

E. SCHNEIDER.

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

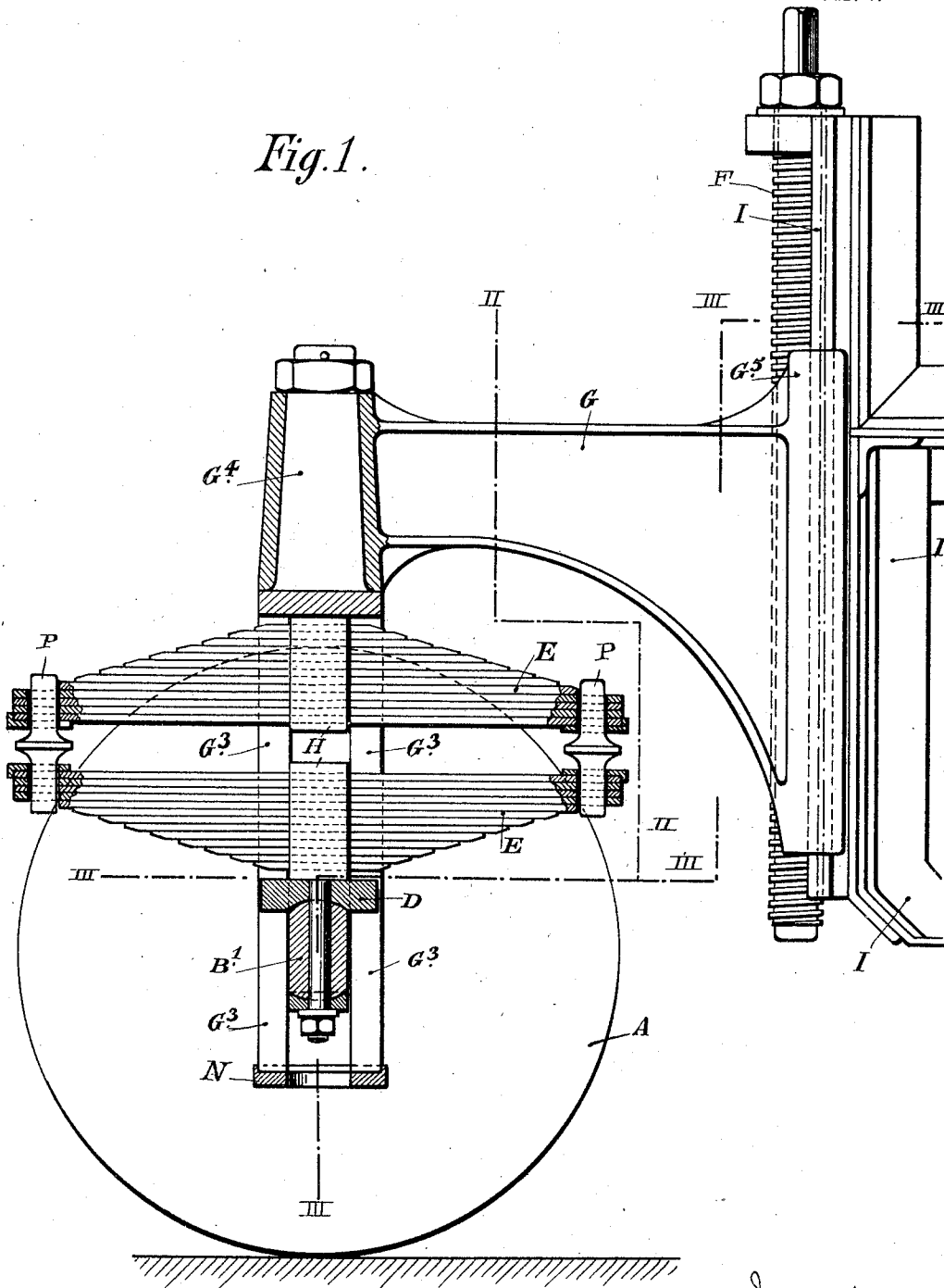
APPLICATION FILED JUNE 16, 1919.

1,340,418.

Patented May 18, 1920.

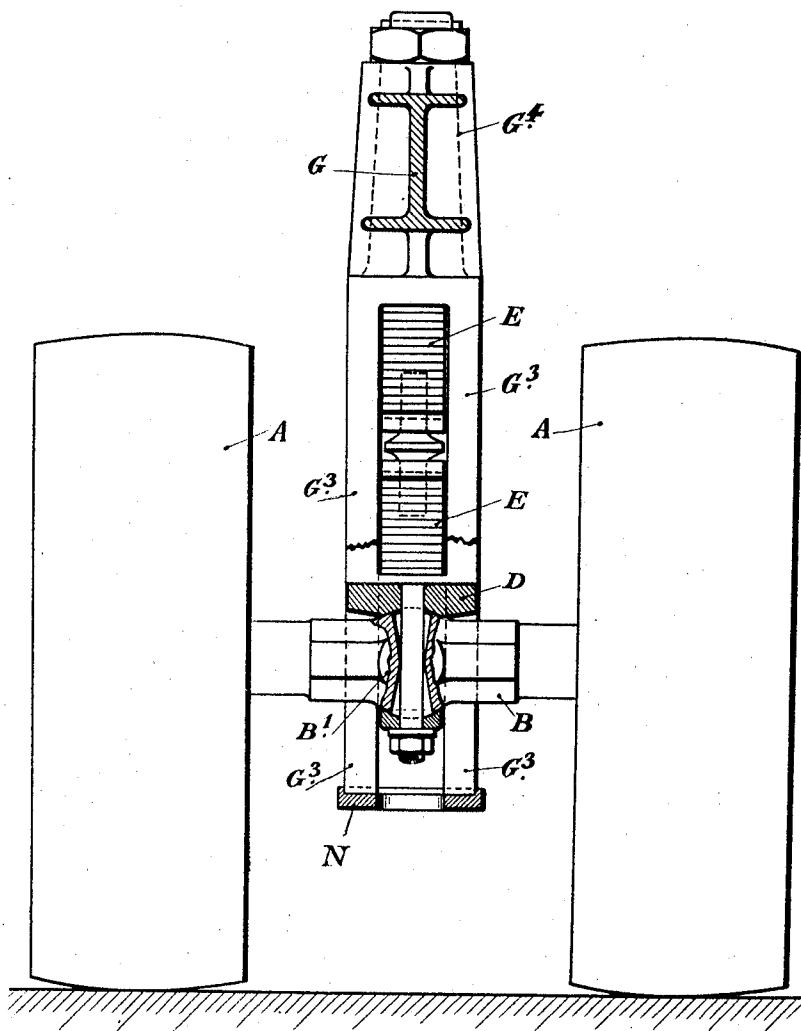
3 SHEETS—SHEET 1.

Fig. 1.



Inventor:—
Eugene Schneider
By Mauro, Cameron, Lewis & Massie
Attorneys

Fig. 2.



Inventor:—
 Eugene Schneider
 By Mauns, Cameron, Louis Massie
 Attorneys.

E. SCHNEIDER.

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

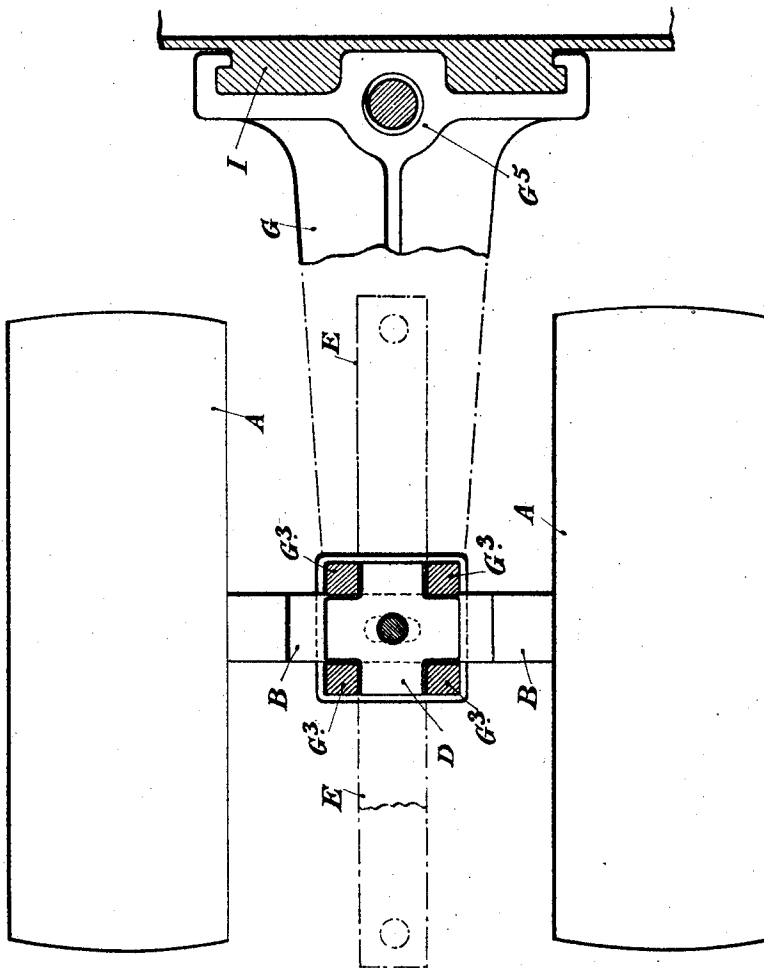
APPLICATION FILED JUNE 16, 1919.

1,340,418.

Patented May 18, 1920.

3 SHEETS—SHEET 3.

Fig. 3.



Inventor:—
Eugene Schneider
By *Wm. Cameron Lewis & Massie*
Attorneys.

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.

1,340,418.

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. 304,648.

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 view partly in longitudinal vertical section and partly in side elevation showing a bogie embodying my improvements.

Fig. 2 is a view partly in transverse vertical section on the line 2—2 of Fig. 1 and partly in front elevation, and

Fig. 3 is a view partly in plan and partly

in horizontal section on the line 3—3 of Fig. 1.

In 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 which supports the screw element F of the screw-jack. The bracket G guided on the framing I as shown in Figs. 1 and 2 constitutes the screwjack nut, the nut G⁵ proper being formed in the rear of the bracket. A plate D is mounted on the axle B and is connected therewith through a loose joint such as a ball-and-socket joint B' and serves as the lower abutment for a pair of flat suspension springs E which support the outer end of bracket G through a pivot G⁴.

The upper and lower members of the pair of springs E are secured by straps H respectively to pivot G⁴ and to plate D. The free ends of the springs are separately connected by pins P. Four upright members G³ project from pivot G⁴ beyond axle B and serve as guides for the springs E, plate D and axle B. The lower ends of these guides are held by a nut N.

Assuming that the parts of the screw-jack bogie are in the position shown in Fig. 1 then by turning screw F in the proper direction the framing I may be lowered in respect to the bracket arm G to rest on the ground. By continuing the rotation of the screw the bracket G rises till the nut N meets the lower side of the wheeled axle which is then lifted off the ground.

If desired, the wheeled axle may be disconnected from the screw-jack by removing nut N, thereby permitting guides G³ to be lifted free from the axle B. The upper member of the pair of springs E at the same time separates from pins P.

What is claimed is:

1. In a bogie for supporting a trailer, gun carriage or other vehicle, a wheeled axle, a vehicle frame and springs supporting said frame on said axle, a screw element revolutely supported on said frame, a vertically movable bracket arm having at its inner end threaded engagement with said screw element and at its outer end a pivot adapted to constitute the upper abutment for said springs, and a plate having a loose connection with said axle and adapted to constitute a lower abutment for said springs.

2. In a bogie for supporting a trailer, gun

carriage or other vehicle, a wheeled axle, a vehicle frame and springs supporting said frame on said axle, a screw element rev-
5 olubly supported on said frame, a verti-
cally movable bracket arm having at its
inner end threaded engagement with said
screw element and at its outer end a pivot
adapted to constitute the upper abutment for
said spring and having depending members
10 for receiving and guiding said axle and
springs, and a plate having a loose connec-
tion with said axle and adapted to constitute
the lower abutment of said springs.

3. In a bogie for supporting a trailer, gun
15 carriage or other vehicle, a wheeled axle pro-
vided with a plate having a loose connec-
tion therewith, two sets of separable flat

springs the lower set of which is fast to said
plate, a screw element revolubly mounted on
said frame, a vertically movable bracket arm 20
the inner end of which has threaded en-
gagement with said screw element, a pivot
mounted in the outer end of said bracket
arm and to which said upper set of springs
is fast, said pivot being provided with de- 25
pending guide members for receiving and
guiding said springs and axle.

In testimony whereof I have signed this
specification.

EUGÈNE SCHNEIDER.

Witnesses:

ANDRÉ MOSTICKER,
CHAS. P. PRESSLY.