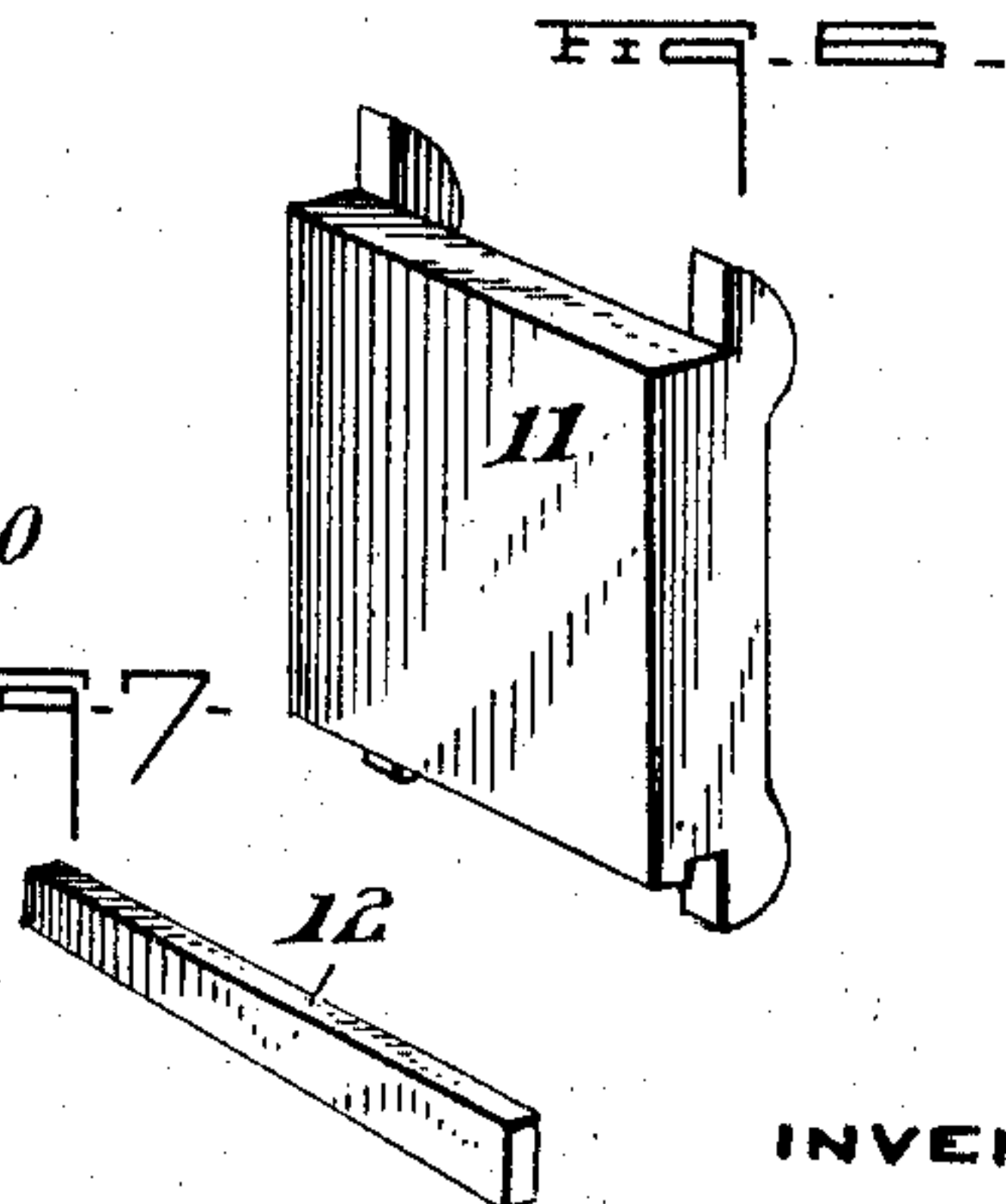
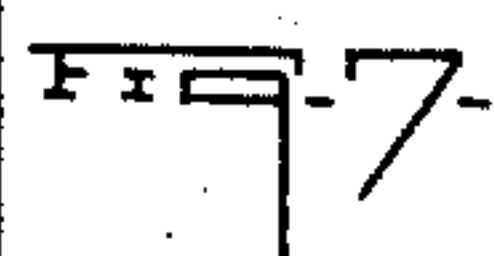
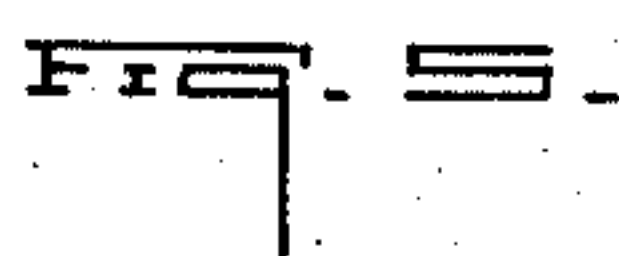
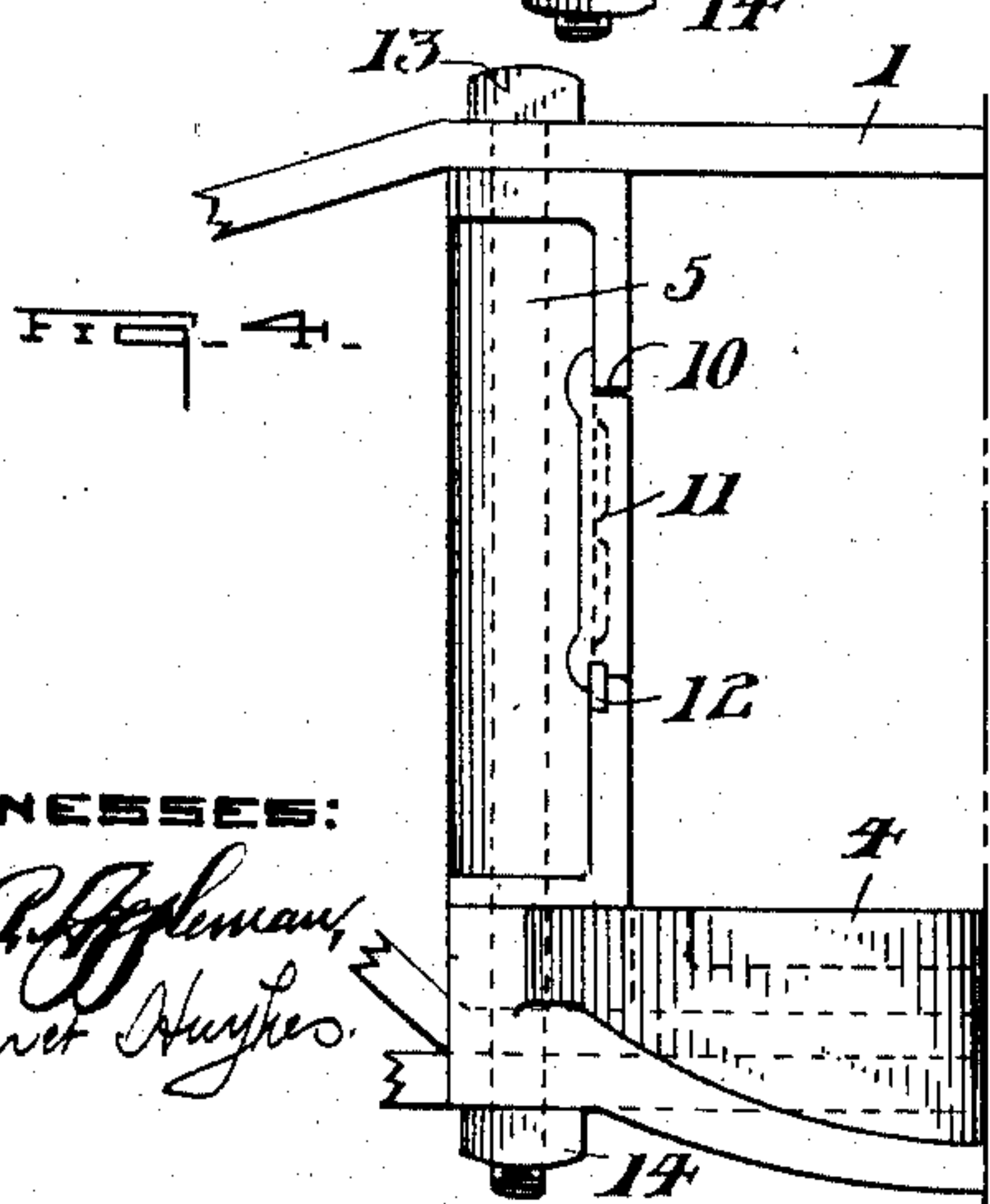
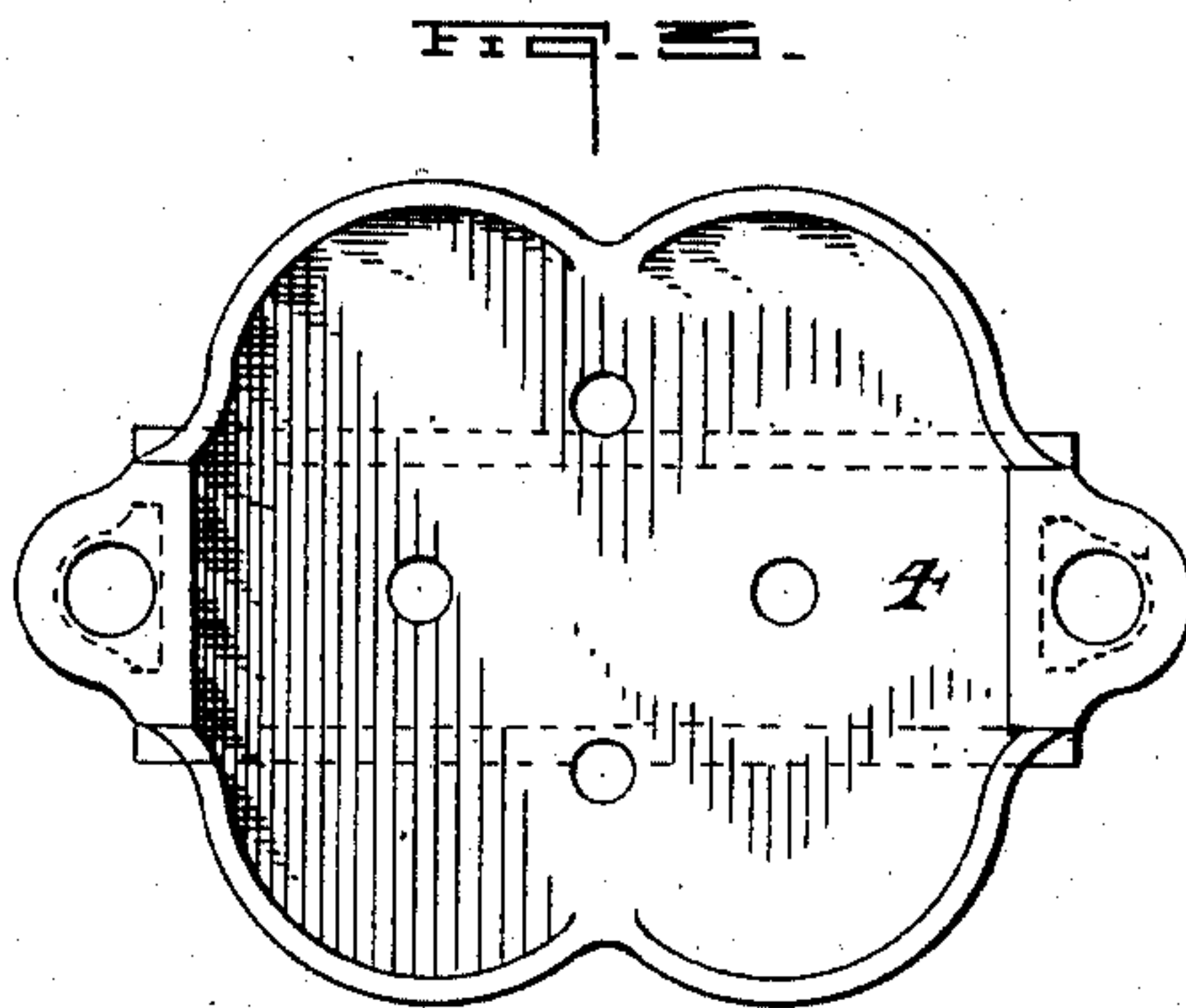
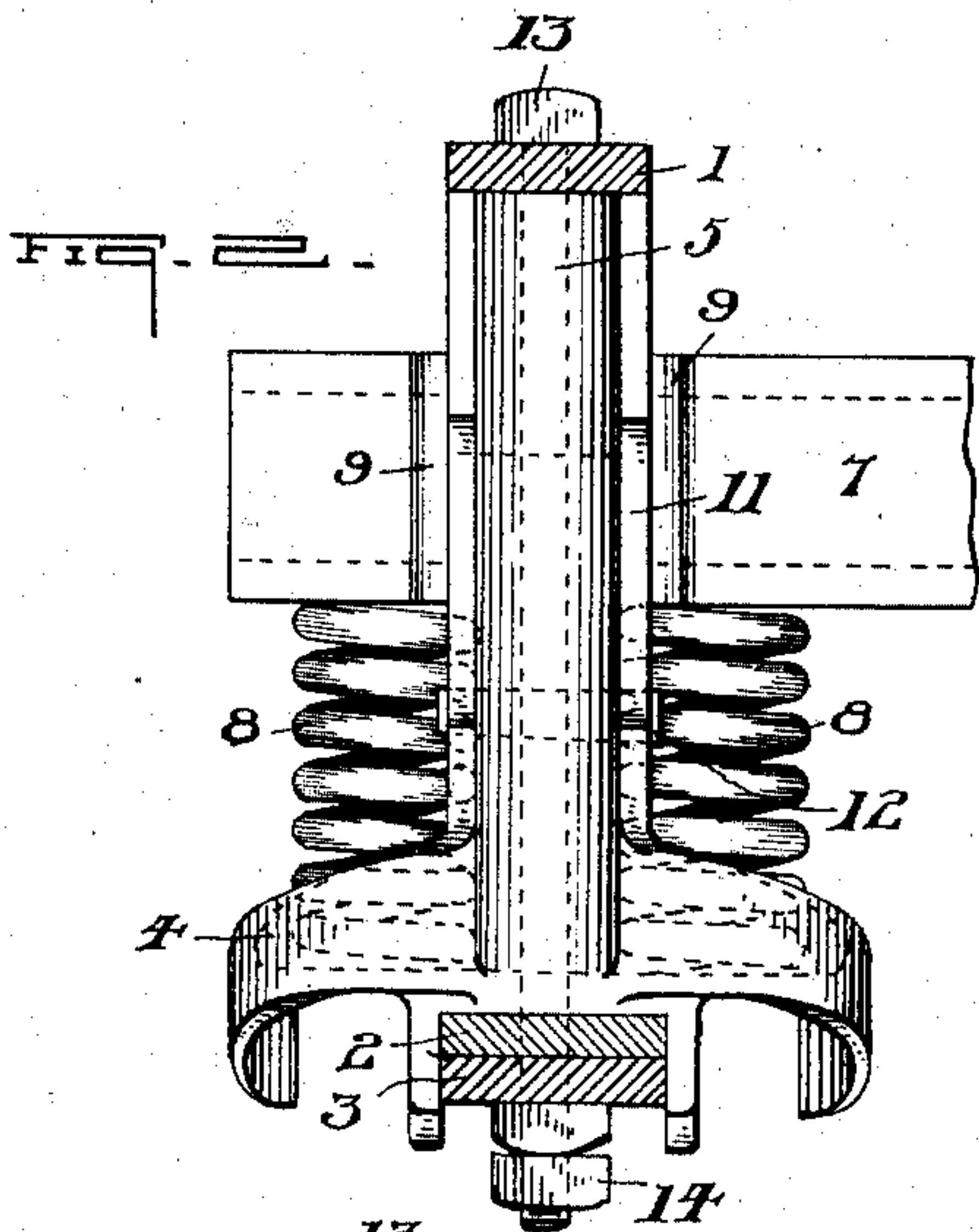
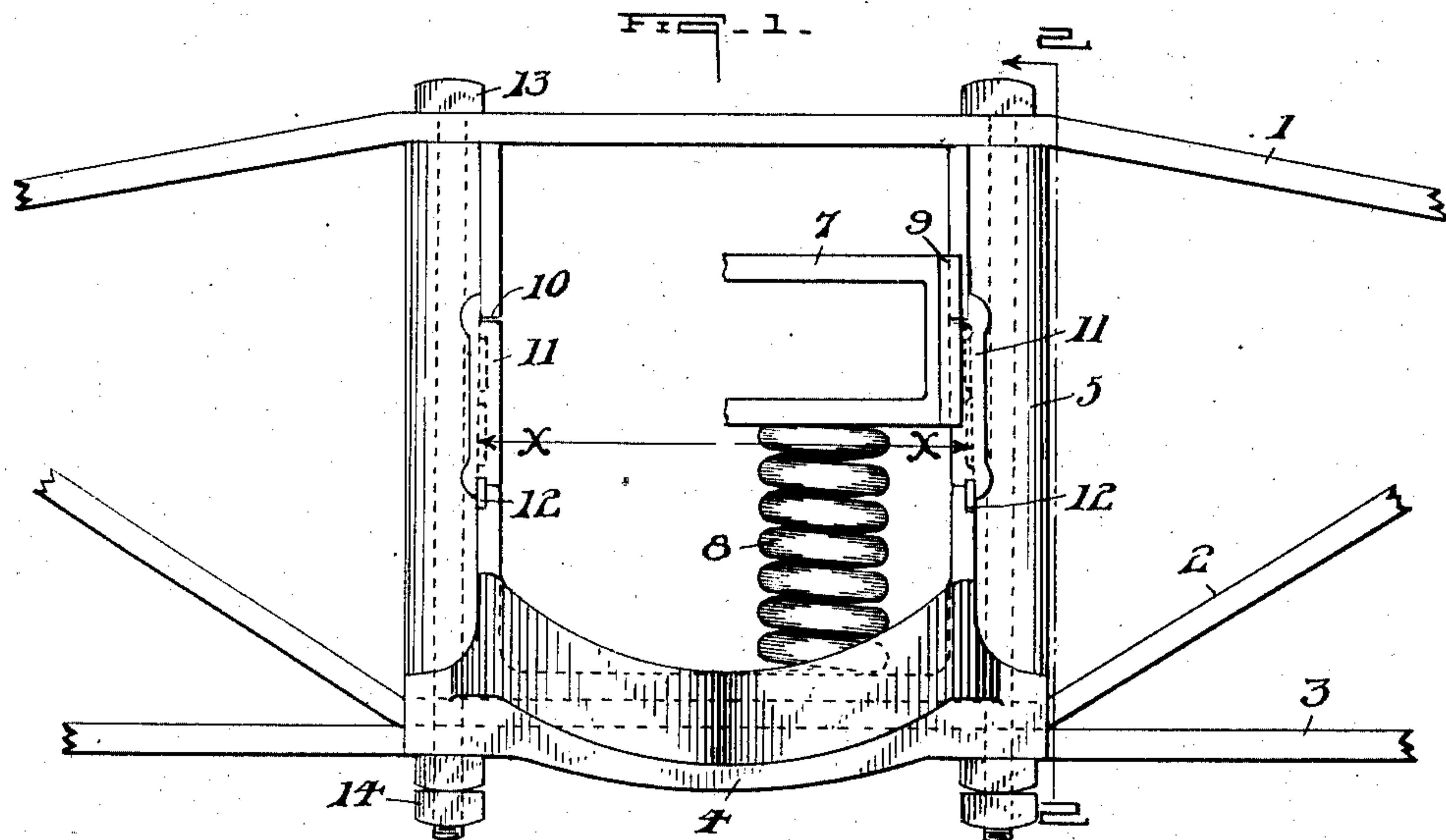


O. S. PULLIAM.
 CAR TRUCK END CASTING CONSTRUCTION.
 APPLICATION FILED JUNE 6, 1907.

909,021.

Patented Jan. 5, 1909.



WITNESSES:

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UNITED STATES PATENT OFFICE.

OSWALD S. PULLIAM, OF PITTSBURG, PENNSYLVANIA, ASSIGNOR TO PITTSBURGH EQUIPMENT COMPANY, OF PITTSBURG, PENNSYLVANIA, A CORPORATION OF PENNSYLVANIA.

CAR-TRUCK END-CASTING CONSTRUCTION.

No. 909,021.

Specification of Letters Patent.

Patented Jan. 5, 1909.

Application filed June 6, 1907. Serial No. 377,624.

To all whom it may concern:

Be it known that I, OSWALD S. PULLIAM, of Pittsburg, in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in Car-Truck End-Casting Construction, of which the following is a specification.

My invention relates to improvements in car-truck end casting construction and the prime object of the present invention is the provision of means whereby the truck-bolsters may be placed in position and removed from the end casting without removing the arch-bars, bolster-columns, or column-bolts.

To this end my invention consists in a new and improved car-truck end casting construction, in the novel features of construction, and in the combination of parts all as herein described and claimed.

In the accompanying drawing which illustrates applications of my invention, Figure 1 is a side elevational view of a car-truck end casting construction embodying my invention; Fig. 2 an end view partly in section taken on line 2—2 of Fig. 1; Fig. 3 a plan of spring-seat; Fig. 4 a broken side elevational view of a modified form; Fig. 5 a perspective view of end casting column; Fig. 6 a perspective view of filler-block, and Fig. 7 a view of a key employed.

Referring to the drawing, 1 designates the top arch-bar, 2 the bottom arch-bar and 3 a tie-bar of the usual construction.

The spring-seat 4 and the column 5 may be formed as an integral structure as shown by the form of Fig. 1 or the seat and the columns may be constructed of separate parts as shown by the form of Fig. 4.

7 designates a truck-bolster resting upon springs 8. The bolster is provided with lips or column-guides 9 adapted when in operative position to engage the columns 5.

Each of the columns 5 whether of the form of Fig. 1 or of the form of Fig. 4 is provided with a cutaway portion or recess 10 to enable the bolster together with its column-guides to be readily inserted therein. In the drawing I have shown each column formed with this recess 10, but if desired, only one of the pair of columns may be thus provided.

By providing the recess or cutaway portions 10 sufficient space is provided for placing the bolster and its column-guides

in the bolster-receiving openings or the space provided by the said recesses. The distance measured on the line $x-x$ is as great as the width of the bolster measured over its column-guides. After the bolster is placed within the bolster-receiving opening it is then raised upwardly and the removable filler-blocks 11 placed in position.

The filler-blocks are preferably of the form shown by Fig. 6, but other suitable forms may be employed. The filler-blocks are secured in place by means of keys 12.

Column-bolts 13 extend through the columns 5 and the top and bottom arch-bars and are secured in position by nuts 14.

What I claim is:

1. The combination with a bolster provided with column-guides, of an arch-bar truck side-frame comprising separable upper and lower arch-bars, a column formed with a bolster-receiving-opening, a bolt passed through the column and joining the arch-bars, and a removable filler or bolster-guide located in the opening of the column.

2. The combination with a bolster provided with column-guides, of an arch-bar truck side-frame comprising separable upper and lower arch-bars, a spring-seat having a column formed integral therewith, said column formed with a bolster-receiving-opening, a bolt passed through the column and joining the arch-bars, and a removable filler or bolster-guide located in the opening of the column.

3. The combination with a bolster provided with column-guides, of an arch-bar truck side-frame comprising separable upper and lower arch-bars, a pair of columns each having a central portion cut away to provide a bolster-receiving-opening at least as wide as the bolster measured over its column-guides, bolts passed through the columns and joining the arch-bars, and a removable filler located in the cut away portion of each column.

4. The combination with a bolster provided with column-guides, of an arch-bar truck side-frame comprising separable upper and lower arch-bars, a spring-seat having a pair of columns formed integral therewith with each column having a central portion cut away to provide a bolster-receiving-opening at least as wide as the bolster measured over its column-guides, bolts passed through

the columns and joining the arch-bars, and a removable filler located in the cut away portion of each column.

5 5. The combination with a bolster provided with column-guides, of a truck side-frame comprising a top arch-bar, a separate inverted arch-bar, an independent casting between the arch-bars having a spring-seat and a pair of upstanding spaced columns
10 each formed with a recess, and a removable filler located in each recess.

6. The combination with a bolster provided with column-guides, of a truck side-frame comprising a top arch-bar, a separate
15 inverted arch-bar, an independent casting between the arch-bars having a spring-seat and an upstanding column formed with a recess, and a removable filler located in the recess.

20 7. In a railway car truck side-frame, the combination of a top arch-bar, a separate inverted arch-bar, and an independent casting between said arch-bars having a spring-seat and a pair of upstanding spaced col-
25 umns, the adjacent sides of which are re-

cessed to permit the removal of a bolster, and a removable filler located in each recess.

8. In a railway car truck side-frame, the combination of a top arch bar, a separate inverted arch bar, and an independent col- 30
umn casting between said arch bars having a spring seat and a pair of upstanding spaced columns, the adjacent faces of which near their lower ends are recessed to permit
35 removal of the bolster, substantially as de- scribed.

9. In a railway car truck side-frame, the combination of a top arch-bar, a separate inverted arch-bar, and an independent col-
40 umn casting between said arch-bars having a spring-seat and a pair of upstanding spaced columns, the adjacent faces of which are recessed to permit the removal of the bolster.

In testimony whereof I affix my signa- 45
ture in presence of two witnesses.

OSWALD S. PULLIAM.

Witnesses:

W. G. DOOLITTLE,
MARGARET HUGHES.