

A. D. McWHORTER.
DRAW BAR CARRIER.
APPLICATION FILED SEPT. 9, 1907.

912,876.

Patented Feb. 16, 1909.

2 SHEETS—SHEET 1.

Fig. 1.

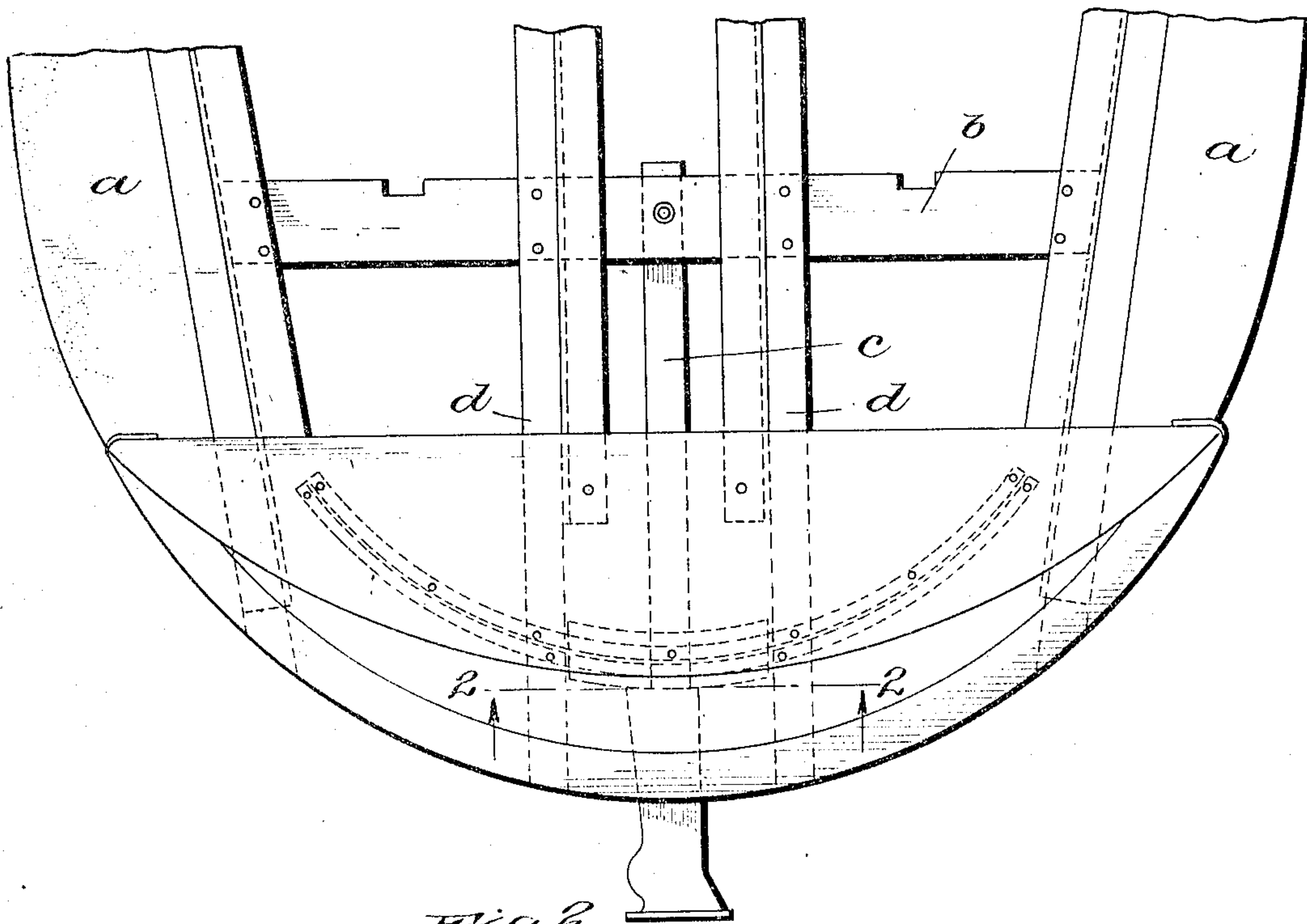
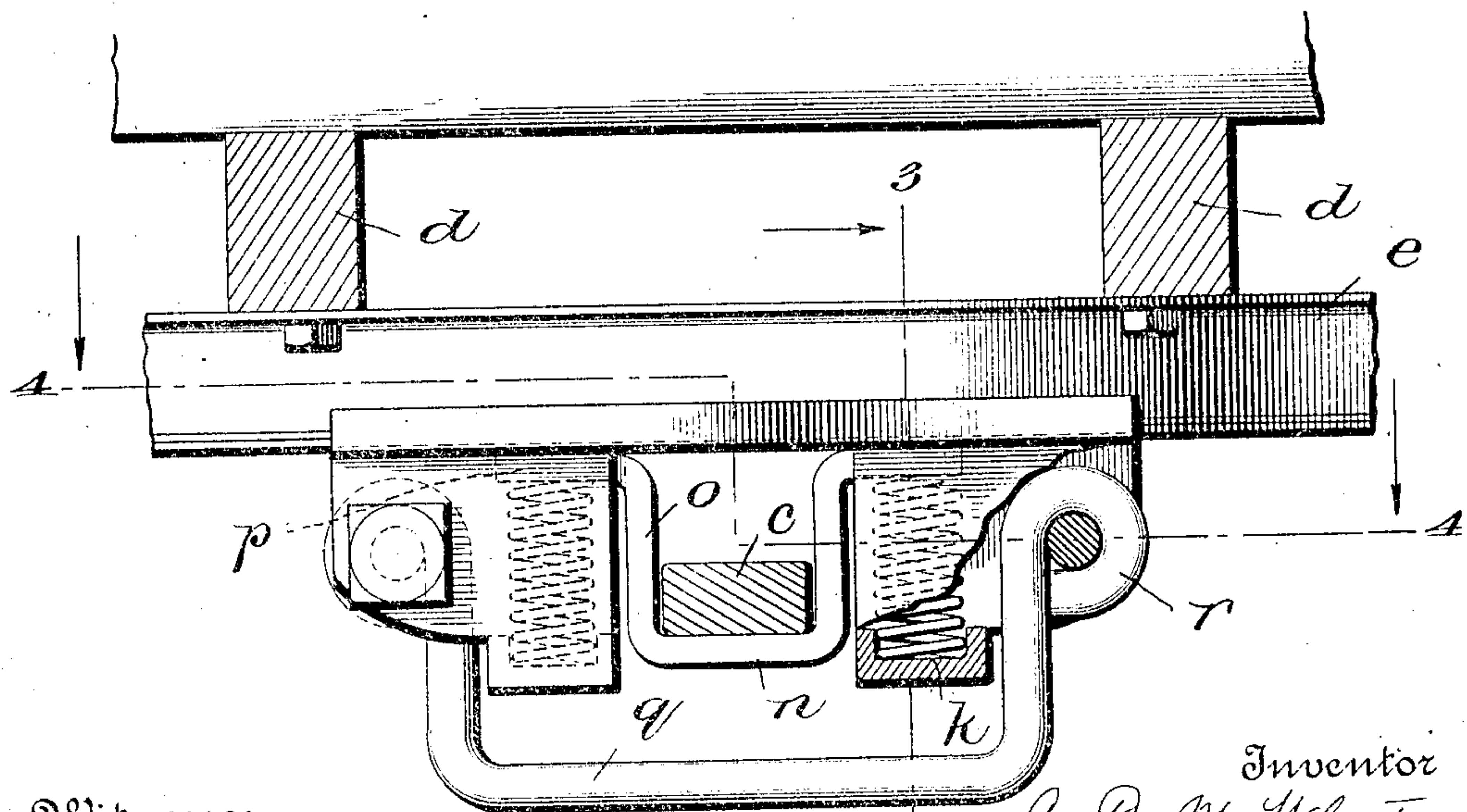


Fig. 2.



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2 SHEETS—SHEET 2.

Fig. 3.

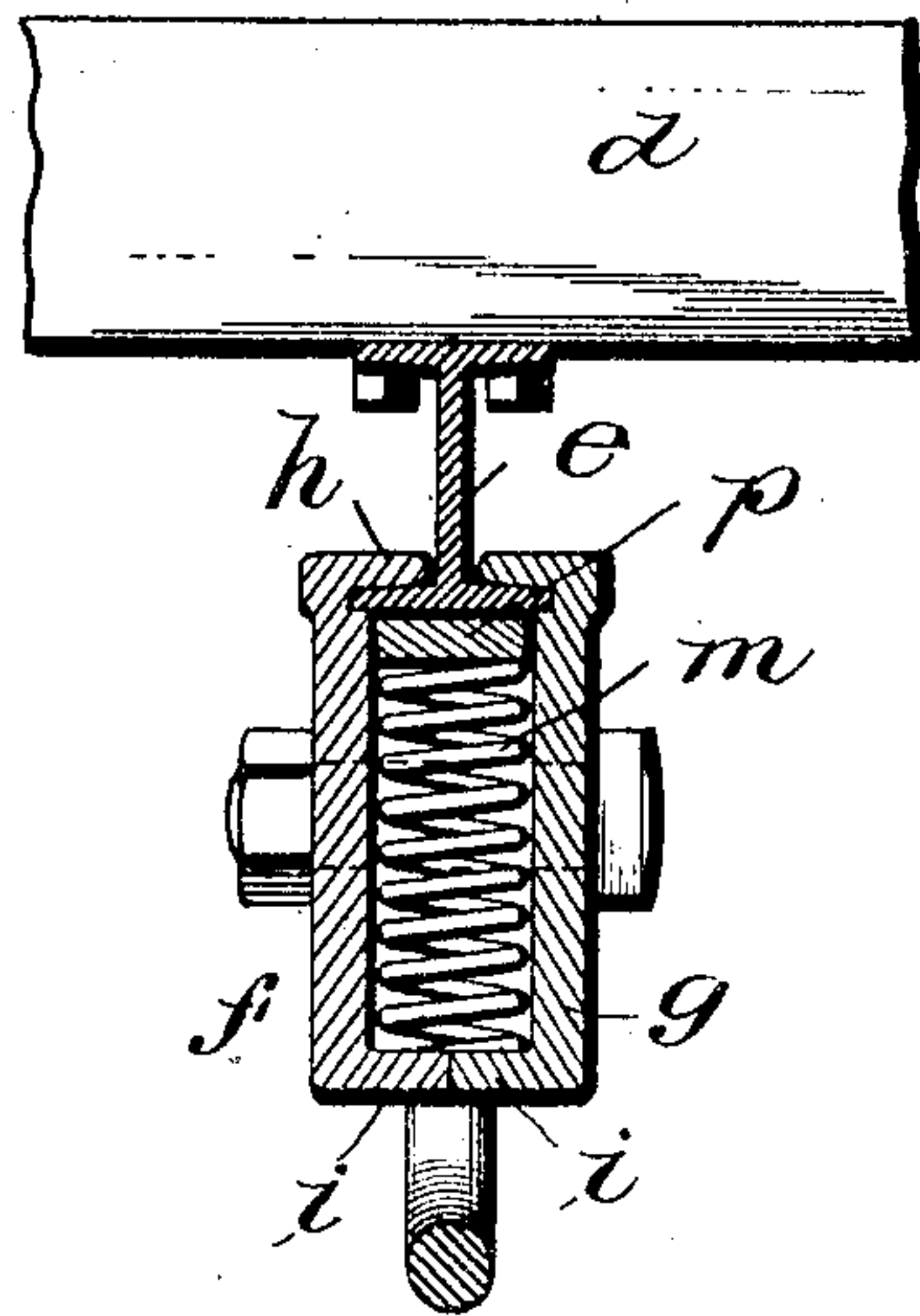


Fig. 4.

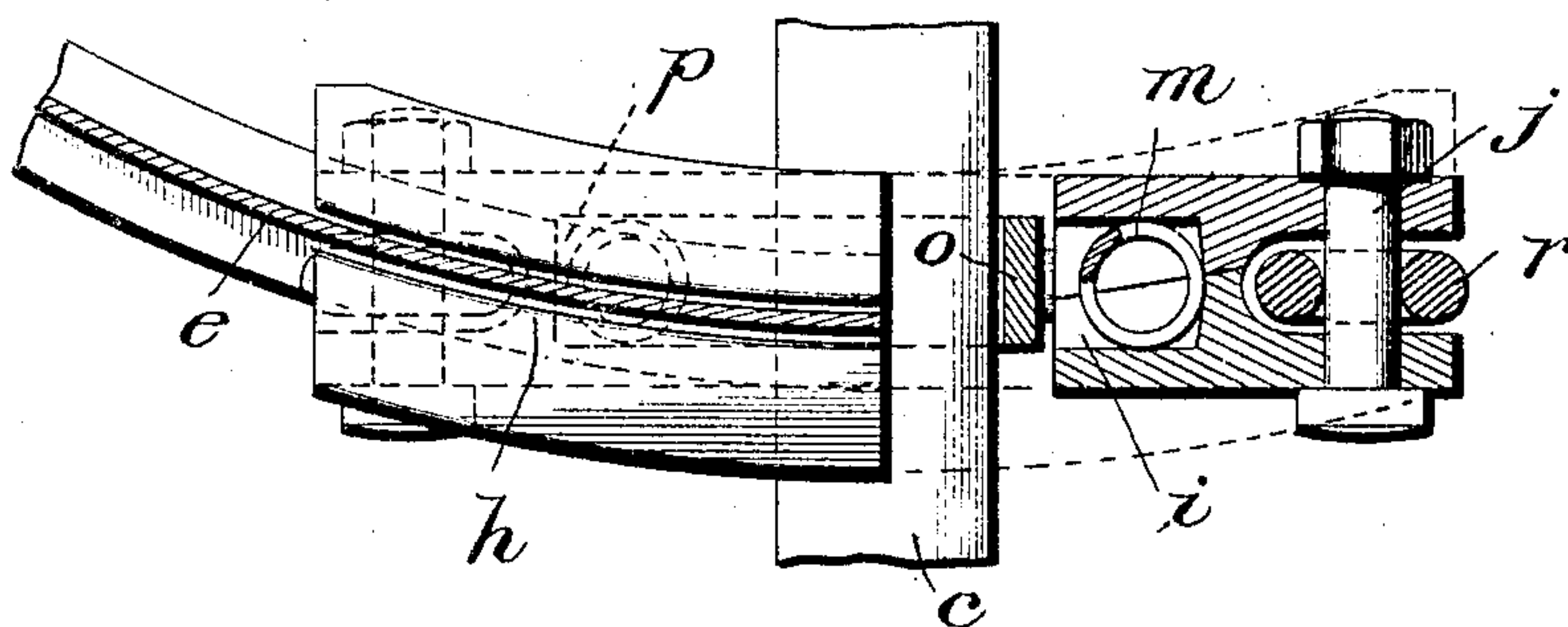


Fig. 5.

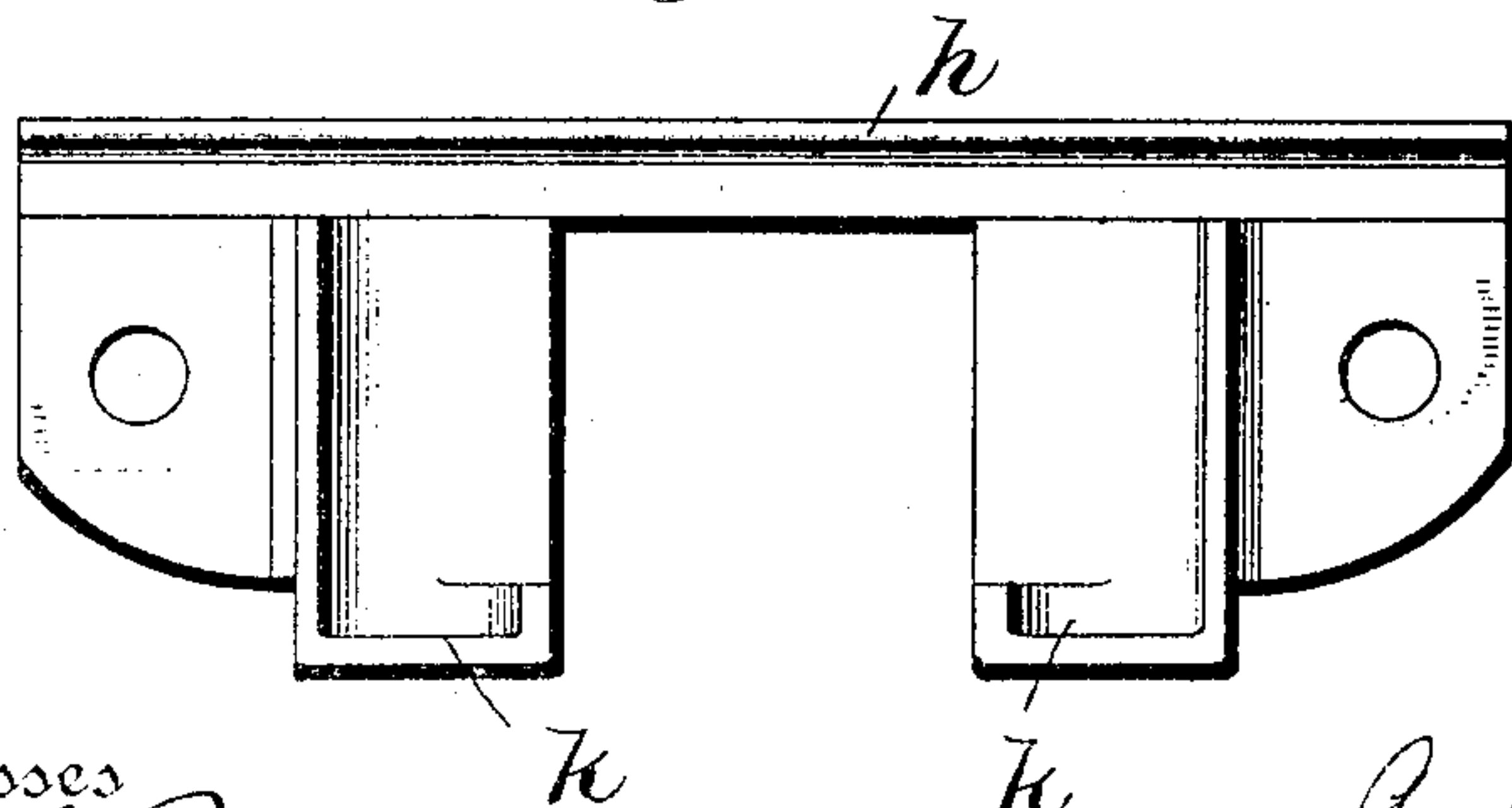
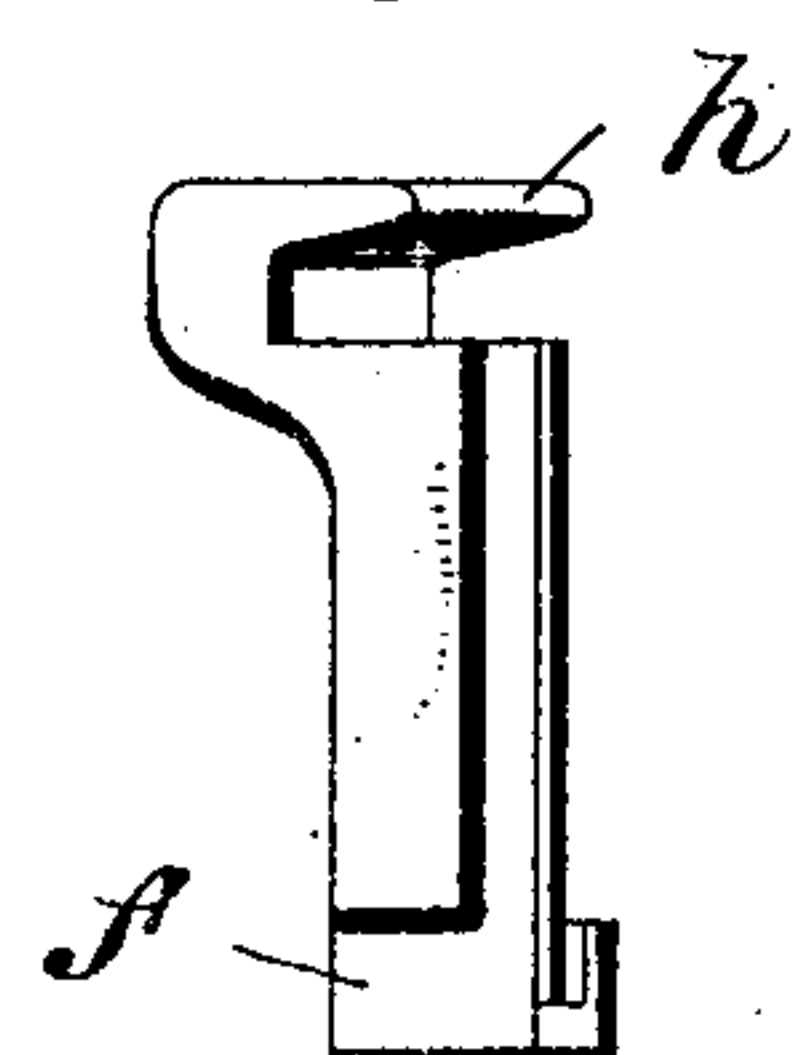


Fig. 6.



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UNITED STATES PATENT OFFICE.

ALFRED D. McWHORTER, OF MEMPHIS, TENNESSEE, ASSIGNOR TO THE TOMLINSON COUPLER COMPANY, OF DENVER, COLORADO, A CORPORATION OF SOUTH DAKOTA.

DRAW-BAR CARRIER.

No. 912,876.

Specification of Letters Patent.

Patented Feb. 16, 1909.

Application filed September 9, 1907. Serial No. 392,007.

To all whom it may concern:

Be it known that I, ALFRED D. McWHORTER, a citizen of the United States, residing at Memphis, in the county of Shelby and State of Tennessee, have invented certain new and useful Improvements in Draw-Bar Carriers; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to improvements in draw bar carriers, which is more especially adapted for street-cars, although it is not restricted to such use.

The object of my invention is to produce a carrier that will hold the draw bar perfectly level when not in service, making it possible to couple two cars together automatically without endangering life.

Further objects are to hold the draw bars perfectly level and square with each other when coupled together, to prevent them from wearing on one side when the trailer draw-head would run against the front car in turning curves, and to allow of vertical travel above or below the normal or center line to compensate for uneven tracks.

With these objects in view, my invention consists in the constructions and combinations of parts as hereinafter described and claimed.

In the accompanying drawings:—Figure 1 is a top view of a portion of a car platform showing my invention as applied thereto. Fig. 2 is a cross section on an enlarged scale, on the line 2—2 of Fig. 1, looking in the direction of the arrows, and a part being broken away to show the interior construction. Fig. 3 is a cross section on the line 3—3 of Fig. 2, looking in the direction of the arrows. Fig. 4 is a cross section on the line 4—4 of Fig. 2, looking in the direction of the arrows. Fig. 5 is a front view of one of the retaining castings, and Fig. 6 is an end view thereof.

a represents a car platform, *b* a cross beam, and *c* a draw bar pivotally attached thereto, all of these parts being of the usual or any suitable construction. Underneath the front of the platform, beams *d* are provided to which is bolted a curved I-beam *e*, which serves as a guide for the draw bar. Engaging the lower flange of the I-beam *e* are two similarly shaped and oppositely-

disposed castings *f* and *g*, having at the top projections *h* which engage the lower part of the I-beam, and having at the bottom projections *i* which fit against each other, making the two castings together a box, the two parts of the box being firmly united by bolts *j*. The projecting parts *i* are beveled, as shown in Fig. 4, so that they will fit firmly against each other. These projections *i* are provided with seats *k* for the spiral springs *m*, each of said projections *i* forming approximately one-half of one of said seats. On the springs *m* rests the retaining yoke through which the draw bar passes. This yoke is provided with a horizontal portion *n*, upright portions *o*, and horizontal portions *p*, which latter rest upon the springs *m*. An additional yoke *q* is provided, made substantially in the shape of the yoke *n*, but terminating in eyes *r*, through which the bolts *j* pass. This yoke *q* is made stronger than the yoke *n*, and is intended to be an additional safeguard in case the yoke *n* is pressed suddenly and violently down upon the springs *m*, which might occur in case of a derailment.

By the construction described the objects of my invention are fully attained. Furthermore, when the draw bar is not in use, the springs push the yoke *n* up against the I-beam *e* with sufficient pressure to keep the draw bar from swinging on the I-beam as the car lurches.

Another advantage in the use of this carrier is that the draw bar heads instead of becoming worn on their top faces are held up in such a manner that the wear is distributed over the entire surface. The wide range of vertical travel of the draw bar is also an advantage, and especially so when the tracks are uneven. Furthermore, the carrier always holds the draw bar level, and this adds considerably to the appearance of the car. It should be noticed also that the castings *f* and *g* are recessed in the center, but that the strain due to the compression of the springs *m* always comes near the ends of said castings where they are strongest.

Having thus described my invention, I claim:—

1. The combination of a car platform, a draw bar pivotally secured thereto, supporting means for said draw bar, and a curved guide for said supporting means secured to said platform, said supporting means being

provided with springs normally holding said means stationary on said guide, substantially as described.

2. The combination of a car platform, a draw bar pivotally secured thereto, a curved I-beam acting as a guide secured to said platform, and supporting means for said draw bar engaging said I-beam, said supporting means being provided with a yoke through which said draw bar passes, and springs holding said yoke in contact with said I-beam, substantially as described.

3. The combination of a car platform, a draw bar pivotally secured thereto, a curved guide fastened to said platform, and supporting means for said draw bar movably supported on said guide, said means including similarly shaped castings embracing a part of said guide, a yoke through which said draw bar passes, and springs seated in said castings normally holding said yoke against said guide, substantially as described.

4. The combination of a car platform, a draw bar pivotally secured thereto, a curved guide fastened to said platform, and supporting means for said draw bar movably held by said guide, said means including

castings embracing a part of said guide, a yoke through which said draw bar passes, springs seated in said castings and bearing against the ends of said yoke, and a supplemental yoke secured to said castings, substantially as described.

5. The combination of a draw bar and supporting means therefor, said means including two similarly shaped but oppositely-disposed castings, springs supported in said castings, and a yoke having bent upper ends with which said springs engage, substantially as described.

6. The combination of a draw bar and supporting means therefor, said means including two similarly shaped but oppositely-disposed castings, bolts uniting said castings, a yoke through which said draw bar passes, springs seated in said castings and bearing against said yoke, and a second safety yoke, substantially as described.

In testimony whereof, I affix my signature, in presence of two witnesses.

ALFRED D. McWHORTER.

Witnesses:

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