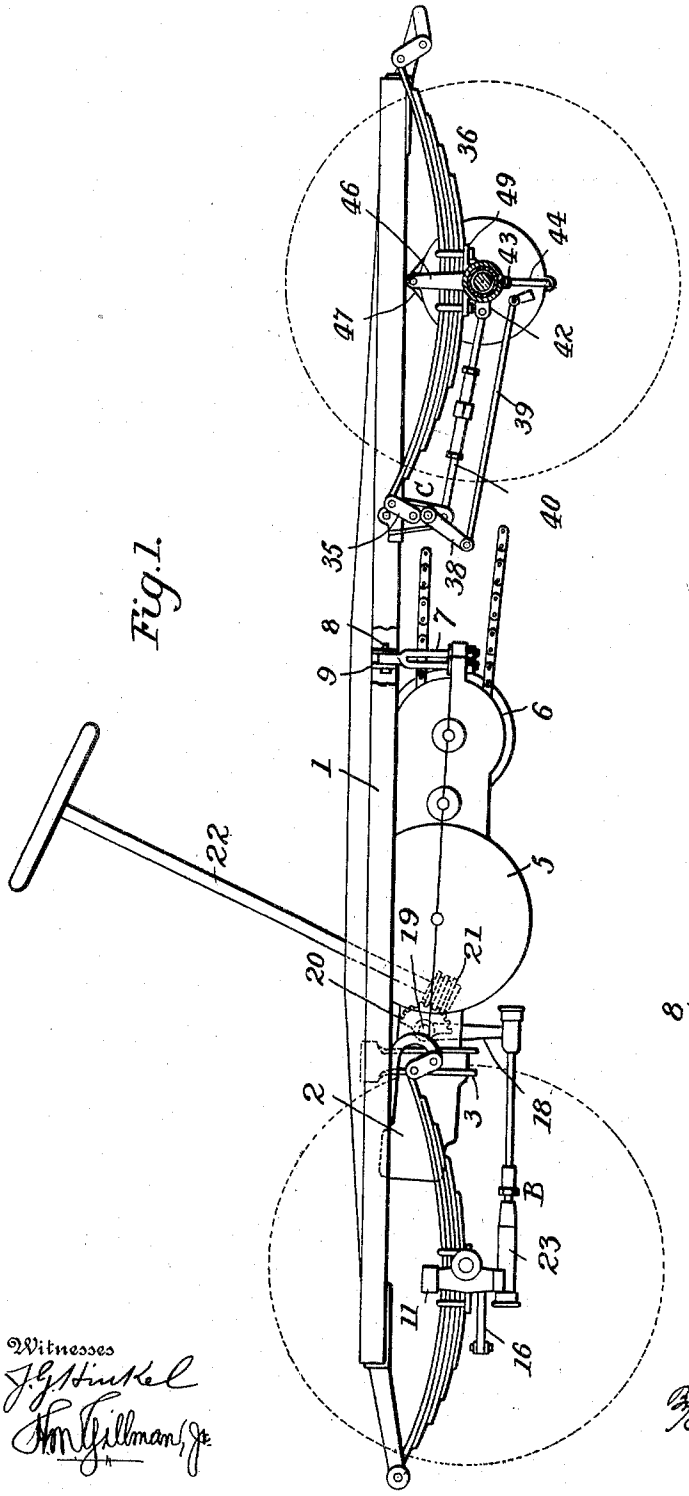
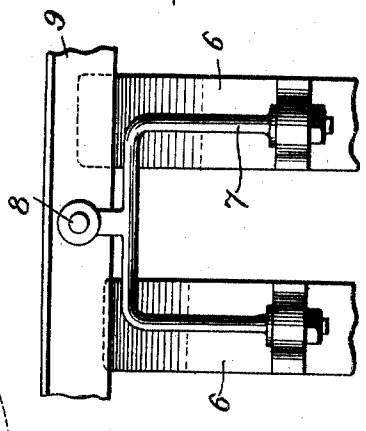


Fig. 2.



Witnesses

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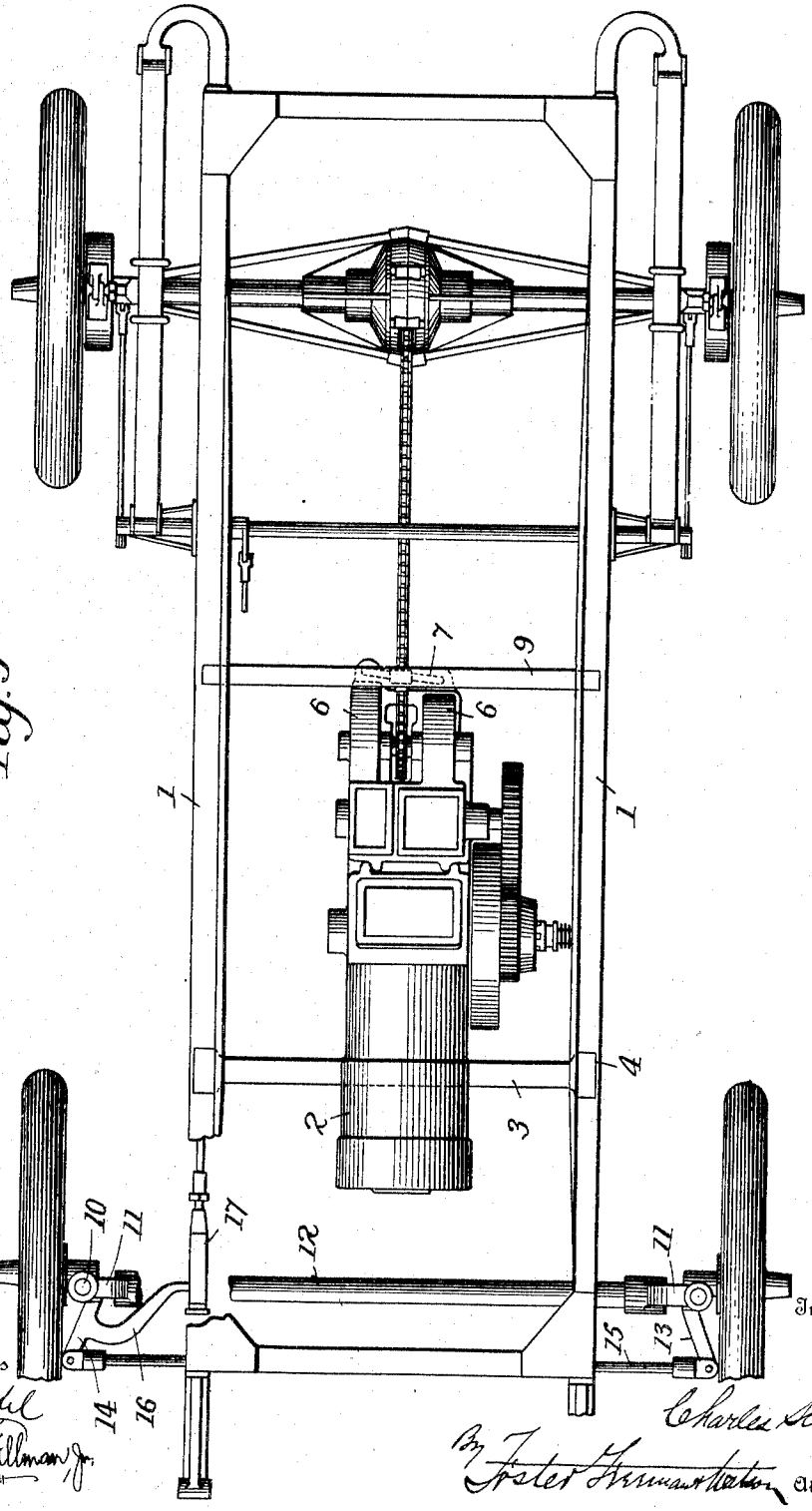
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2 SHEETS—SHEET 2.

Fig. 3



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No. 783,547. Patented February 28, 1905.

UNITED STATES PATENT OFFICE.

CHARLES SCHMIDT, OF WARREN, OHIO, ASSIGNOR TO THE PACKARD MOTOR CAR COMPANY, OF WARREN, OHIO, A CORPORATION OF WEST VIRGINIA.

MOTOR-VEHICLE.

SPECIFICATION forming part of Letters Patent No. 783,547, dated February 28, 1905.

Application filed June 22, 1903. Serial No. 162,632.

To all whom it may concern:

Be it known that I, CHARLES SCHMIDT, a citizen of France, residing at Warren, in the county of Trumbull and State of Ohio, have invented certain new and useful Improvements in Motor-Vehicles, of which the following is a specification.

This invention comprises various improvements in the art relating to the frame or running-gear of motor-vehicles.

The particular improvements will be described with reference to the accompanying drawings, in which—

Figure 1 is a side elevation, partly in section, of an automobile-frame. Fig. 2 is a detail of the rear motor-hanger. Fig. 3 is a plan view of the frame and running-gear.

Referring to the drawings, 1 indicates the frame proper, and 2 a motor. The frame when the machine is in operation is subjected to certain warping strains due to inequalities in the roads, and it is advisable to connect the motor with the frame in such a manner that it will not be strained by warping or twisting of the frame and will remain in proper relation to the driving-axle. With this end in view the motor is supported at three separate points upon the frame, the three points forming, preferably, the angles of an isosceles triangle. As shown, the motor 2 is supported near its forward end by a transverse bar 3, extending under the cylinder and connected to the frame-bars 1 at points 4. The motor mechanism in the present instance includes the crank-case 5 and a gear-case 6, the gear-case having two rearwardly-extending legs or branches, as shown in Fig. 3. The motor-cylinder, crank-case, and gear-case are all rigidly connected together and to the transverse bar 3. The two branches of the gear-case 6 are supported on the U-shaped hanger 7, which is centrally pivoted at 8 to a transverse bar 9 of the frame 1. It will thus be seen that the motor mechanism is supported from the frame at three points only—namely, the points 4 4 and 8—and that one of these supports is a pivotal connection, thus insuring the motor against strains due to the twisting or bending of the frame on uneven roads.

As shown in Figs. 1 and 3, the front wheel-hubs turn about vertical pivots 10, which are supported in yokes 11, fitted to the front axle 12. A pair of arms 13 14 are rigidly connected to the wheel-hubs and are connected together by a suitable connecting-rod 15 in the usual manner. For steering purposes the arm 15 has a branch arm 16, which arm 16 is connected by a link B with a vertical arm 18 upon a horizontal shaft 19, which is rocked by worm-gear 20, worm-wheel 21, and steering-shaft 22.

Certain features of the construction illustrated in the drawings and not herein specifically described or claimed form the subject of a divisional application, filed April 29, 1904.

Having described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In a motor-vehicle, the combination with the frame, of a motor, a transverse beam or bar connected with the sides of the frame to which one end of the motor is rigidly connected, and a second transverse beam or bar to which the other end of the motor is pivotally connected.

2. In a motor-vehicle, the combination with the frame, of a motor, a transverse beam or bar connected with the sides of the frame and on which one end of the motor rests and is rigidly secured, and a second transverse beam or bar to which the other end of the motor is pivotally connected.

3. In a motor-vehicle, the combination with the frame, of a rigidly-connected motor, crank-case and gear-case, a transverse beam or bar connected with the sides of the frame to which one end of the motor is rigidly connected, and a second transverse beam or bar to which one end of the gear-case is pivotally connected.

4. In a motor-vehicle, the combination of a

motor-frame having two transverse bars or beams, a motor, crank-case and gear-case rigidly connected, and a U-shaped hanger pivotally connected to one of said bars and connected to opposite sides of said gear-case, the motor being rigidly connected to the other transverse bar.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

CHARLES SCHMIDT.

Witnesses:
RUSSELL HUFF,
H. V. BATCHELLER.