

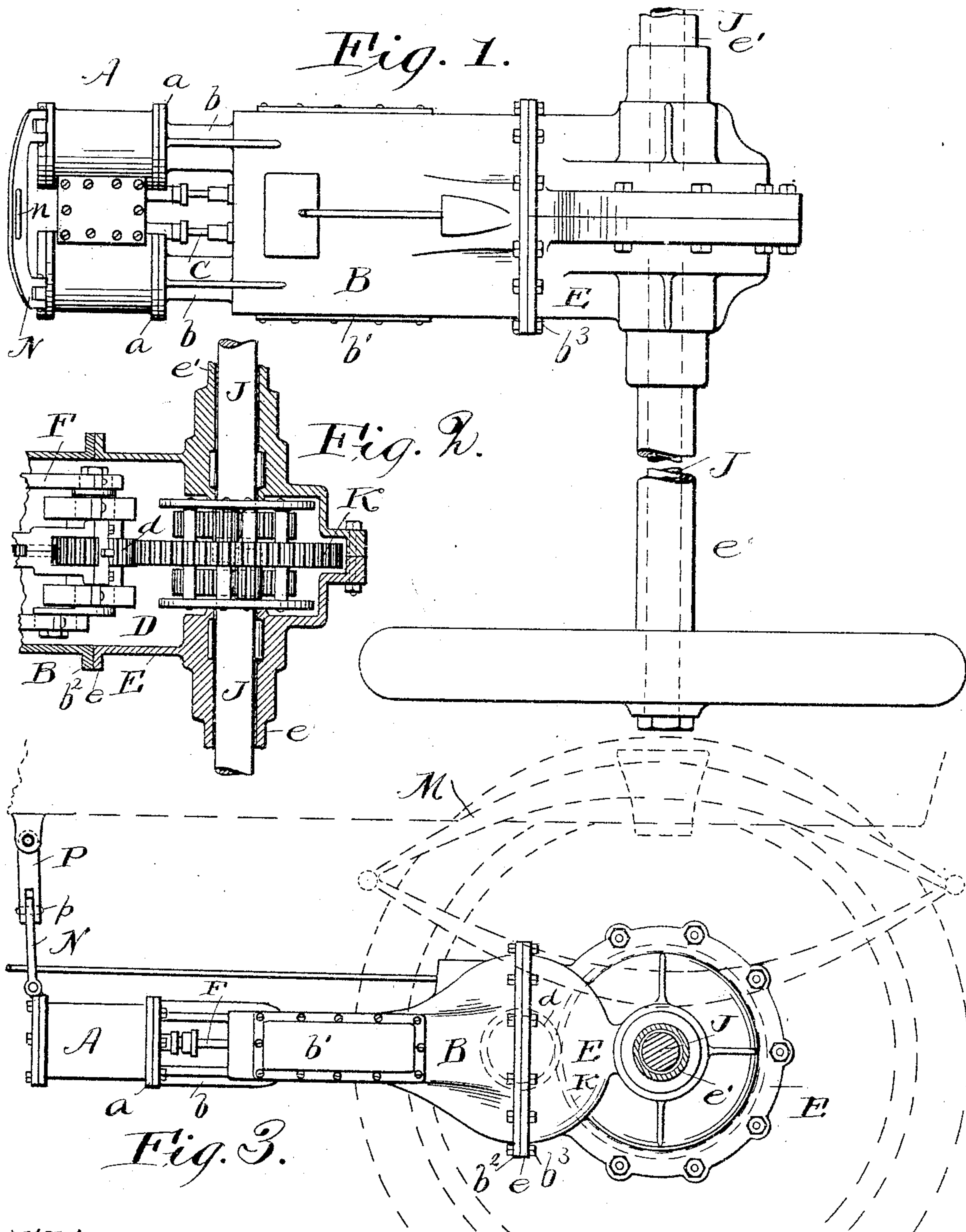
No. 777,964.

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V. LINK.
AUTOMOBILE.

APPLICATION FILED JULY 16, 1904.

NO MODEL.



Witnesses.
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UNITED STATES PATENT OFFICE.

VINCENT LINK, OF GENEVA, OHIO, ASSIGNOR TO THE GENEVA AUTOMOBILE & MFG. CO., OF GENEVA, OHIO, A CORPORATION OF OHIO.

AUTOMOBILE.

SPECIFICATION forming part of Letters Patent No. 777,964, dated December 20, 1904.

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To all whom it may concern:

Be it known that I, VINCENT LINK, a citizen of the United States, residing at Geneva, in the county of Ashtabula and State of Ohio, have invented a certain new and useful Improvement in Automobiles, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings.

The invention relates to the means for supporting and protecting the engines and the mechanism by which power is transmitted from the engine to the driving-axles.

The invention may be said to consist of the combination and construction of parts shown in the drawings and hereinafter described and claimed.

In the drawings, Figure 1 is a plan view of the mechanism involved in the invention. Fig. 2 is a sectional plan view of a part thereof, and Fig. 3 is a side elevation of said invention.

Referring to the parts by letter, A represents a two-cylinder steam-engine. The rear heads *a* of these cylinders are rigidly attached to the front end of two arms *b b*, which project forward from a housing B, in the rear end of which the engine crank-shaft D is mounted. Preferably said housing and arms and cylinder-heads are cast in a single piece.

The slide-valve stems C C and the piston-rods F F extend into the housing through the front end thereof. Within the housing is the usual engine mechanism—to wit., the cross-heads and their slides, the valve-operating mechanism, and the reversing mechanism. The parts mentioned may be of any familiar form and are therefore not shown. There are removable doors *b'* covering openings in the side of the housing, through which access may be had to the interior thereof and the mechanism therein contained.

The rear end of the housing is open and is bolted to the open front end of a housing E, which covers the compensating mechanism. This compensating mechanism may be of usual or any suitable form for transmitting properly differentiated movement to the two axle-

sections J J. It is not thought necessary to show in detail or to describe any particular compensating mechanism, because it is no part of the present invention. That which is shown has a gear K, which meshes with and receives motion from a gear *d* on the engine driving-shaft. One of the advantages of the invention, as shown, is the possibility of making this direct connection from the engine driving-shaft to the compensating mechanism.

The housing E is of ordinary form, except for its open front end, on which is a flange *e*, through which and a flange *b'* on the rear end of the housing B the fastening-bolts *b'* pass. When these two housings are thus connected, all of the engine mechanism and the transmitting mechanism is inclosed in one large chamber. The operative connection between the engine and the compensating mechanism is broken by mere withdrawal of the gear *d* from its meshing relation with the gear K. The separation of the two parts of these two housings enables one to have access to the inclosed parts to a sufficient extent to make any of the usual repairs.

The housing E has two laterally-projecting tubes *e' e'*, to which the body-supporting springs M (shown only in dotted lines in Fig. 3) are connected.

The front end of the rigid structure, which includes the engine cylinders and housings, is suspended from the spring-supported body by means which permit perfect freedom of motion of the body without imposing any strain upon the parts heretofore described. The clevis-like link N is pivoted on a transverse horizontal axis to the engine-cylinders. The link P is hung on a parallel pivot from the lower side of the body. The lower end of the link P is bifurcated and loosely embraces the link N. A pin *p* passes through the bifurcated part of said link P and loosely through a horizontal slot *n* in said link N. As before stated, this manner of suspending the front end of the described structure from the spring-supported body permits the body to move forward or backward, upward or downward, or transversely in either direc-

tion without tending to impose any strain calculated to move the link-supported structure out of its operative position.

Having described my invention, I hereby
5 claim—

1. In an automobile, the combination of the housing for the compensating mechanism; which housing has laterally-projecting tubular members adapted for connection, through
10 springs, with the vehicle-body, and has also an open front end, with an engine, and a housing which is rigidly connected with the engine-cylinder and incloses the working parts of the engine, and is open at its rear end and is re-
15 movably connected with the open front end of the differential housing to form one large inclosed chamber, and a supporting-link which is pivoted at its upper end to the vehicle-body, and at its lower end to the front end of the
20 engine, both of the pivots of said supporting-link being horizontal, and one being extended transversely of the body and the other being at right angles to said pivot.

2. In an automobile, the combination of the
25 housing for the compensating mechanism, which housing has an open front end, around which is an external flange, and has also laterally-projecting tubular members, a vehicle-body, springs connecting said tubular mem-
30 bers with the vehicle-body, a housing which is rigidly connected with the engine-cylinder and incloses the working parts of the engine,

and is open at its rear end, where it is provided with an external flange, bolts connecting said flange with the flange on the housing 35 for the compensating mechanism, and a swinging link from which the front end of the engine is suspended from the vehicle-body.

3. In an automobile, the combination of the housing for the compensating mechanism; 40 which housing has laterally-projecting tubular members adapted for connection, through springs, with the vehicle-body, and has also an open front end, with an engine, and a hous-
45 ing which is rigidly connected with the engine-cylinder and incloses the working parts of the engine, and is open at its rear end and is removably connected with the open front end of the differential housing to form one large
50 inclosed chamber, a link pivoted at its lower end to the front end of the engine on a transverse horizontal pivot, and having a substantially horizontal slot near its upper end, and a link pivoted to the vehicle-body on a par-
55 allel axis and carrying a horizontal pin which passes through said slot, substantially as de-
scribed.

In testimony whereof I hereunto affix my signature in the presence of two witnesses.

VINCENT LINK.

Witnesses:

HENRY MEANS,
MARY CLARK.