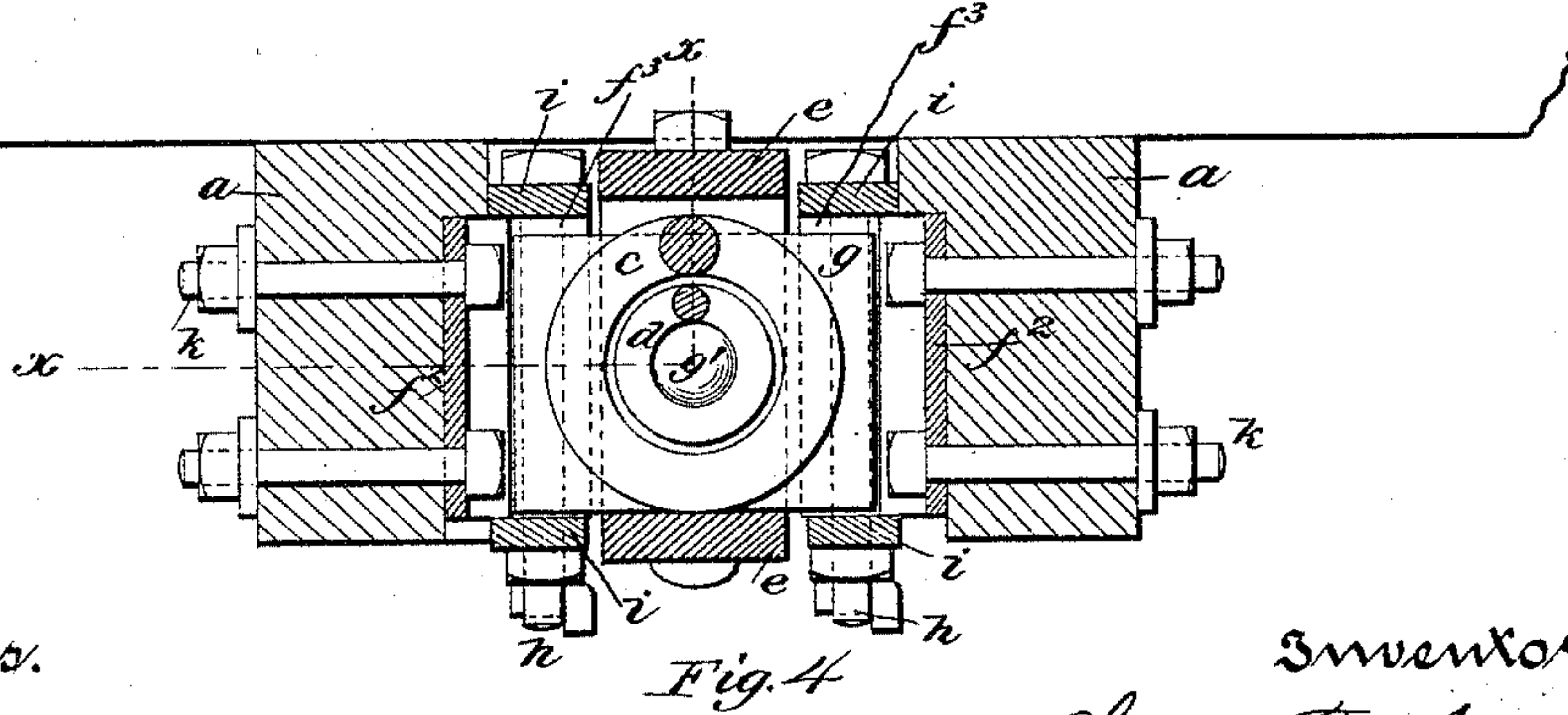
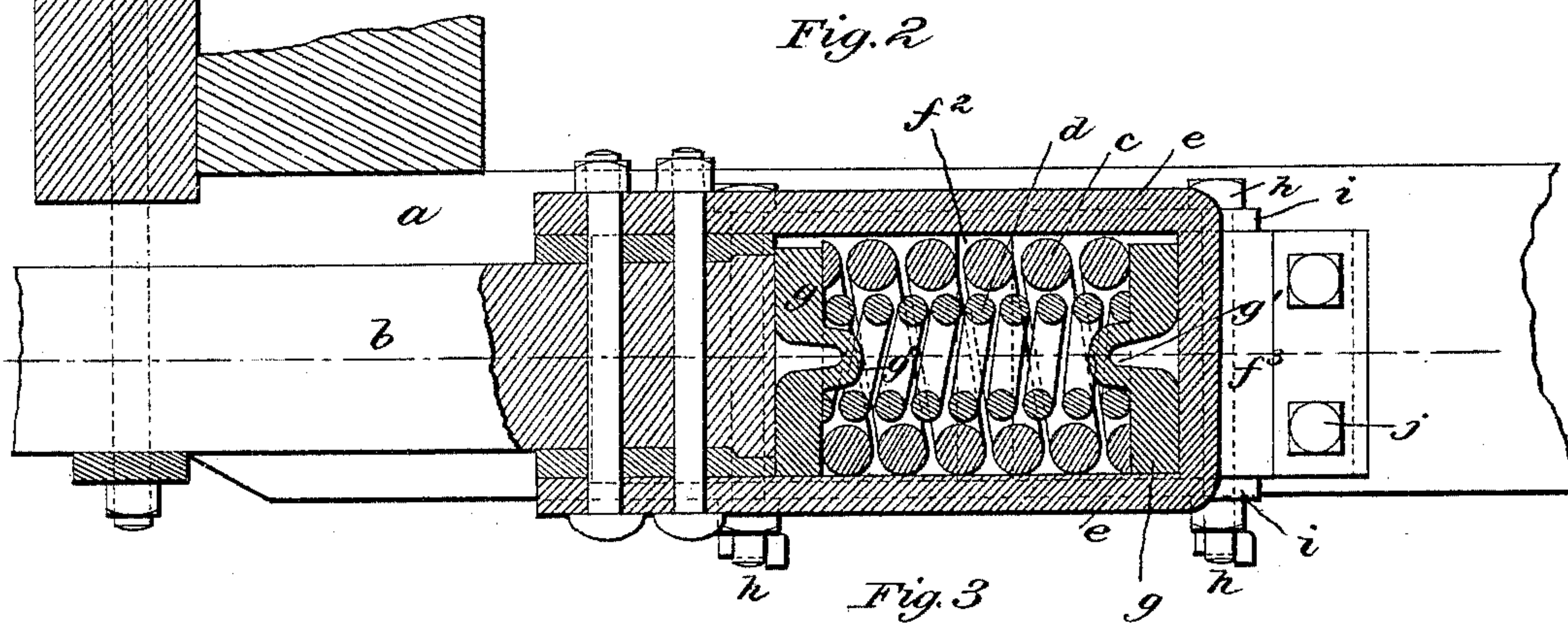
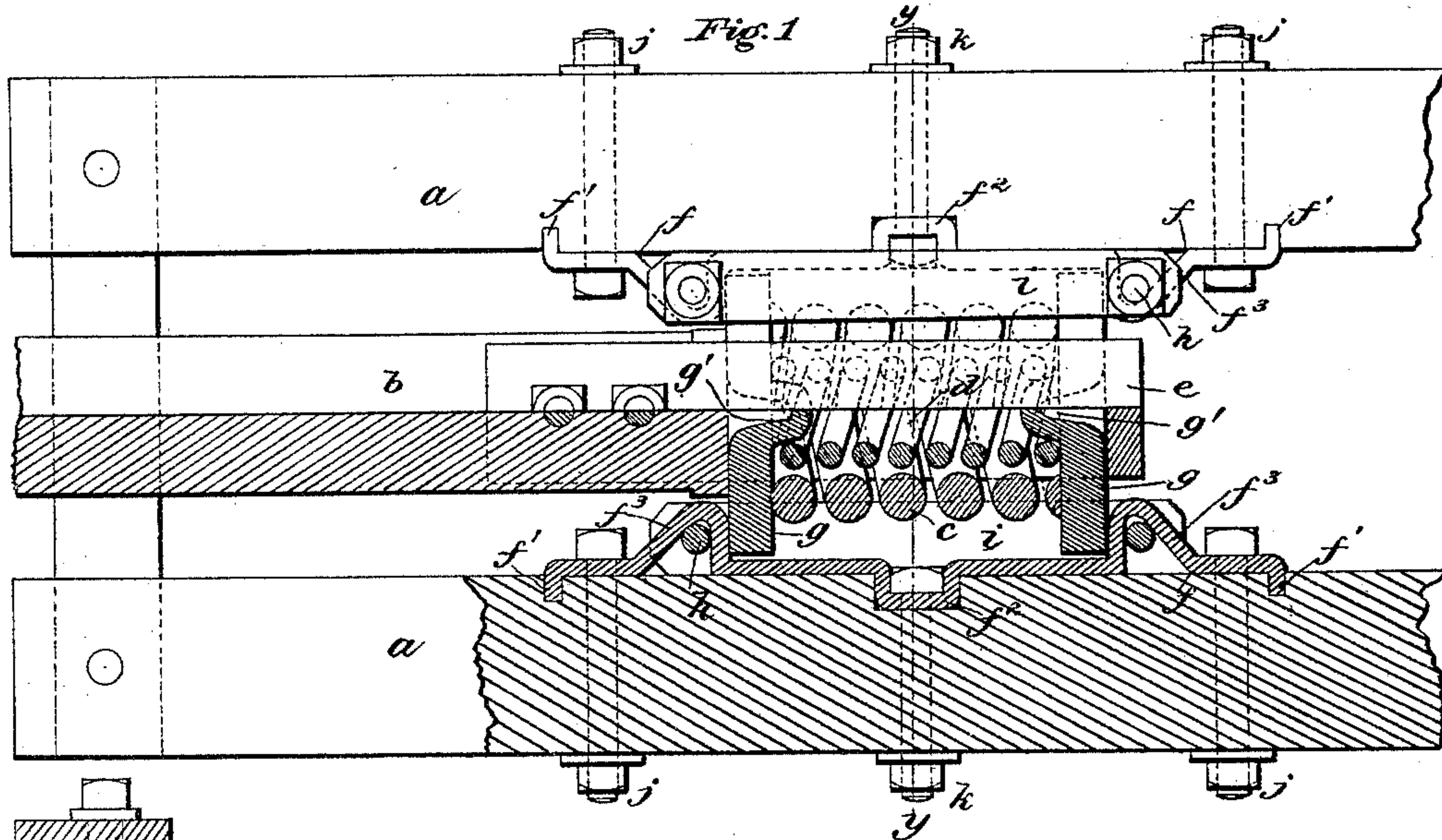


(No Model.)

C. T. SCHOEN.
DRAW BAR SPRING POCKET.

No. 497,825.

Patented May 23, 1893.



Witnesses.

J. F. Coleman
Ed. Kimball.

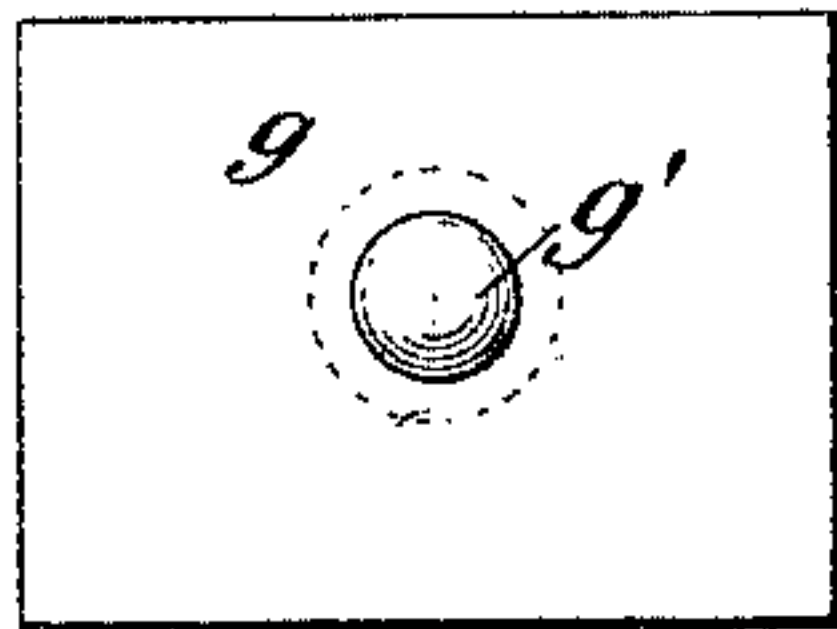


Fig. 4



Inventor

Charles T. Schoen

By W. H. Finckel

his atty.

UNITED STATES PATENT OFFICE.

CHARLES T. SCHOEN, OF ALLEGHENY, PENNSYLVANIA.

DRAWBAR-SPRING POCKET.

SPECIFICATION forming part of Letters Patent No. 497,825, dated May 23, 1893.

Application filed January 31, 1893. Serial No. 460,407. (No model.)

To all whom it may concern:

Be it known that I, CHARLES T. SCHOEN, a citizen of the United States, residing at Allegheny, in the county of Allegheny and State of Pennsylvania, have invented a certain new and useful Improvement in Drawbar-Spring Pockets, of which the following is a full, clear, and exact description.

The object of this invention is to provide drawbar rigging for use in connection with a yoke applied to the drawbar instead of a drawbar rod, both modes of connection being in common use.

In practicing my invention, I employ guide-plates, struck up from wrought metal, preferably steel plate, which are supplied with top and bottom detachable flanges, and combined with novel followers which are made with teats to center the springs, all as I will proceed now more particularly to set forth and finally claim.

In the accompanying drawings illustrating my invention, in the several figures of which like parts are similarly designated, Figure 1 is a top plan view and half-section, the section being taken in the plane of line $x-x$, Fig. 3. Fig. 2 is a longitudinal sectional elevation. Fig. 3 is a cross section, taken in the plane of line $y-y$, Fig. 1; and Fig. 4 shows, in front view and edge view, the follower detached.

The draw timbers a , drawbar b , springs c , d , and yoke e are of usual construction. Each guide-plate f is made with transverse end-flanges f' , and a central transverse bead, f^2 , which are let into recesses made in the draft-timbers or sills, and are also provided with the abutments f^3 near their opposite ends. These abutments f^3 are substantially right angular in cross section, so as to present opposite flat surfaces to receive the followers g , hereinafter described. The abutments f^3 , being hollow, are adapted to receive bolts h , by which flange plates i are applied to the longitudinal edges, at top and bottom, of the guide-plates; said flanges serving to retain the followers and springs in the drawbar pockets.

The guide-plates, provided with the features hereinabove described, may be very readily struck up or pressed from steel plate in dies, and at very small cost.

The followers g are made, by preference, of wrought metal, say steel plate, and each is provided with a mediate teat g' , which is of little less diameter than the inside diameter of the inside coiled spring d , and thereby the nest of springs is centered within the drawbar pocket and prevented from displacement, no matter what the distance between the draw timbers may be. The teats g' may be formed upon the followers by punching or drawing up the metal in any suitable and well-known manner. There is no perforation, therefore, of the follower, and, consequently, the strength of the said follower is not reduced, but, in point of fact, its strength is rather reinforced or increased by virtue of the provision of the central teat.

The guide-plates supplied with the flange plates, substantially as described, are applied to the draw timbers by means of the transverse bolts, j , k , and it will be observed that the transverse beads f^2 receive within them and thus countersink the heads of the bolts k . The yoke e and the drawbar b are applied to the follower-plates in the drawbar pocket substantially as shown more especially in Fig. 2, so that the yoke will bear against the rearmost follower and the drawbar against the forward follower, and thereby the action of the springs obtained. The abutments f^3 limit the movements of the followers in both directions. Inasmuch as the outer ends of the abutments are at an incline, they serve to brace and stiffen the said abutments against the thrust of the followers as they are moved by the drawbar in the operation of the car. The end flanges f' and beads f^2 entering into the draft timbers substantially as shown, a large measure of the strain on the drawbar pocket is transmitted to such draw timbers.

While I have specially designed my improvements in drawbar spring pockets for manufacture from sheet or plate metal, by die-pressing or equivalent manufacture, yet I do not wish to be understood as limiting my invention to that mode of manufacture, inasmuch as the parts of the drawbar spring pocket may be produced in any other way.

My guide-plates differ from those shown in my patent No. 426,143, dated April 22, 1890, in several particulars, among which are that the longitudinal flanges in this present in-

vention are attachments to and not integral with the guide-plate proper; and, also, that the ends of the guide-plates used to receive the bolts *j* are made flat for that purpose, instead of being provided with recesses, as in the patent referred to.

What I claim is—

1. A guide-plate for drawbar spring pockets, having hollow abutments near its ends, and longitudinal flange plates applied to such guide-plates by bolts passed transversely through said hollow abutments, substantially as described.

2. A guide-plate for drawbar spring pockets, having transverse end-flanges and a transverse bead projecting from one side, and transverse hollow abutments projecting from the opposite side near the ends of the guide-plate, all formed in a single piece of wrought metal, such as plate steel, and pressed to shape, combined with longitudinal flange-plates and bolts arranged in the hollow abutments and connecting the flange-plates with the guide-plate, substantially as described.

3. In a drawbar-spring pocket for use in

connection with a drawbar and a connecting yoke, the combination of the guide-plates having end abutments and longitudinal flanges, the followers arranged between said flanges and limited in movement by said abutments and having integral teats, and springs arranged between said followers and centered and supported upon their teats, substantially as described.

4. In a drawbar spring pocket for use in connection with a drawbar and a connecting yoke, the combination of the guide-plates provided with hollow abutments, longitudinal flange-plates applied to such guide-plates by bolts passed through the hollow abutments and the flange-plates, and followers having integral spring-centering teats, substantially as described.

In testimony whereof I have hereunto set my hand this 28th day of January, A. D. 1893.

CHARLES T. SCHOEN.

Witnesses:

JAS. C. WILSON,

A. D. WILSON.