

No. 730,914.

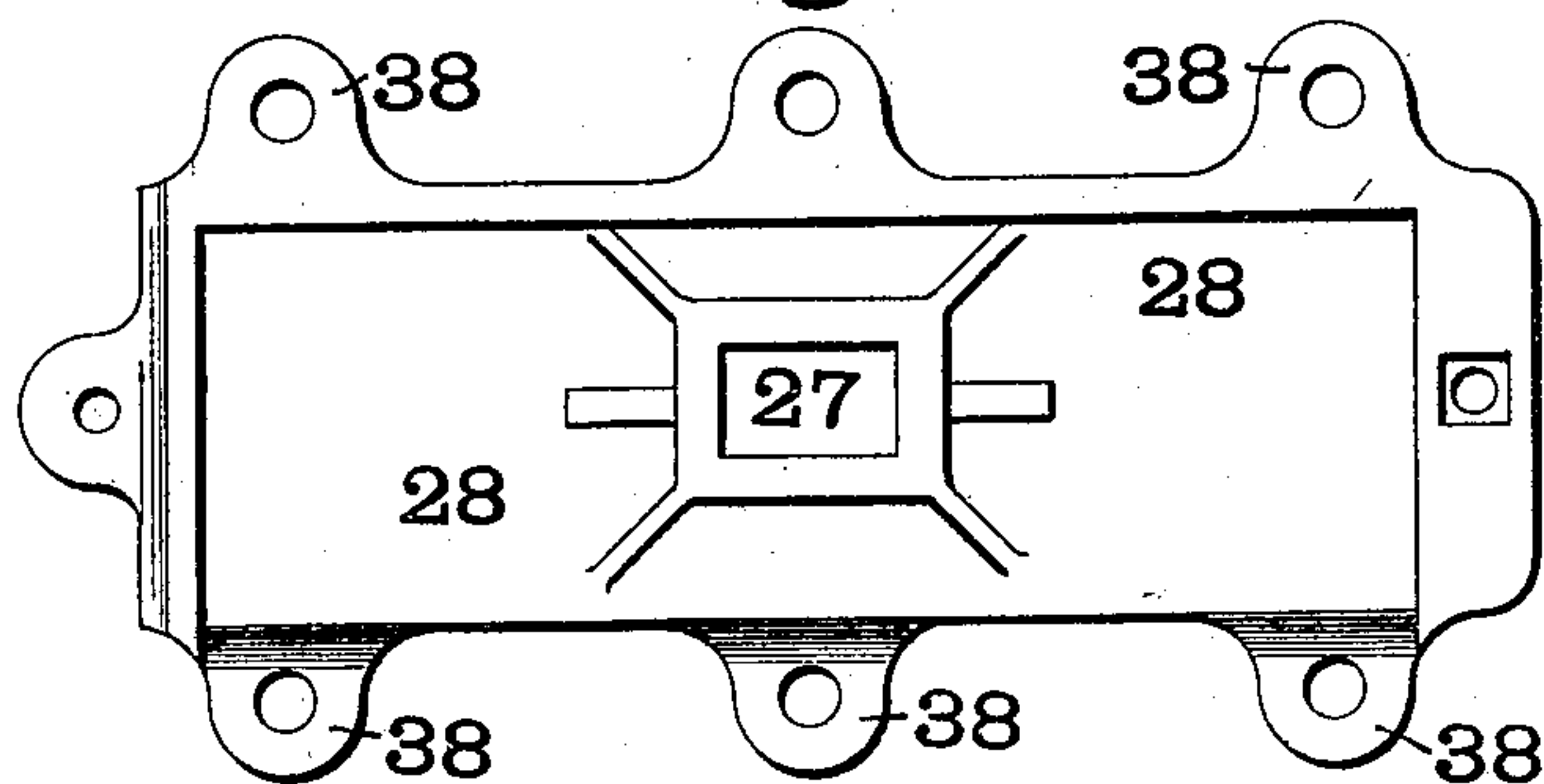
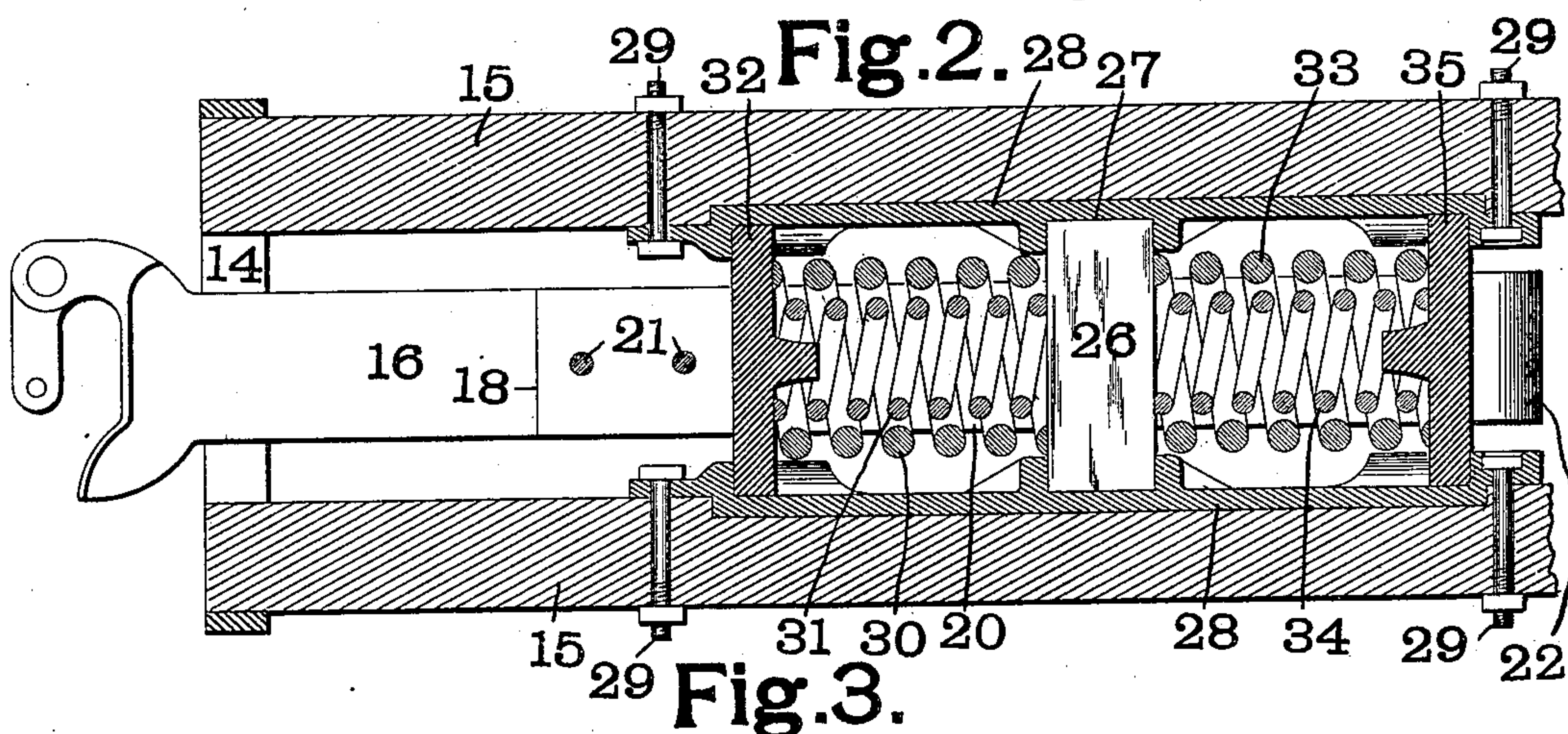
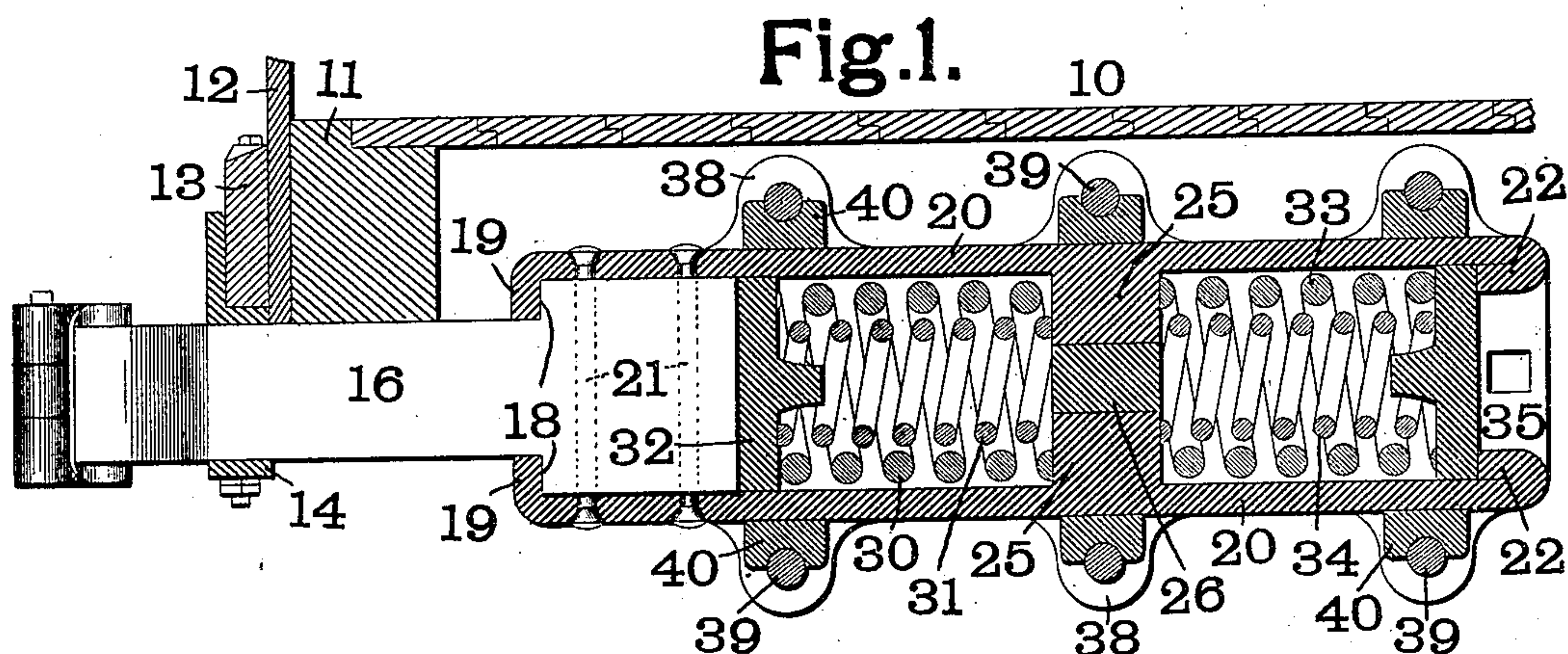
PATENTED JUNE 16, 1903.

L. A. HOERR.
DRAFT RIGGING.

APPLICATION FILED MAR. 28, 1903.

NO MODEL.

2 SHEETS—SHEET 1.



Witnesses
W. A. Alexander
L. B. Beach

Inventor
Louis A. Hoerr
By Attorneys *Hoerr & Bryson*

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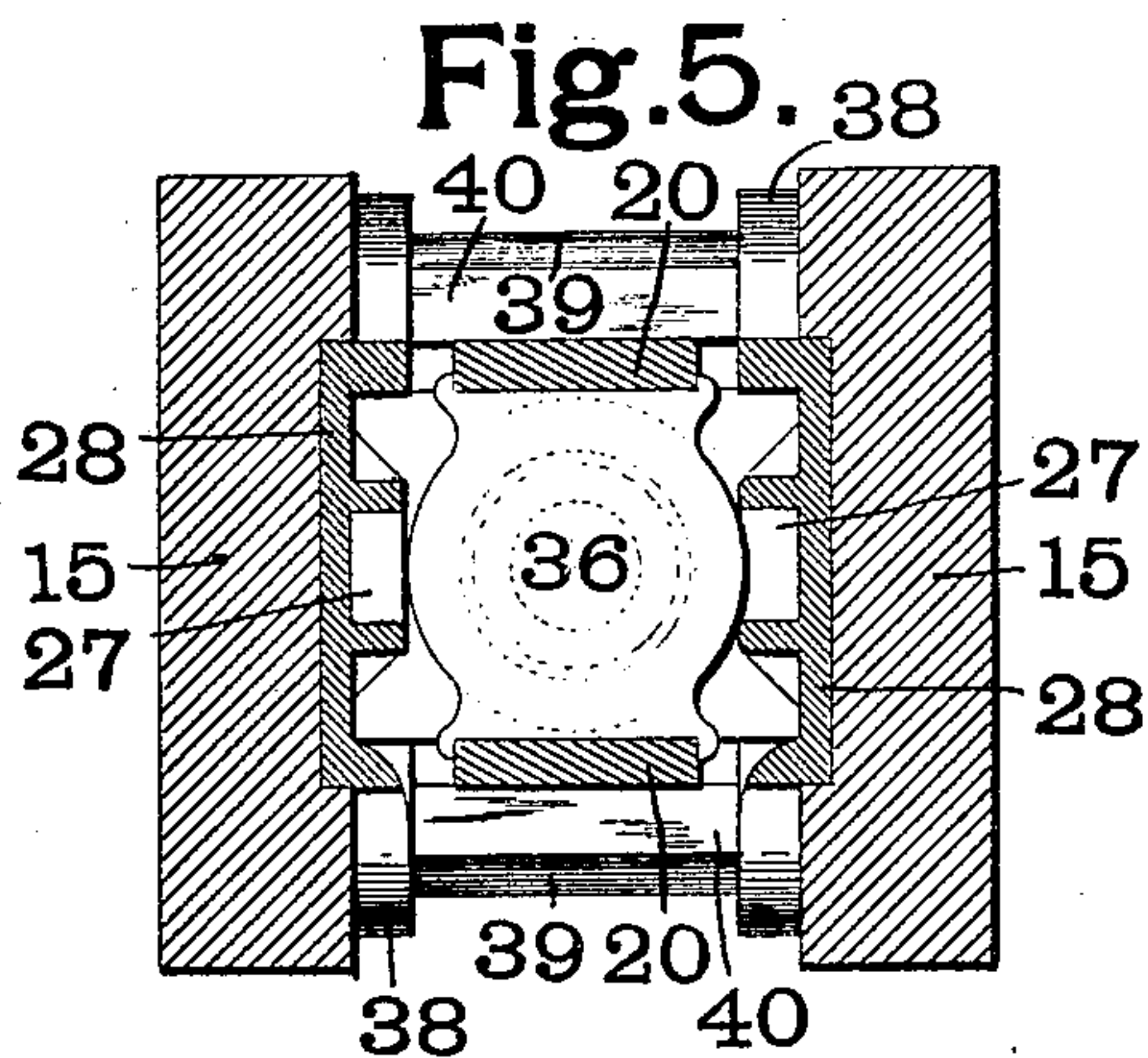
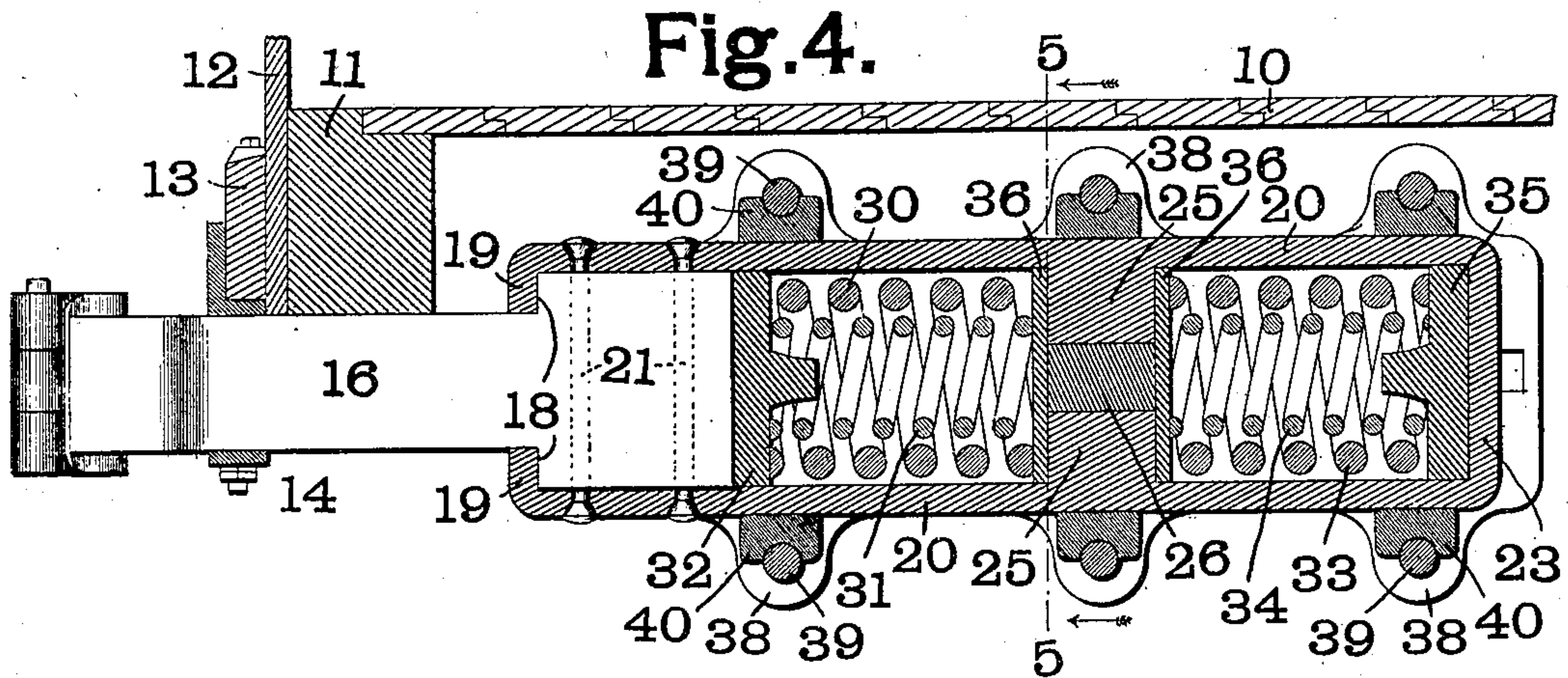
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W. A. Alexander
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UNITED STATES PATENT OFFICE.

LOUIS A. HOERR, OF ST. LOUIS, MISSOURI.

DRAFT-RIGGING.

SPECIFICATION forming part of Letters Patent No. 730,914, dated June 16, 1903.

Application filed March 28, 1903. Serial No. 149,933. (No model.)

To all whom it may concern:

Be it known that I, LOUIS A. HOERR, a citizen of the United States, residing at the city of St. Louis, in the State of Missouri, have invented a certain new and useful Draft-Rigging, of which the following is such a full, clear, and exact description as will enable any one skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, forming part of this specification.

My invention relates more particularly to improvements in that class of draft-rigging shown and described in Letters Patent No. 692,200, granted to me January 28, 1902.

The object of my invention is to reduce the number of parts in such draft-rigging, thus simplifying the rigging and lessening the cost of same, and also to provide additional means for holding the moving parts of the rigging in place.

My invention consists in part in the combination, with a draw-bar, of a pair of straps carried thereby, stops carried by said straps, a draft-spring at each side of said stops, side plates, and a cross-bar carried by said side plates and arranged between said stops.

My invention also consists in certain other novel features and details of construction, all of which are described in the following specification and pointed out in the claims affixed hereto.

In the accompanying drawings, which illustrate draft-rigging made in accordance with my invention, Figure 1 is a vertical longitudinal section. Fig. 2 is a horizontal longitudinal section. Fig. 3 is an elevation of one of the side plates. Fig. 4 is a view similar to Fig. 1, but showing slight modifications; and Fig. 5 is a section on the line 5 5 of Fig. 4.

Like marks of reference refer to similar parts in the several views of the drawings.

10 is the car-decking; 11, the end sills; 12, the sheathing; 13, the dead-wood, and 14 the coupler-bearing.

15 represents the draft timbers, and 16 the draw-bar.

The above-mentioned parts are of the usual construction.

The draw-bar 16 is provided with shoulders 18, against which rest the down-turned ends 19 of a pair of straps 20. The straps 20 are se-

cured to the draw-bar 16 by means of bolts or rivets 21. The ends of the straps 20 may be turned over to form stops 22, as shown in Figs. 1 and 2, or the two straps may be connected by an integral portion 23, as shown in Fig. 4. Carried by each of the straps 20 is a stop 25, and passing between the stops 25 is a cross-bar 26, the ends of which rest in pockets 27 formed in side plates 28, which are secured to the draft-timbers 15 by means of bolts 29. At the front of the cross-bar 26 and stops 25 is a compound spring consisting of an outer spring 30 and an inner spring 31. The front end of said compound spring bears against a follower-plate 32. At the rear of the cross-bar 26 and stops 25 is a compound spring consisting of an outer spring 33 and an inner spring 34. The rear end of this compound spring bears against a follower-plate 35. The cross-bar 26 may either bear directly against the ends of the draft-springs, as shown in Figs. 1 and 2, or spring-caps 36 may be interposed between the ends of the springs and the cross-bar, as shown in Figs. 4 and 5. The side plates 28 are provided with lugs 38, through which pass bolts 39. Placed between the bolts 39 and the straps 20 are guide-bars 40, which hold the straps from spreading.

In the operation of my draft-rigging when the draw-bar 16 is drawn forward the stops 25 on the straps 20 bear against the rear end of the springs 30 and 31, while the front ends of said springs are supported by means of the follower-plate 32. At the same time the follower-plate 35 is drawn against the rear ends of the springs 33 and 34, while the front ends are supported by the cross-bar 26, so that both sets of springs are compressed. When the draw-bar 16 is forced to the rear, the rear ends of the springs 33 and 34 are supported by the follower-plate 35 while pressure is applied to them by the stops 25, and the rear ends of the springs 30 and 31 are supported by the cross-bar 26 while pressure is applied to their front ends by the follower-plate 32. It will thus be seen that both sets of springs are compressed by movement in either direction without the use of the central follower-plate shown in my previous patent, above referred to. At the same time the cross-bar 26 also aids in holding the straps 20 and other movable parts of the rigging in position.

Having fully described my invention, what I claim as new, and desire to secure by Letters Patent of the United States, is—

- 5 1. In a draft-rigging, the combination with a draw-bar, of a pair of straps carried thereby, stops carried by said straps, a draft-spring at each side of said stops, side plates, and a cross-bar carried by said side plates and arranged between said stops.
- 10 2. In a draft-rigging, the combination with a draw-bar, of a pair of straps carried thereby, stops carried by said straps, a draft-spring at each side of said stops, side plates, and a cross-bar removably carried by said side
- 15 plates and arranged between said stops.
3. In a draft-rigging, the combination with a draw-bar, of a pair of straps carried thereby,

stops carried by said straps, a draft-spring at each side of said stops, side plates provided with pockets, and a cross-bar carried in said 20 pockets and passing between said stops.

4. In a draft-rigging, the combination with a draw-bar, of a pair of straps carried thereby, stops, a draft-spring at each side of said stops, side plates, and a cross-bar carried by said 25 side plates, and arranged to bear directly against the ends of said draft-springs.

In testimony whereof I have hereunto set my hand and affixed my seal in the presence of the two subscribing witnesses.

LOUIS A. HOERR. [L. s.]

Witnesses:

W. A. ALEXANDER,
JAMES H. BRYSON.