

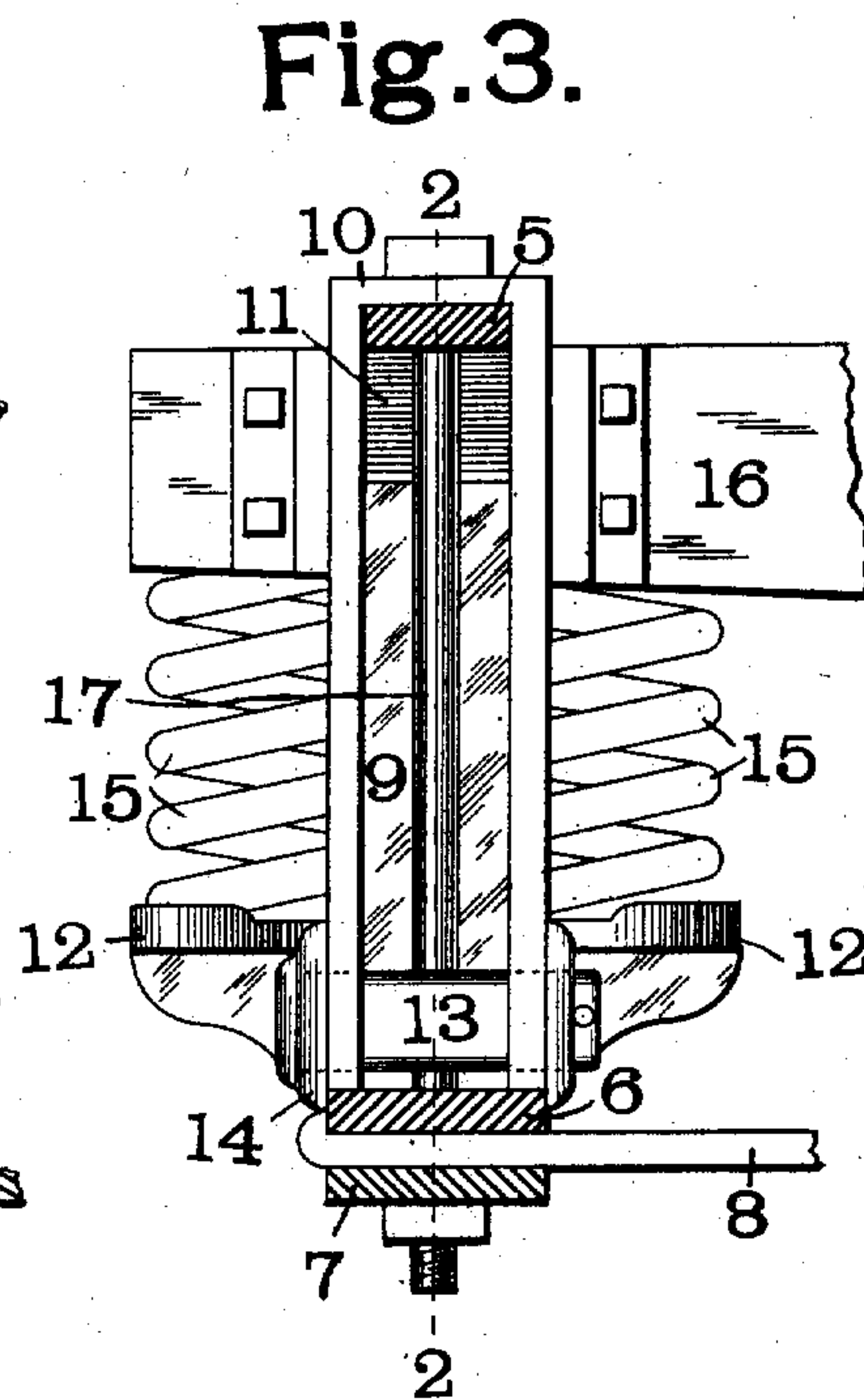
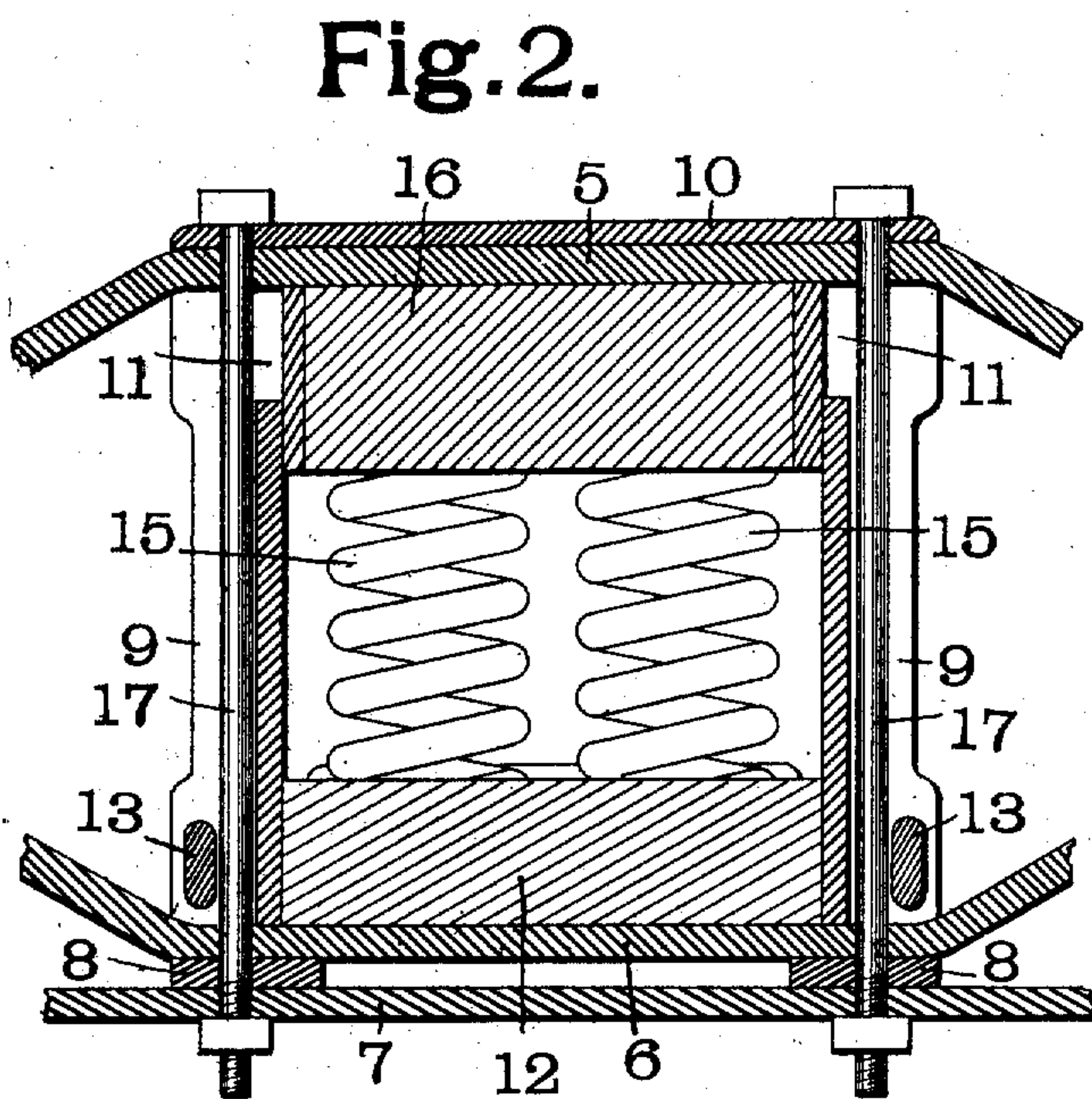
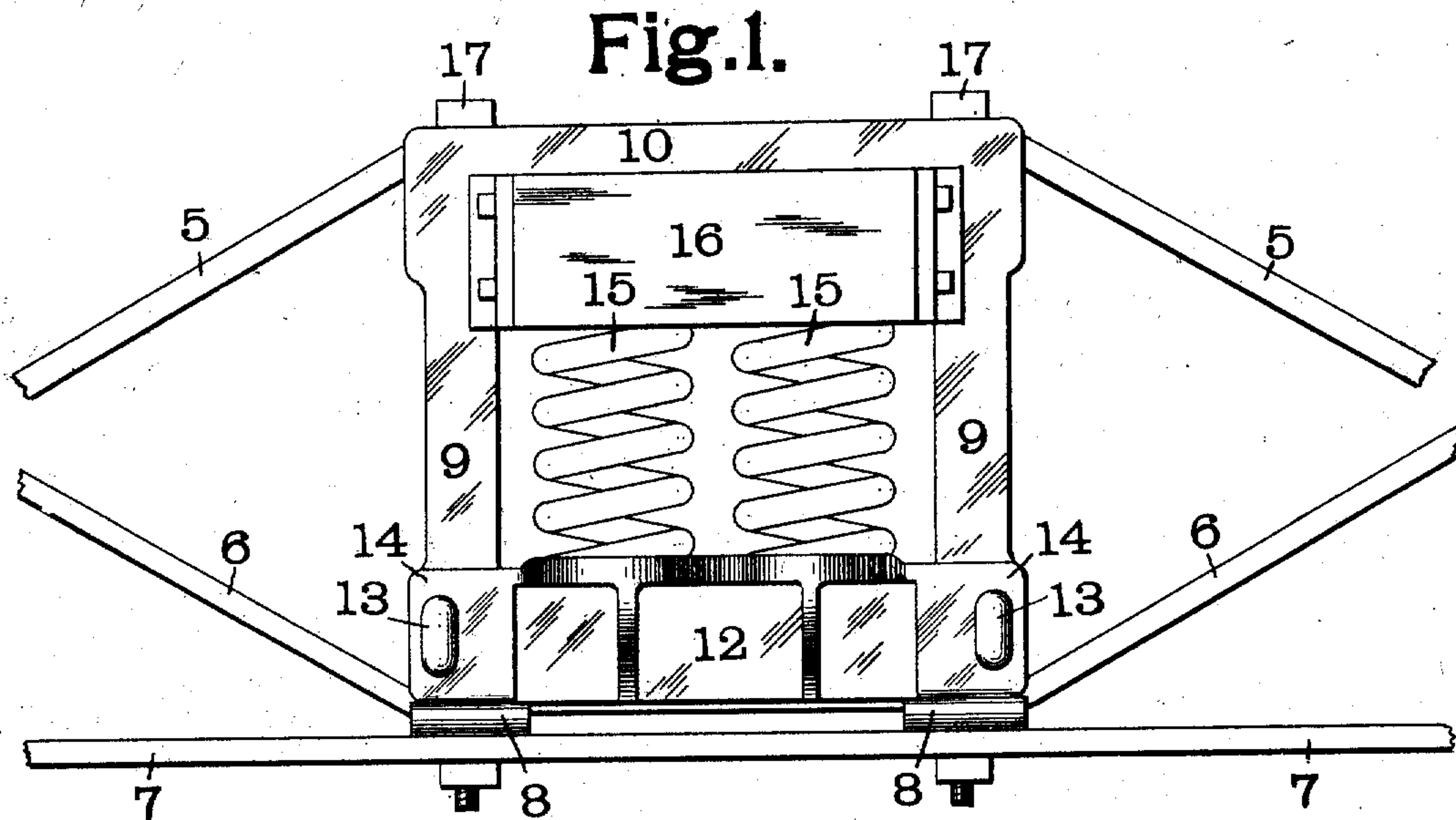
No. 652,238.

Patented June 26, 1900.

E. S. BARREIRAS.
CAR TRUCK.

(Application filed Apr. 9, 1900.)

(No Model.)



Witnesses

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UNITED STATES PATENT OFFICE.

ENRIQUE S. BARREIRAS, OF KIRKWOOD, MISSOURI.

CAR-TRUCK.

SPECIFICATION forming part of Letters Patent No. 652,238, dated June 26, 1900.

Application filed April 9, 1900. Serial No. 12,063. (No model.)

To all whom it may concern:

Be it known that I, ENRIQUE S. BARREIRAS, a citizen of the United States, residing at Kirkwood, in the State of Missouri, have invented a certain new and useful Car-Truck, 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 to a car-truck, and more particularly to the construction of the end casting for such truck. In car-trucks as heretofore constructed it has been usual to arrange the arch-bar so as to pass above the upper cross-bar of the end casting and be held in position by the column-bolts. The objection to this construction is that if the column-bolts become broken the arch-bar will be allowed to spring upward, thus allowing the bolster and other parts to drop and so destroy the usefulness of the entire truck. It has been proposed to overcome this difficulty by providing the upper cross-bar or columns with upwardly-projecting ears, through which pass pins or keys which hold the arch-bar in position. The objection to this construction is that the ears are liable to become broken or the pins or keys lost. Trucks have also been constructed in which the arch-bar passes under the upper cross-bar. In such construction, however, the upper cross-bar has been formed separate from the columns and secured thereto by means of pins or keys. The objection to this construction is that it requires a larger number of parts, and consequently is expensive to manufacture. Another objection is that the pins or keys passing through the upper part of the columns weaken them at the points where they require the greatest strength.

The object of my invention is to provide a car-truck in which the arch-bar will be securely held in position and at the same time the end casting will have the greatest possible strength and consist of as few parts as possible.

My invention consists, mainly, in an end casting for car-trucks, consisting of a pair of columns connected by an integral upper cross-bar, such columns being provided with open-

ings below the arch-bar for the passage of the arch-bar.

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

In the accompanying drawings is illustrated a car-truck made in accordance with my invention.

Figure 1 is a side elevation. Fig. 2 is a section on the line 2 2 of Fig. 3; and Fig. 3 is an end view, some of the parts being shown in section.

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

5 is the arch-bar, 6 the inverted arch-bar, 7 the pedestal tie-rod, and 8 the cross tie-rods, all being of the usual construction.

9 represents the columns, which are connected by an upper cross-bar 10, formed integral with said columns 9. In each of the columns 9 an opening 11 is formed beneath the upper cross-bar 10, through which openings the arch-bar 5 passes. The openings 11 are preferably made of the same width as the arch-bar 5, but are by preference considerably deeper than the thickness of said arch-bar, so that the arch-bar may be inserted in said openings in its bent condition.

12 is the spring-seat, which is preferably formed separate from the columns 9 and removably secured thereto by means of keys 13 passing through ears 14 on said spring-seat and through the lower ends of the columns 9.

15 represents the springs which rest on the spring-seat 12, and 16 the bolster which rests upon the springs 15.

17 represents the column-bolts which pass down through the cross-bar 10, arch-bar 5, inverted arch-bar 6, cross tie-rod 8, and pedestal tie-rod 7. These column-bolts 17 serve to draw the spring-seat 12 into position when the parts are being assembled and also serve to retain the cross tie-rods 8 and pedestal tie-rod 7 in position. They do not carry any of the load, however, and are hence not liable to become broken, and even if they should become broken or lost the arch-bar 5, which carries the load, cannot become displaced because there is an upward thrust on it under all conditions, and the cross-bar 10 will prevent it

from moving upward, and hence the action of the truck will not be affected by the breaking of the column-bolts.

5 It will be seen that while my truck is simple of construction and contains a minimum number of parts it is very rigid and strong and provides ample protection against the displacement of the arch-bar 5.

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

1. An end casting for car-trucks, consisting of a pair of columns connected by an integral upper cross-bar, said columns being 15 provided with openings below said cross-bar for the passage of an arch-bar.

2. An end casting for car-trucks, consisting of a pair of columns connected by an integral upper cross-bar, said columns being 20 provided with openings below said cross-bar, and said openings being of greater depth

than the thickness of an arch-bar, whereby a bent arch-bar may be inserted below said cross-bar.

3. In a car-truck, the combination with a 25 pair of columns connected by an integral upper cross-bar, of an arch-bar passing under said upper cross-bar, a spring-seat, and an inverted arch-bar.

4. In a car-truck, the combination, with a 30 pair of columns connected by an integral upper cross-bar, of an arch-bar passing below said cross-bar, a spring-seat removably connected to the lower end of said columns, and an inverted arch-bar. 35

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

ENRIQUE S. BARREIRAS. [L. S.]

Witnesses:

A. C. FOWLER,

W. A. ALEXANDER.