

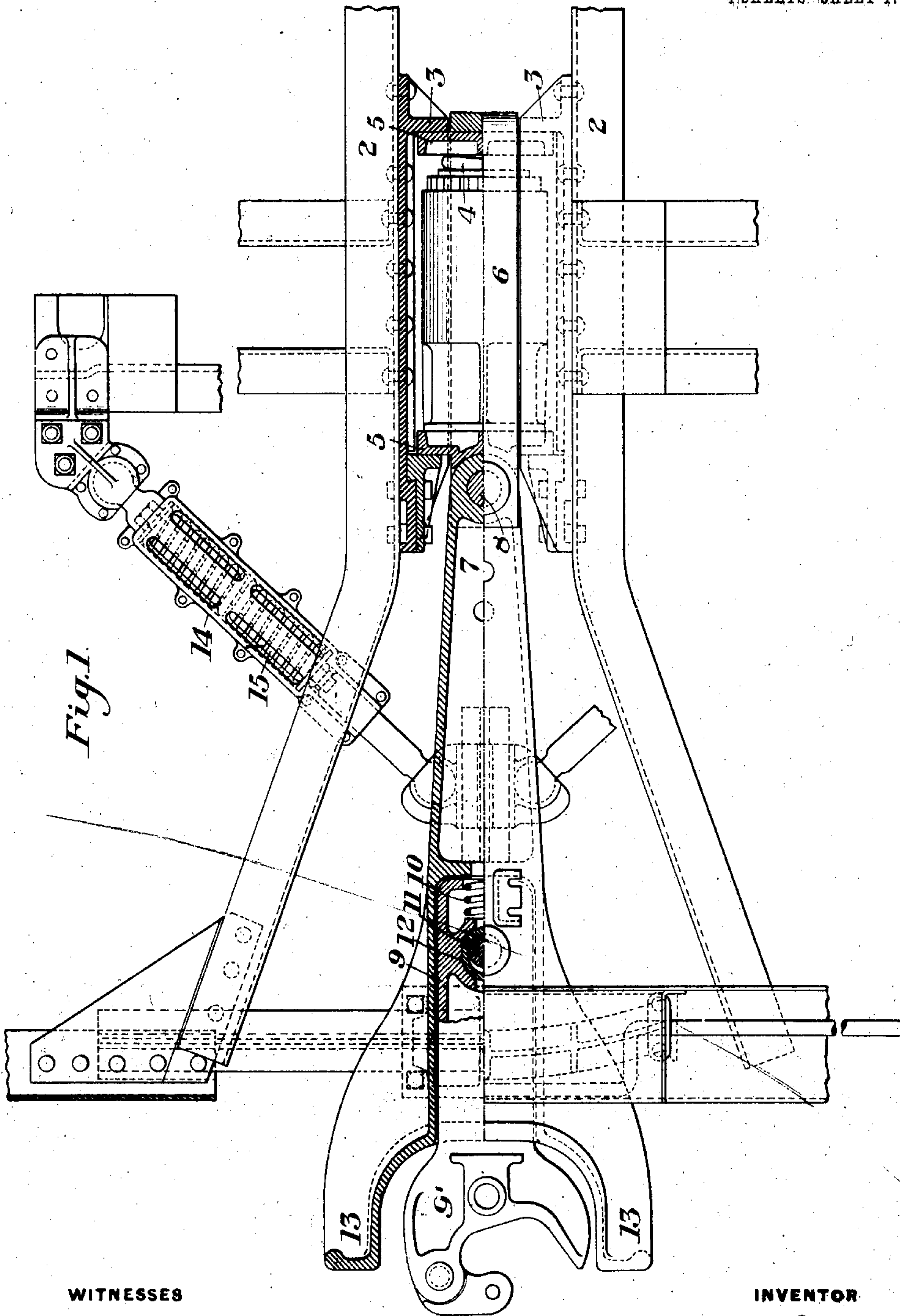
H. F. POPE.
DRAFT GEAR.

APPLICATION FILED MAY 17, 1906. RENEWED APR. 9, 1907.

947,349.

Patented Jan. 25, 1910.

4 SHEETS—SHEET 1.



WITNESSES

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Warren W. Swartz

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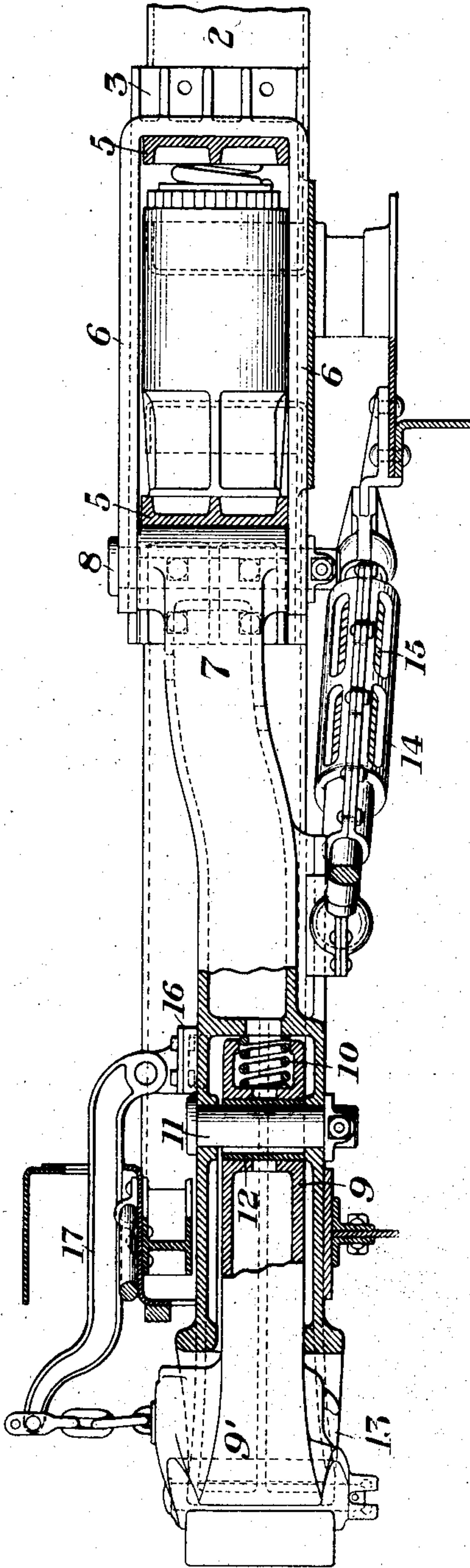
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4 SHEETS—SHEET 2.

Fig. 2.



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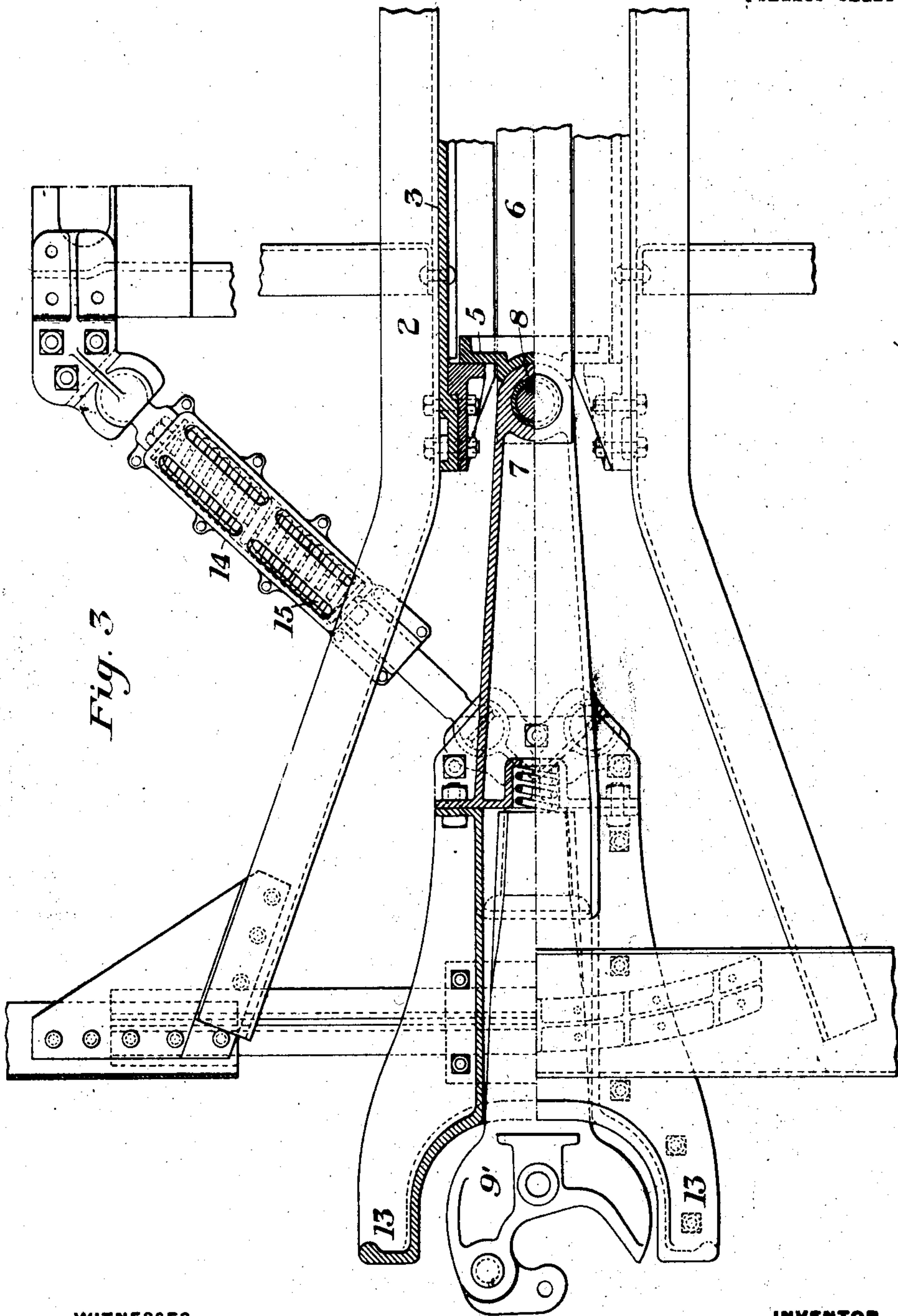
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4 SHEETS—SHEET 3.



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4 SHEETS—SHEET 4.

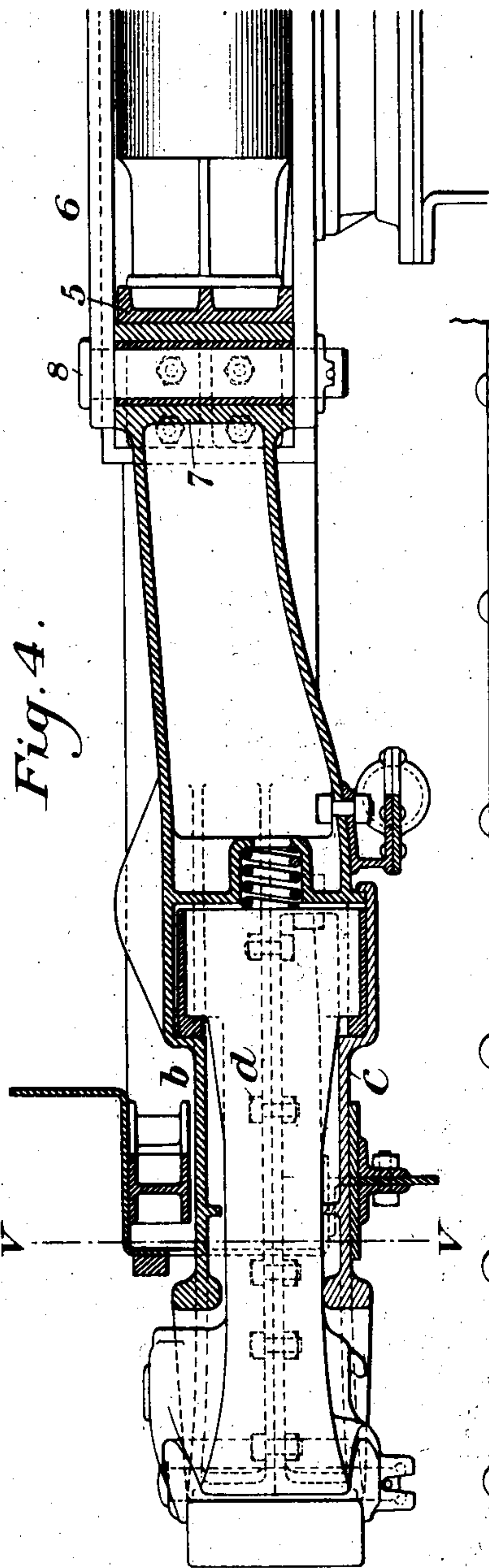


Fig. 4.

WITNESSES

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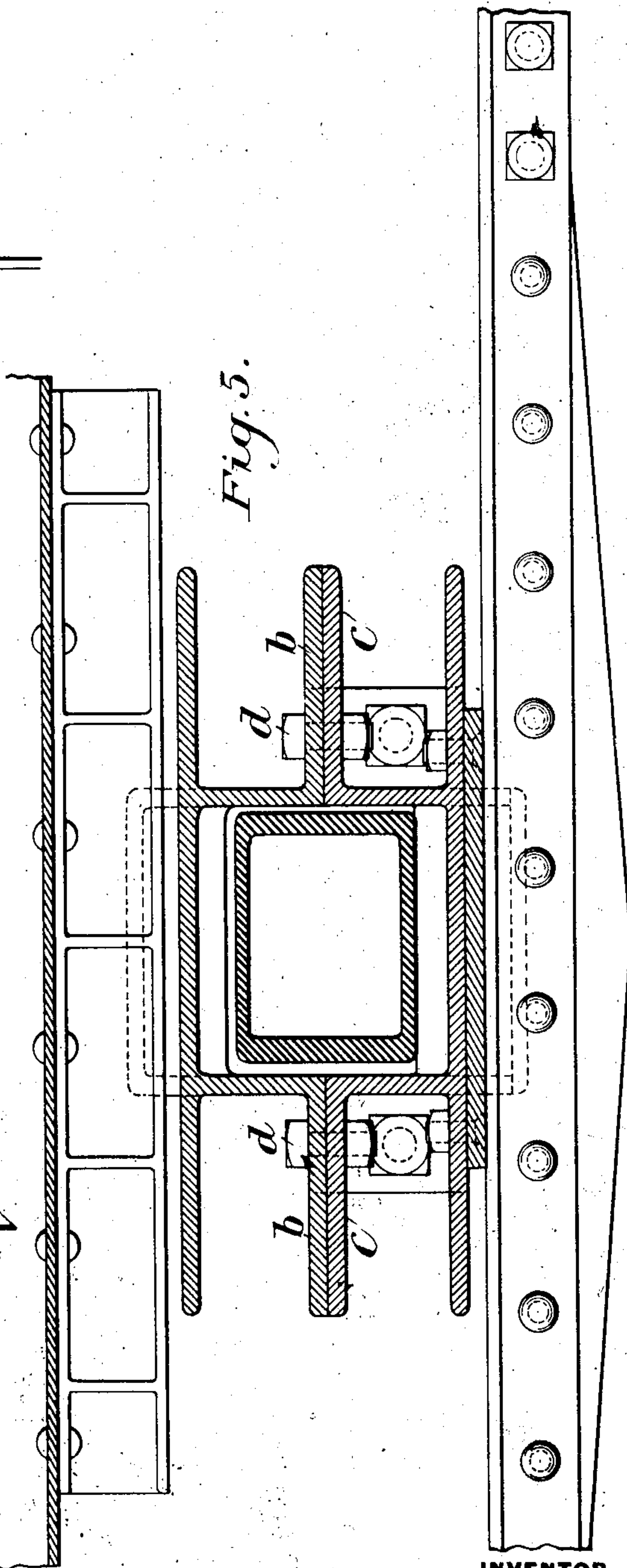


Fig. 5.

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UNITED STATES PATENT OFFICE.

HENRY F. POPE, OF CLEVELAND, OHIO, ASSIGNOR TO THE NATIONAL MALLEABLE CASTINGS COMPANY, OF CLEVELAND, OHIO, A CORPORATION OF OHIO.

DRAFT-GEAR.

947,349.

Specification of Letters Patent.

Patented Jan. 25, 1910.

Application filed May 17, 1906, Serial No. 317,361. Renewed April 9, 1907. Serial No. 367,168.

To all whom it may concern:

Be it known that I, HENRY F. POPE, of Cleveland, Cuyahoga county, Ohio, have invented a new and useful Draft-Gear, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a plan view partly in horizontal section showing my improved device; Fig. 2 is a vertical central section; Fig. 3 is a view similar to Fig. 1 showing a modification; Fig. 4 is a sectional view of the parts shown in Fig. 3, and Fig. 5 is a vertical section on the line V—V of Fig. 4.

My invention is an improvement upon the draft-rigging shown and described in application filed by me on October 6, 1905, Serial No. 281,605, and involves a simplification and improvement which enables me to increase the strength and cheapen the construction.

In the drawing, 2, 2 are the center sills of the car having fixed thereto draft-irons 3, 3 between which is a yielding draft-rigging. This yielding draft-rigging may be of any suitable construction having a spring or springs, with or without friction elements. The draft-rigging which I illustrate is set telescopically within the space between the draft irons 3, and is of the Westinghouse type. It has a spring 4, front and rear followers 5, 5, and a yoke 6. The front follower 5 is preferably concave at its forward side to fit against the rear curved end of a coupler-pocket 7, which is connected by a vertical pin 8 to the arms of the yoke 6. This coupler-pocket, as shown in Fig. 1, is made of an integral piece, and at its forward end has a horizontal socket adapted to receive the shank 9 of a coupler 9', which coupler is backed by a spring 10, and is connected to the socket by a vertical pin 11 passed through a longitudinal slot in the shank. This slot is preferably bushed with a bushing 12, and a suitable bushing may be provided for the pin 8. The coupler pocket has wings 13 at its front end which project forwardly at the sides of the coupler-head and constitute stops for engaging similar devices on the pocket of an adjacent car. The pocket has a guiding connection with the car-truck consisting preferably of telescopic rods 14, provided with springs 15 and extending from the pocket to the truck. The

pocket has also preferably a bracket 16 by which an uncoupling lever 17 is carried.

When the coupler is engaged with the coupler of an adjoining car and is subjected to a pushing or buffing force, it is moved back within the pocket against the spring 10, to the slight extent permitted by the slot through which the pin 11 passes, and eventually the stops 13 at the outer sides of the coupler engage the corresponding stops of the other car. When this engagement is effected, buffing stress applied to the stops or to the coupler will be transmitted directly to the draft-spring 4, and it is clear that when the stops are thus engaged, the draft-gears of both cars will be held and prevented from lateral buckling or jack-knifing, because the stops are laterally attached to the coupler or coupler-shank and constitute a substantial part of the draft-rigging, being compelled to move with and against the pressure of the draft spring.

In the modification shown in Figs. 3, 4 and 5, the coupler pocket is made in two sections *b* and *c*, which are held together by bolts *d*. This construction enables me to fit the parts of the pocket around the coupler-shank, and thus to use a coupler having an enlarged rear end and the usual liner-blocks.

I do not claim herein the broad invention relating to a radially swinging draft member in connection with the stops at the outer sides of the coupler head, the same being claimed in another copending application, Serial No. 367,170.

I claim:—

1. A radially swinging coupler, a stop device to preserve alinement with an adjacent coupler, spring mechanism between the coupler and stop device, and a draft rigging to which the stop device is pivoted.

2. The combination of a radially swinging coupler pocket, a coupler therein and having its head inclosed by the pocket, a draft rigging situated back of the pocket and a pivotal connection between the pocket and draft rigging.

3. The combination of a radially swinging coupler pocket, a coupler therein, the head of the coupler being inclosed by the pocket, a spring backing the coupler in the pocket, a draft rigging having a draft spring back of the pocket, and a pivotal connection between the draft rigging and the pocket.

4. A draft gear having a radially swing-
ing coupler pocket with a coupler mounted
therein and having its head inclosed by the
pocket, stops rigidly connected with the
5 coupler pocket and situated beyond the
outer sides thereof, guiding connections be-
tween the pocket and car truck, a draft rig-
ging back of the pocket, and a pivotal con-
nection between the draft rigging and the
10 pocket.

5. A draft gear having a draft rigging,
a coupler pocket pivotally connected to the
draft rigging and having guiding connec-

tions with the car truck, and a coupler
mounted in the pocket for limited independ- 15
ent longitudinal movement, the pocket hav-
ing wings at its front end which project
forwardly at the sides of the coupler head
and constitute stops to engage similar de-
vices on the pocket of an adjacent car. 20

In testimony whereof, I have hereunto set
my hand.

HENRY F. POPE.

Witnesses:

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JEANNETTE SACHEROFF.