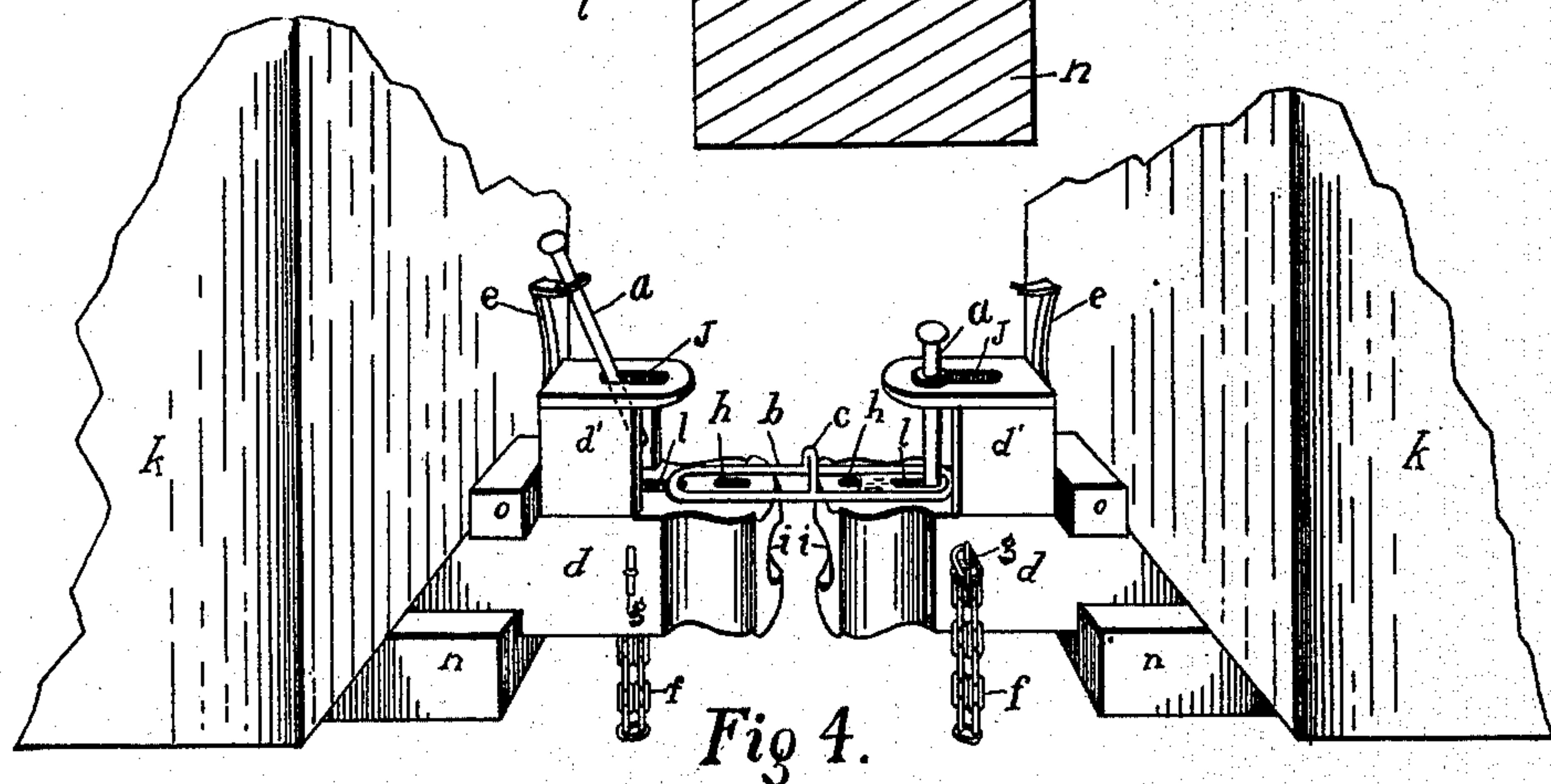
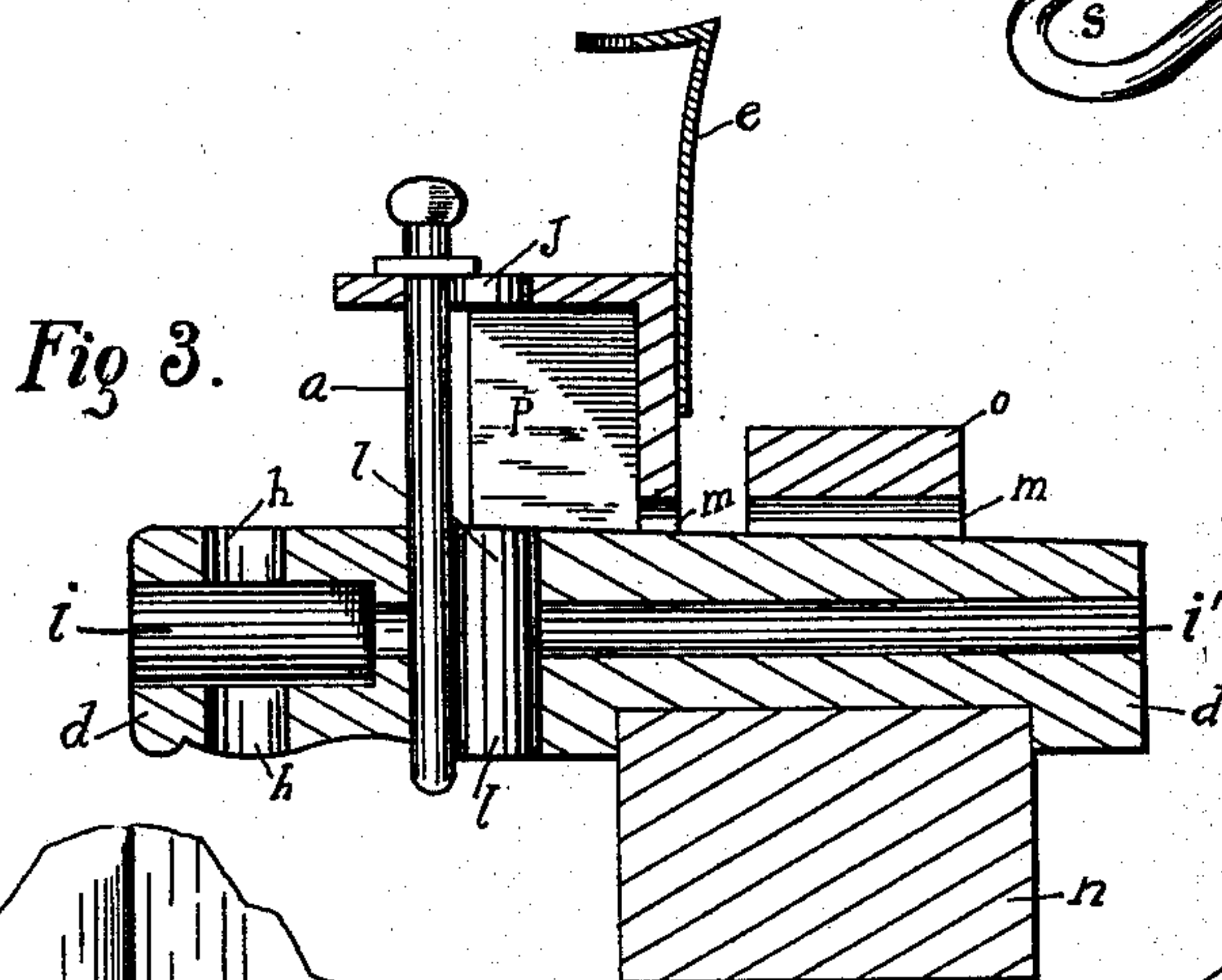
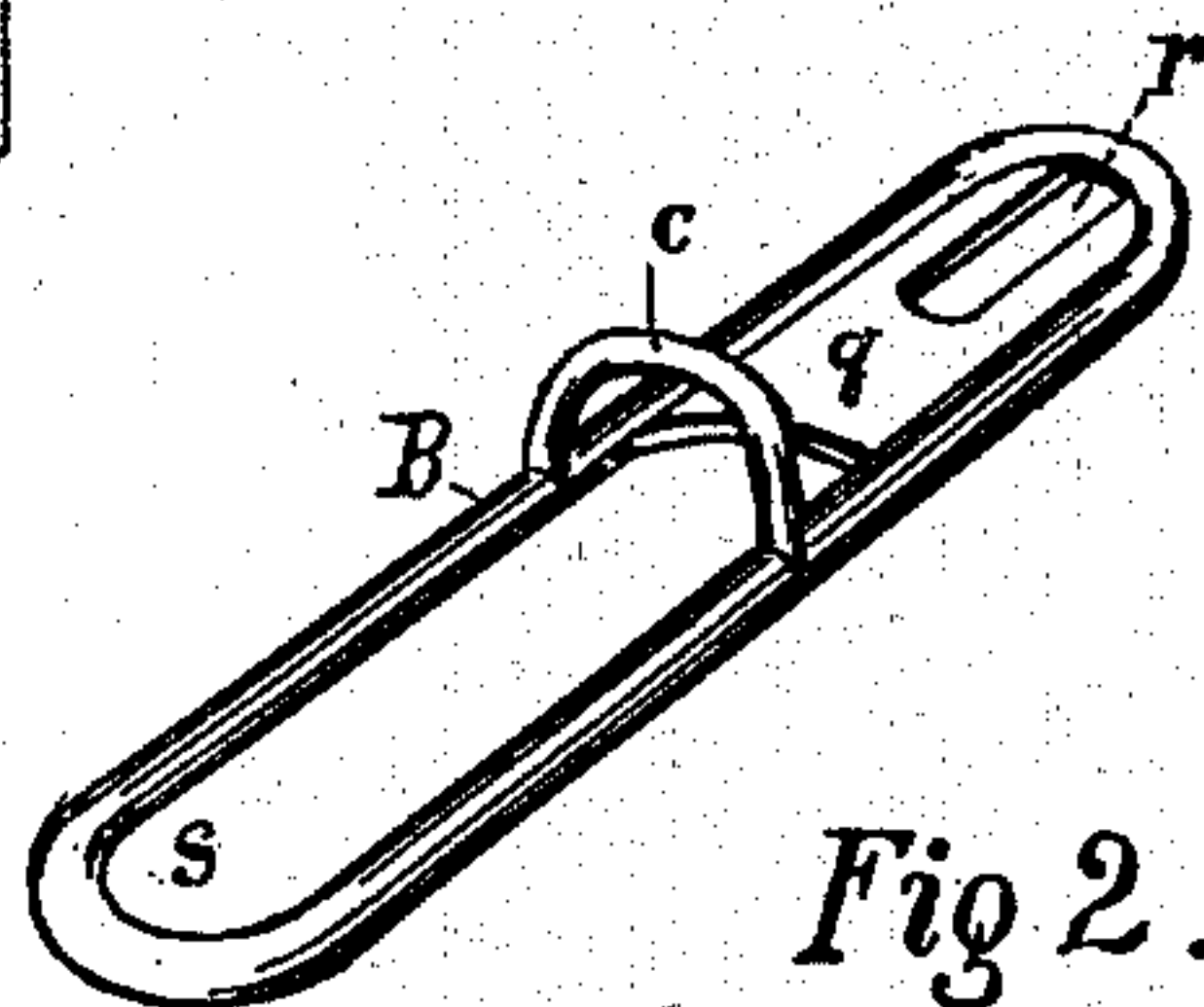
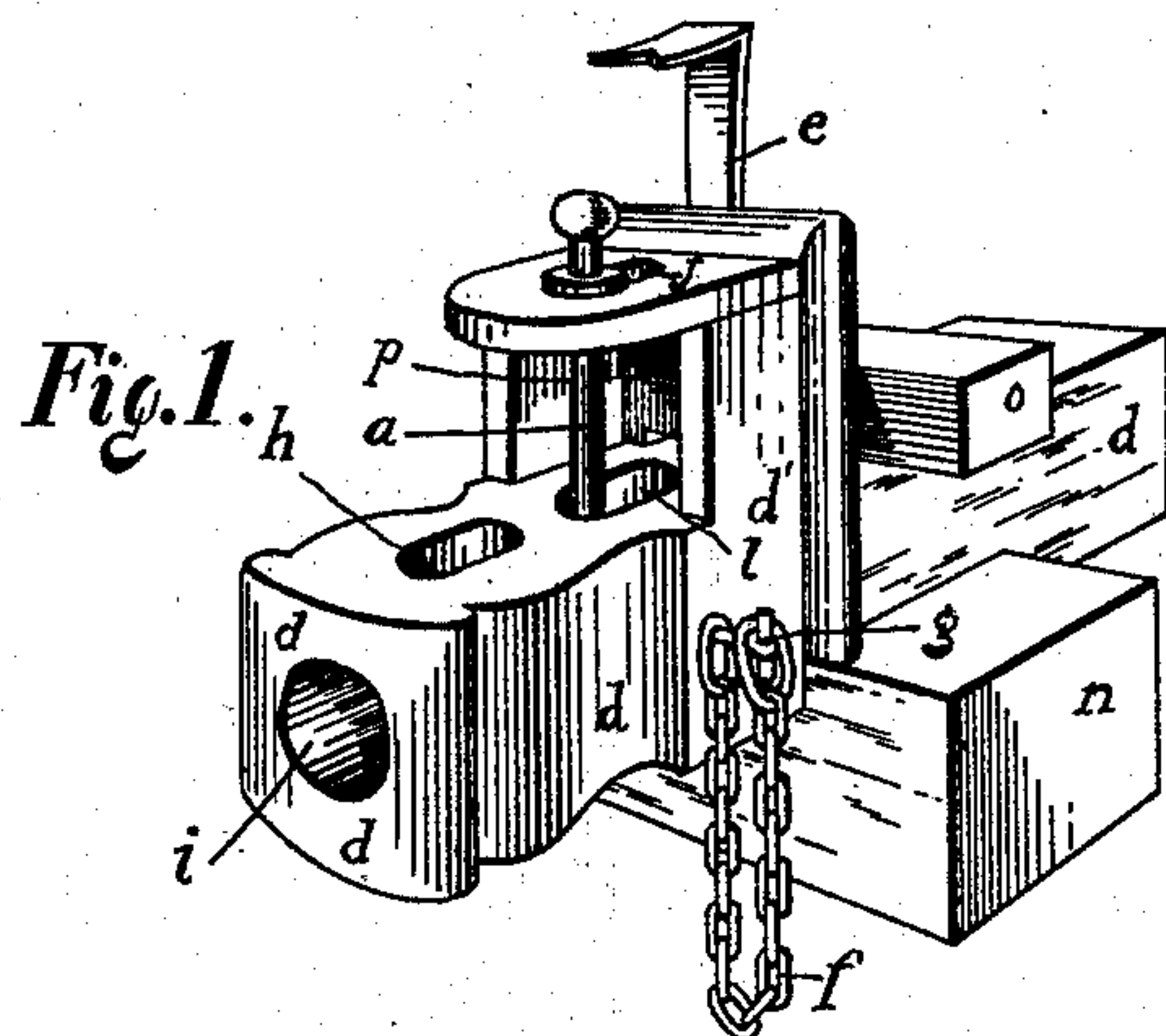


(No Model.)

R. P. McBRIDE.
CAR COUPLING.

No. 413,201.

Patented Oct. 22, 1889.



WITNESSES.
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ONE-HALF TO ELBRIDGE G. LAPHAM, OF SAME PLACE.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 413,201, dated October 22, 1889.

Application filed May 2, 1889. Serial No. 309,406. (No model.)

To all whom it may concern:

Be it known that I, RICHARD PLATT McBRIDE, a citizen of the United States, residing at Canandaigua, in the county of Ontario and State of New York, have invented certain new and useful Improvements in Railroad-Car Couplers; and I do 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, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

The objects of my invention are, first, to render the act of coupling cars comparatively safe to the person so employed; second, to avoid the difficulties which are found in coupling cars when said cars are standing on curved tracks, and, third, in case of the cars being of unequal heights, to keep the coupling-links in a horizontal position, thus giving a more equal strain on the pins holding the same, avoiding the breaking and wearing of the draw-head and the breaking and bending of the said links. I attain these objects by the mechanism illustrated in the accompanying drawings, in which—

Figure 1 is a perspective view of my coupling device, one of which is placed on each end of the cars using the same. Fig. 2 is a perspective view of my improved coupling-link used in combination with the device aforesaid. Fig. 3 is a vertical section of the coupling device, and Fig. 4 a perspective view of the ends of two cars about to be coupled together.

Similar letters refer to similar parts throughout the several views.

The bumper *d* is attached to the car in the ordinary manner by passing between the blocks *o n*, and being secured to the car by means of a bolt passing through the channel *i'*. (Shown in Fig. 3.) On the top side of the bumper, and being a part thereof, is the draw-head *d'*, to which is attached the pin-rest *e*, referred to hereinafter. The draw-head is inclosed on three sides, thus forming the recess *P*. Between the bumper *d* and the back side of said recess is the slot *m*, which is continued through the block *o*, as shown in Fig.

3. The purpose of the said slot is to provide a place in which to place the coupling-link *B*, Fig. 2, when the same is not in use. This is effected by first removing the pin *a* from the draw-head *d'*. The link is then entered at recess *P*, thence through the slots *m m* until the guard *c* on the link prevents its further passage by coming against the back of the draw-head. The pin *a* is then passed through the slot *J* in the draw-head, thence through the link at *s* and into the slot *l* in the bumper, thus effectually keeping the link from loss or breakage when not in use. The bumper is not new, but the draw-head on the top of the same is part of my design. One end *r* of the link *B* is made heavier than the other end by being partly filled with metal, as shown at *q*, Fig. 2. The object of this is to compel the link to keep a horizontal position on the bumper *d*.

In the act of coupling cars (see Fig. 4) to which my device is attached the link *B* is first secured to either car by placing the end *r* of said link in the recess *P*. The pin *a* is then passed through the slot *J* in the draw-head, thence through the link at *r* and into the slot *l* in the bumper. The pin *a* on the opposite car is then placed on the pin-rest *e*, its point resting in the slot *J* in the draw-head. When the cars are brought together, the end *s* of the link slides into the unoccupied recess *P*. The jar caused by the sudden contact of the bumpers causes the pin *a* to leave the pin-rest *e* and descend through the slot *J*, and the link at *s* into the slot *l* in the bumper, thus effectually coupling the cars together.

In case of the cars being of unequal heights, the end *r* of the link *B* is first attached, in the manner aforesaid, to the highest car. The height of the draw-head on the opposite car will readily admit of the entrance of the end *s* of the link into the recess *P* of the said draw-head, where it is secured by the pin *a* in the manner hereinbefore described, and by which means the horizontal position of the link is assured.

In case of breakage of the link or pins under circumstances which would render repairs to the same difficult, the chains *ff* are temporarily used for coupling by conveying

one end of the same to and linking it with the stud *g* on the opposite bumper. (See Fig. 4.) This is a device in common use.

The difficulties attending the coupling of cars standing on curved tracks are by my device avoided. The link *B*, not being confined at its sides by the draw-head *d'*, can be turned in any direction forward of the pin *a*, thus coupling together cars that are standing on a curve or at an angle one with the other, and the cars can be coupled by hand, avoiding the danger of coupling between the bumpers, as now in general use, so destructive to life and limb.

The coupling of the front end of an engine to a car bearing my device is effected in the ordinary manner—viz., by inserting one end of the iron bar (used on the front of all engines for that purpose) into the opening *i* in the bumper *d*. The pin *a* is then passed through the slot *h* and through the hole provided for that purpose in said bar, thus effecting the said coupling from the top of the draw-head instead of in the middle of the draw-head as now used, and avoiding all danger.

Links of any desired length above six inches long can be used in combination with

my device, and the cars can be coupled from the top of the draw-head instead of between the bumpers as now used, thus avoiding all danger of injury to the person making the coupling.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. The combination, in a car-coupler, of a bumper *d*, having on its top side a draw-head *d'*, to which may be attached a pin-rest *e*, all as substantially set forth.

2. In a car-coupling, the combination, with the bumper having the draw-head in its upper portion, of the link weighted at one end and provided with a handle, substantially as described.

3. The herein-described link provided with openings for the reception of a pin at each end, having one end weighted, and a handle attached to the link at about its center, substantially as described.

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

RICHARD PLATT McBRIDE.

Witnesses:

C. A. RICHARDSON,
JAMES A. ROBSON.