

(No Model.)

2 Sheets—Sheet 1.

P. ULLMAN.
CAR COUPLING.

No. 603,298

Patented May 3, 1898.

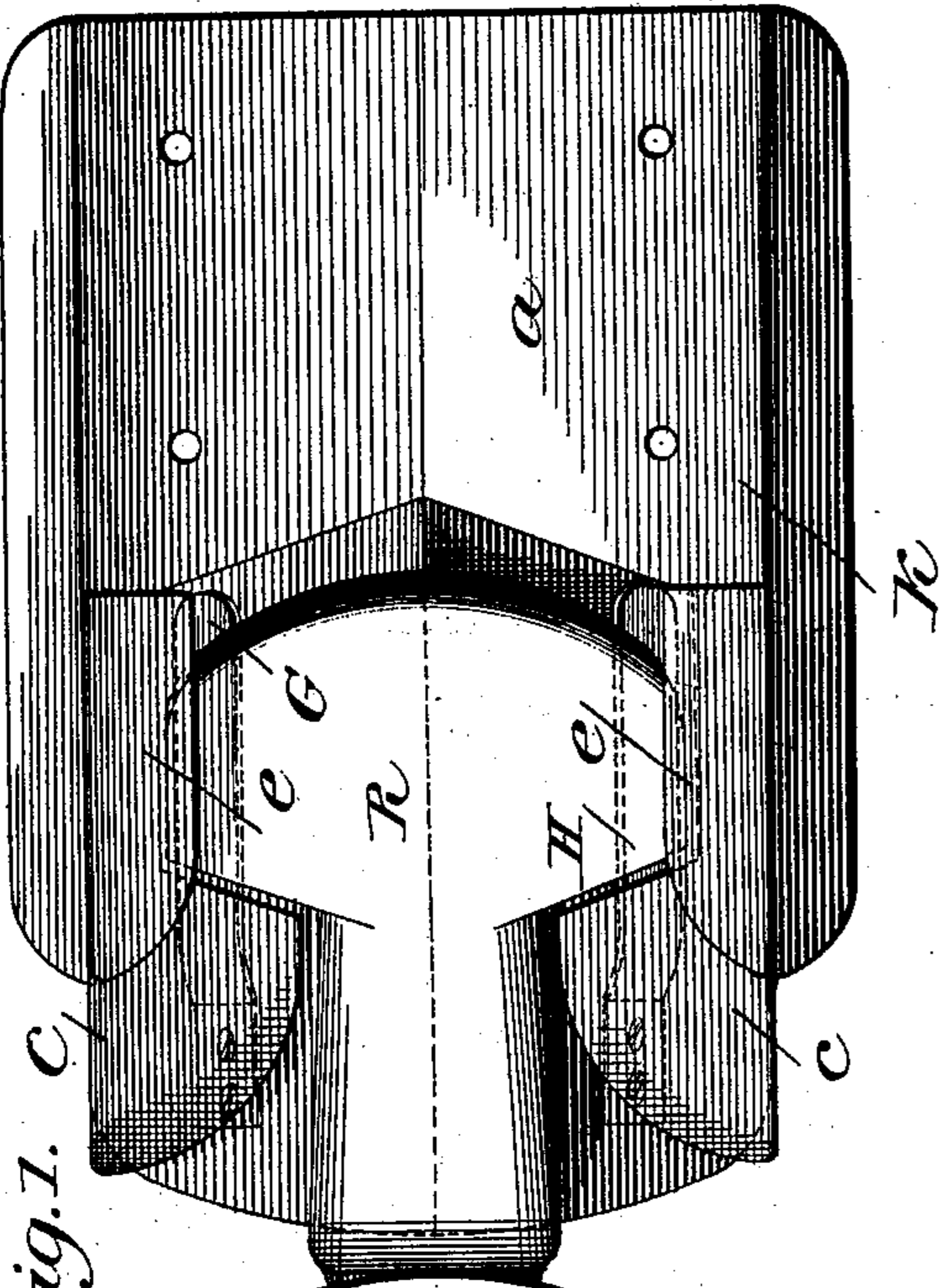
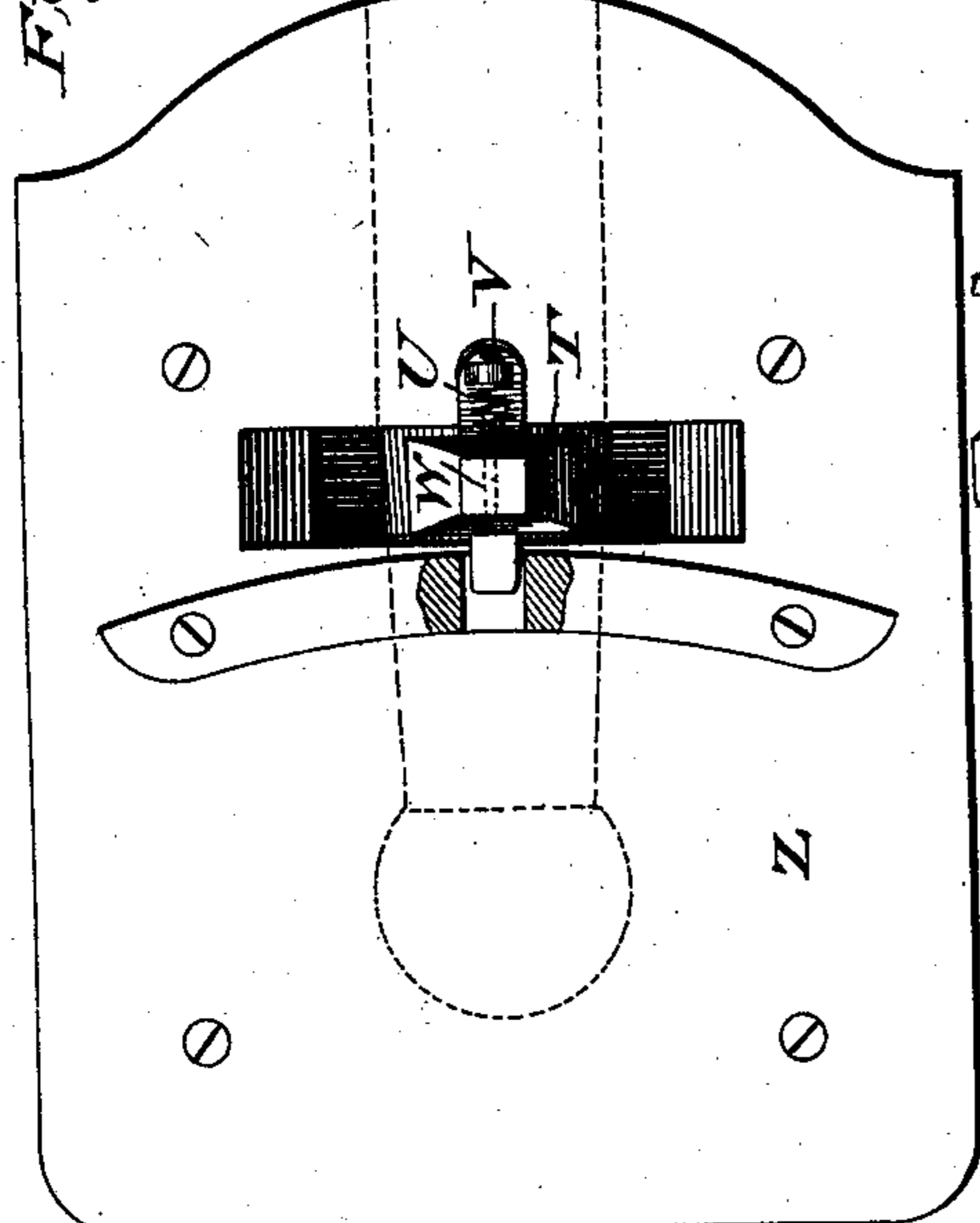


Fig. 1. C.



Witnesses.

M. H. Large
Ed. E. Large

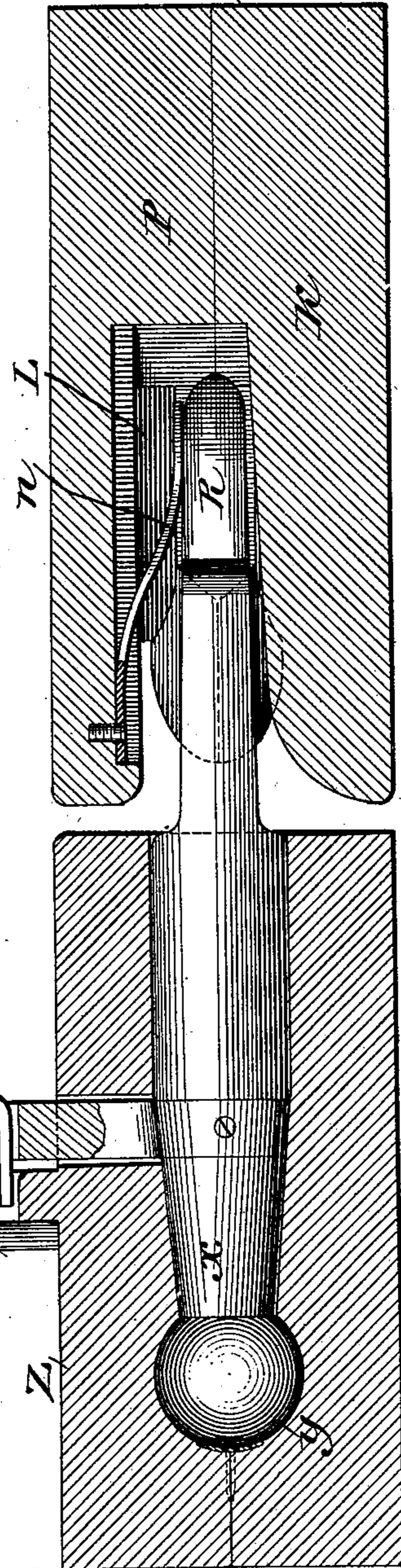


Fig. 2.

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Fig. 3.

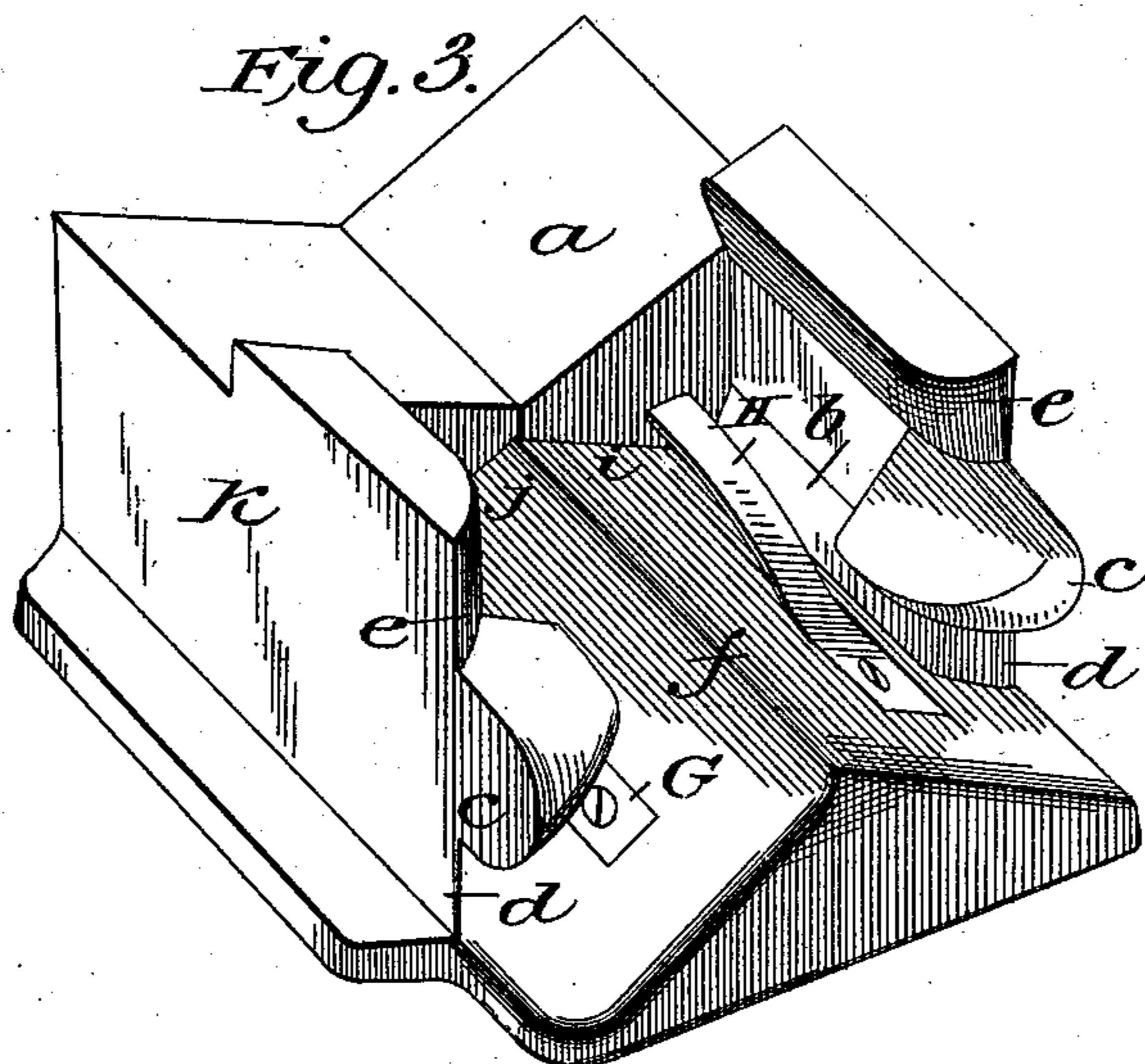
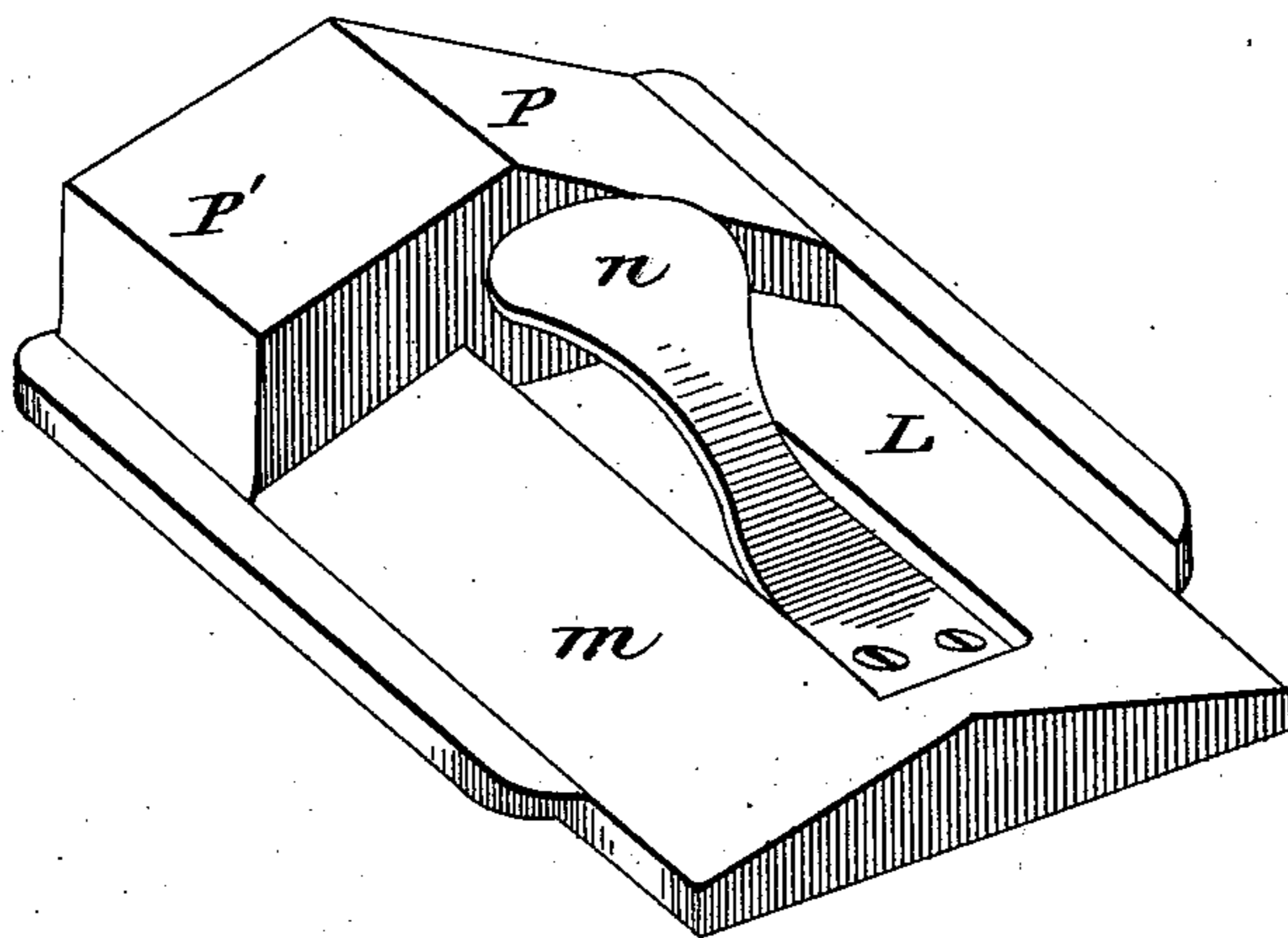


Fig. 4.



Witnesses.
M. H. Large
Ed. E. Large

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UNITED STATES PATENT OFFICE.

PETER ULLMAN, OF STAFFORD, OHIO.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 603,298, dated May 3, 1898.

Application filed March 17, 1897. Serial No. 628,043. (No model.)

To all whom it may concern:

Be it known that I, PETER ULLMAN, a citizen of the United States, residing at Stafford, in the county of Monroe and State of Ohio, have invented a new and useful Car-Coupler, of which the following is a specification.

My invention relates to improvements in automatic car-couplers and emergency releases; and the objects of my improvements are, first, to provide a simple safe automatic car-coupler; second, to provide a sure emergency release when a car upsets, and, third, to provide an easy safe method of uncoupling from platform of passenger-car or top or side of freight-car. I obtain these objects by the mechanism illustrated in the accompanying drawings, in which—

Figure 1 is a plan view with the top portion of the coupling end removed. Fig. 2 is a cross-section longitudinally through the device. Fig. 3 is a perspective view of the bottom part of the receiving end. Fig. 4 is a perspective view of the top part of the same.

Similar letters refer to similar parts throughout the several views.

My coupler consists of an entering and a receiving end. Said entering end consists of an arrow-head steel bolt R, cast in one solid piece with lever T. Said lever T has a dog V, which passes through T at s to the block, which is on top, a part of steel case holding said arrow-head. My receiving end consists of two castings and three springs. One of said castings is shown in Fig. 4, and consists of the top, from which is suspended the main spring N, and the left side of said receiving end, which is a central beveled flange with square butt c'', with openings above and below said flange and with a groove extending from butt c'' of flange to beveled horizontal rear section, where the two castings are bolted together. The second of said castings consists of bottom, from which rise two support-springs G and H and the right vertical side and rear similar to left side and rear just described.

When ready for coupling, the lever T stands to left or right, so that arrow-head R makes an angle of about forty-five degrees with perpendicular. As arrow-head moves forward it is received between the flanges d on one side and e on the other. Moving on forward un-

der main spring N the arrow-head is pressed horizontal as soon as its jaws pass c'', the butts of flanges C, and is supported by the lower springs G and H. The dog V, which has lower end passing through lever T at s, slips in block (shown at s, Fig. 2) and is held there by spring U. The jaws of arrow-head R now fit against butts of flanges (marked c'', Figs. 1 or 4) and coupling is complete.

b is hollowed out part of side and opposite arrow-head when in position.

M and L show slope of top, and f of bottom, of receiving end. Said slopes are about forty-five degrees and determine the angle for emergency release. When either end of coupling turns, the other remaining upright, the dog V holds arrow-head solid, so that one edge of R is pressed against top and the other edge against the bottom of receiving end. When overturning part reaches forty-five degrees, the jaws of R are entirely free from butts c'' of flanges and the arrow-head slides through openings d on one side and e on the other. In case the car turns over the receiving end stands still and the lever end swings to the right, and the blunt end and flattened bolt of arrow-head R accomplishes the release. This is for case of stationary train having car blown from track or thrown or dropped from bridge or embankment. When coupling is entirely in place, the car may fall either to left or right.

The lever T allows uncoupling from platform of passenger-car or top of flat-car. The hole in dog V (shown at V') is for attachment of cords or ropes. The hole at W is for two or three pulleys, allowing said cords or ropes to be worked from sides of any freight-car or top of box-car, thus uncoupling.

K is side of receiving end.

X is drop-forging union of arrow-bolt R and lever T.

Y and Z are bottom and top parts of lever end.

I am aware that prior to my invention arrow-head couplers have been made and also emergency releases. I therefore do not claim either of these ideas absolutely; but

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

1. The combination for automatically coupling moving cars consisting of a blunt arrow-

head set at about forty-five degrees (45°) and moving through openings between flanges, and adapted to be caught above by one and below by two horizontal springs which press
5 said arrow-head horizontal, and flanges with which the jaws of the arrow-head engage, substantially as set forth.

2. The contrivance for emergency release consisting of said blunt arrow-head, of said
10 three (3) springs N, G, and H, located above

and below in the opposing draw-head and adapted to be compressed by the pressure of overturning car on arrow-head, and of openings above and below said flanges from which openings the arrow-head escapes, substan- 15 tially as set forth.

PETER ULLMAN.

Witnesses:

W. H. ULLMAN,
J. W. NEISMONGER.