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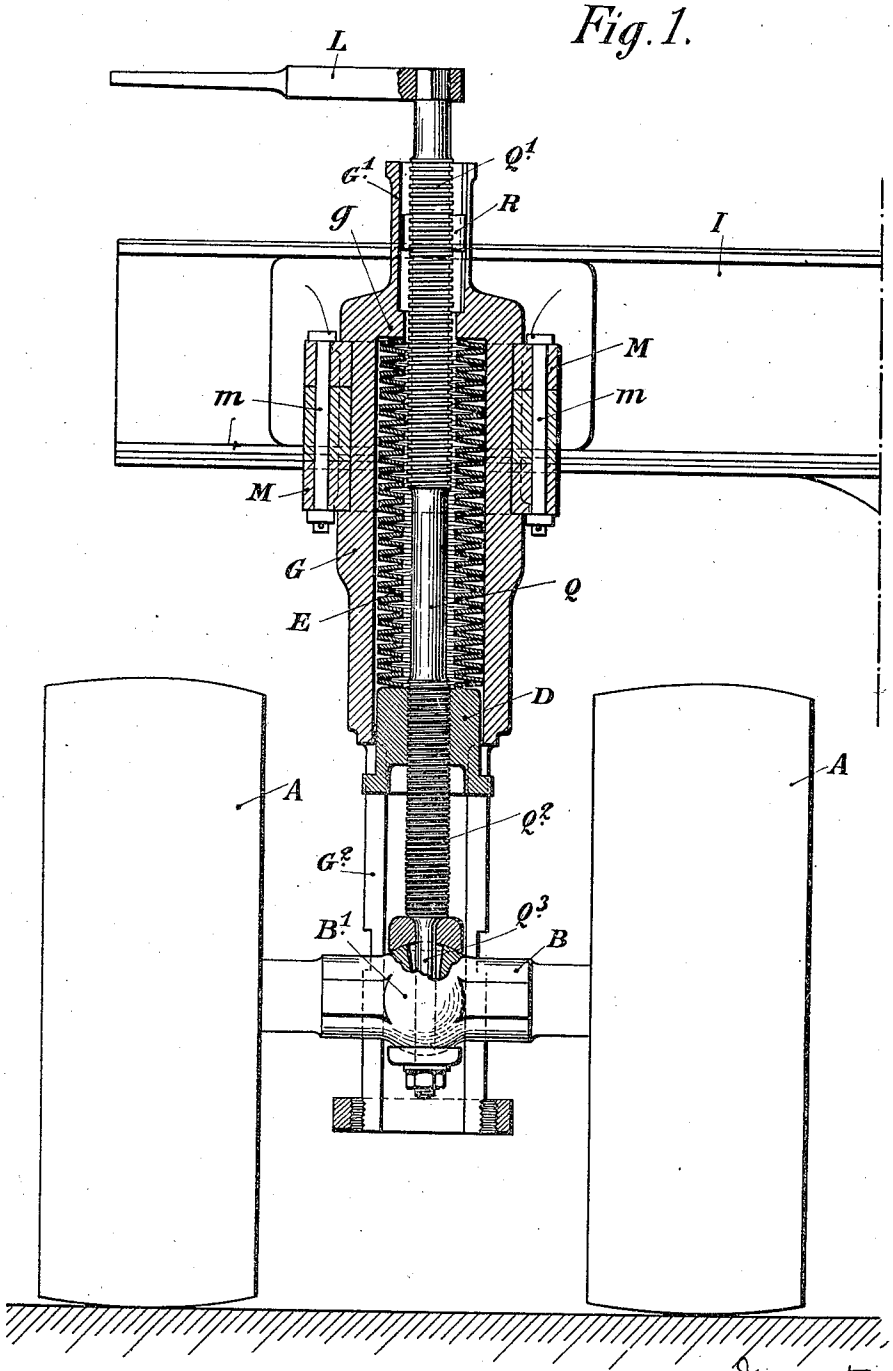
REMOVABLE BOGIE FOR TRAILERS, GUN CARRIAGES, AND OTHER APPARATUS.

APPLICATION FILED JUNE 16, 1919.

1,340,417. **Patented May 18, 1920.**

3 SHEETS—SHEET 1.

Fig. 1.



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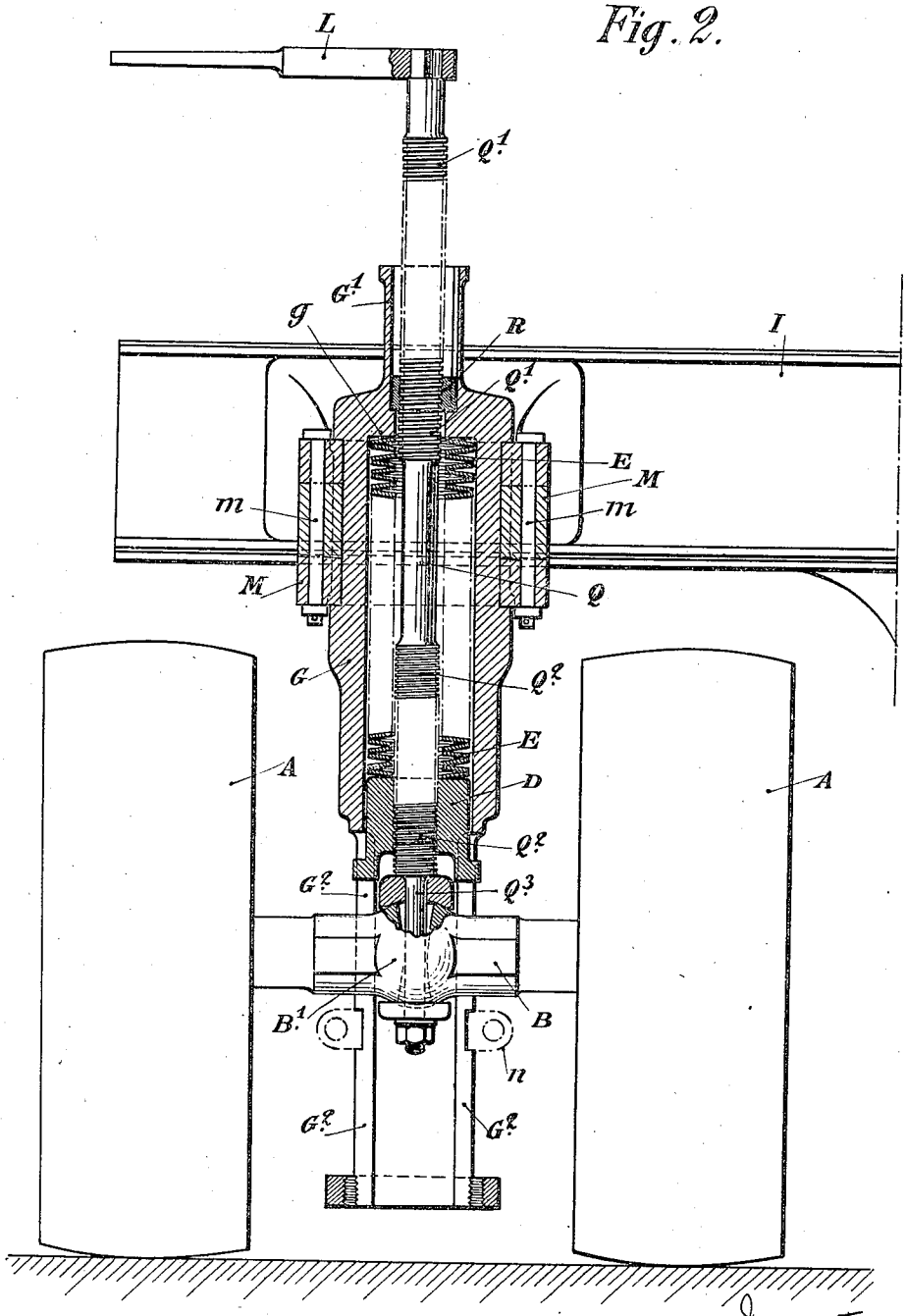
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3 SHEETS—SHEET 2.

Fig. 2.



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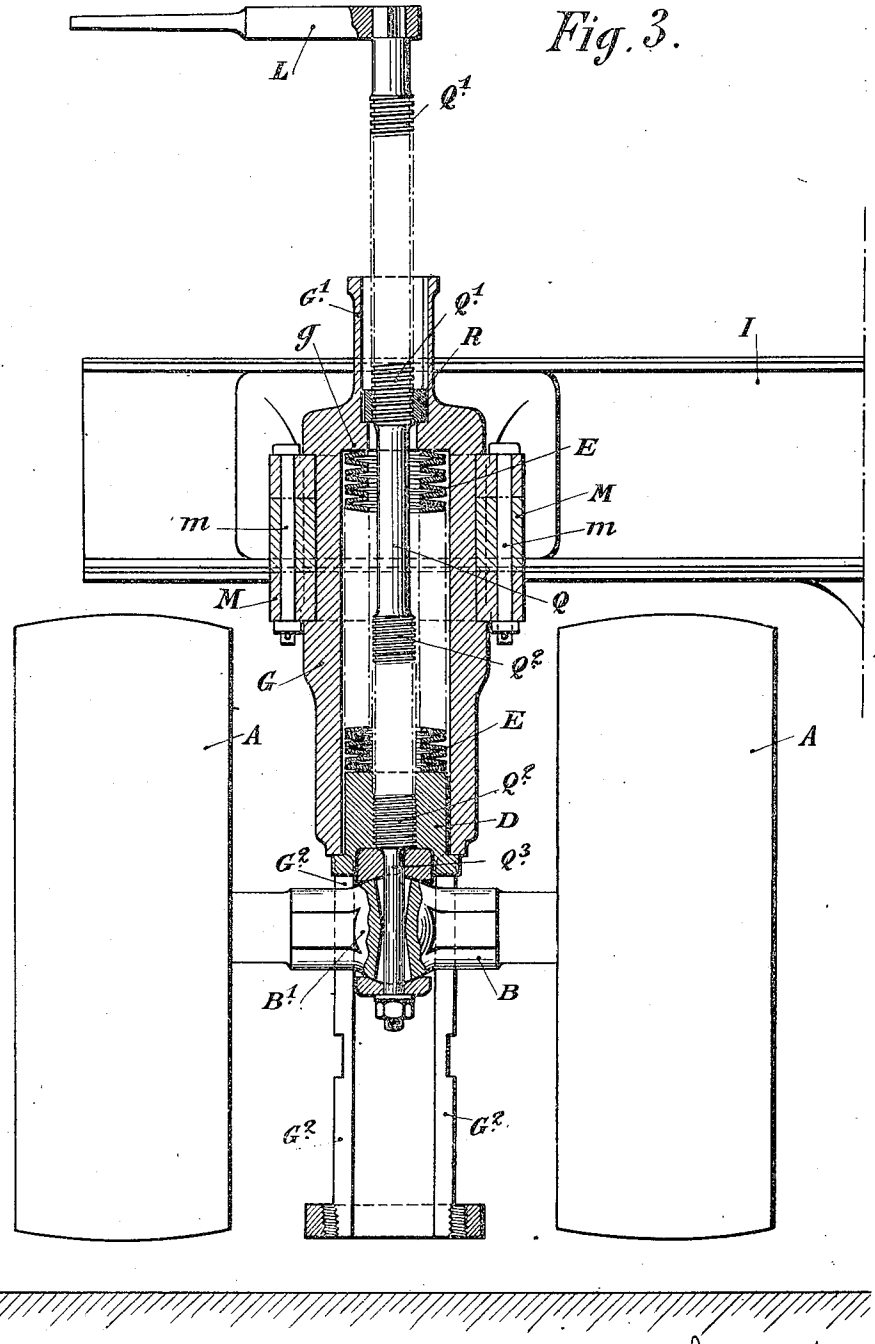
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3 SHEETS—SHEET 3.

Fig. 3.



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UNITED STATES PATENT OFFICE.

EUGÈNE SCHNEIDER, OF PARIS, FRANCE, ASSIGNOR TO SCHNEIDER & CIE., OF PARIS, FRANCE, A LIMITED JOINT-STOCK COMPANY OF FRANCE.

REMOVABLE BOGIE FOR TRAILERS, GUN-CARRIAGES, AND OTHER APPARATUS.

1,340,417. Specification of Letters Patent. Patented May 18, 1920.

Original application filed July 30, 1917, Serial No. 183,595. Divided and this application filed June 16, 1919. Serial No. 304,647.

To all whom it may concern:

Be it known that I, EUGÈNE SCHNEIDER, a citizen of the Republic of France, and a resident of Paris, France, have invented a new and useful Improvement in Removable Bogies for Trailers, Gun-Carriages, and other Apparatus, which invention is fully set forth in the following specification.

In my application Serial No. 183,595, filed July 30, 1917 for improvements in bogies for trailers, gun carriages and the like, of which the present application is a division, I have described a bogie construction adapted to any desired carriage framing, such as a trailer or gun carriage, the variable number of bogies constituting as many elastic suspension devices.

The characteristic feature of the improved bogies is that the bogie axle is connected at its center by a ball-and-socket joint or a horizontal pin to a member constituting the lower abutment, and it may be also the guide, for an elastic suspension, the upper abutment of which is constituted by one of the essential elements of a screwjack or like device, which is pivoted about a vertical axis by means of the support of the other element of the screwjack or by the actual frame of the screwjack in the carriage framing.

This arrangement is such that, on operating the screw-jacks in one direction, the carriage framing may be lowered to rest on the ground in firing position and by continuing the operation the bogies may be lifted off the ground. By reversing the operation, the bogies may be lowered to the ground and by continuing the operation the framing may be lifted into traveling position off the ground. The bearing of the wheels on the ground is assured whatever the contour of the surface during travel.

In order that the invention may be more readily understood, reference is had to the accompanying drawings which show one constructional form of the invention.

Figure 1 is a front elevational view, partly in section, showing a bogie construction embodying my improvements.

Figs. 2 and 3 are similar views showing the parts in different positions.

Referring to the drawings, A, A are the wheels of a bogie mounted on the ends of an axle B. I is a part of the carriage framing on which is mounted a supporting collar M comprising an element fast to the carriage framing and a complementary element adapted to be hinged to the fixed element by pins *m*. The collar is adapted to revolubly receive a screw-jack casing G by removing one of the pins *m* and opening the hinged element of the collar. Q is the screw element of the jack having an extension Q^3 connected by a ball-and-socket joint B^1 with axle B. The casing G is provided with depending cheeks G^2 straddling axle B and form guides for the nut element D while preventing the latter from turning. E is the suspension spring confined between nut D the lower abutment and shoulder *g* of the screw-jack casing which serves as the upper abutment. G′ is an upper extension of the casing G and is adapted to receive an abutment nut R which has a splined connection therewith permitting the nut to slide without rotating. This nut engages threads Q′ on the screw element Q which are of steeper pitch than threads Q^2 engaging the lower abutment nut D. L is a lever for operating the screw Q and *n* is a part of a whiffletree connection.

If on starting from the position shown in Fig. 1 the lever L is operated in the required direction, the screw Q^2, in turning, will cause the descent of the nut D as well as the screw-jack frame G and the carriage framing I until the latter has been brought to bear upon the ground as shown in Fig. 2. The abutment nut R will then come in contact with the screw-jack casing G.

In continuing the movement of the lever L, first the axle is raised, and at the same time an additional compression of the spring E is produced until the nut D strikes with its lower collar against the lower edge of the screw-jack frame G. The parts will then occupy the position shown in Fig. 3.

What is claimed is:

1. In a bogie for supporting a trailer, gun carriage or other vehicle, a wheeled axle, a vehicle frame and a spring supporting said frame on said axle, a screw-jack having a casing revolubly mounted on said frame and constituting the upper abutment for said spring, said screw jack having a screw element provided with a loose-jointed connection with said axle, the nut element of said jack constituting the lower abutment for said spring, and a second nut slidable in said

casing and having threaded engagement with said screw element adapted to serve as an abutment in lifting said axle.

2. In a bogie for supporting a trailer, gun carriage or other vehicle, a wheeled axle, a vehicle frame and a spring supporting said frame on said axle, a screw-jack having a casing revolubly mounted on said frame and constituting the upper element for said spring, said screw jack having a screw element provided with a loose-jointed connection with said axle, the nut element of said jack constituting the lower abutment for said spring, and a second nut slidable in said casing and having threaded engagement with said screw element adapted to serve as an abutment in lifting said axle, said casing having depending cheeks straddling said axle and adapted to confine the movements thereof to a vertical plane and to restrain said nut from rotation.

3. In a bogie for supporting a trailer, gun carriage or other vehicle, a wheeled axle, a vehicle frame and a spring supporting said frame on said axle, a screw-jack having a casing revolubly mounted on said frame and constituting the upper abutment of said spring, a screw element for said jack having a loose jointed connection with said axle, the nut element of the jack constituting the lower abutment for said spring, said screw element having separate threaded portions of different pitch, one of which is adapted to receive said spring abutment nut and a separate nut having a splined connection with said casing engaging the other of said threads to serve as an abutment in lifting the said axle.

In testimony whereof I have signed this specification.

EUGÈNE SCHNEIDER.

Witnesses:

ANDRÉ MOSTICKER,

CHAS. P. PRESSLY.