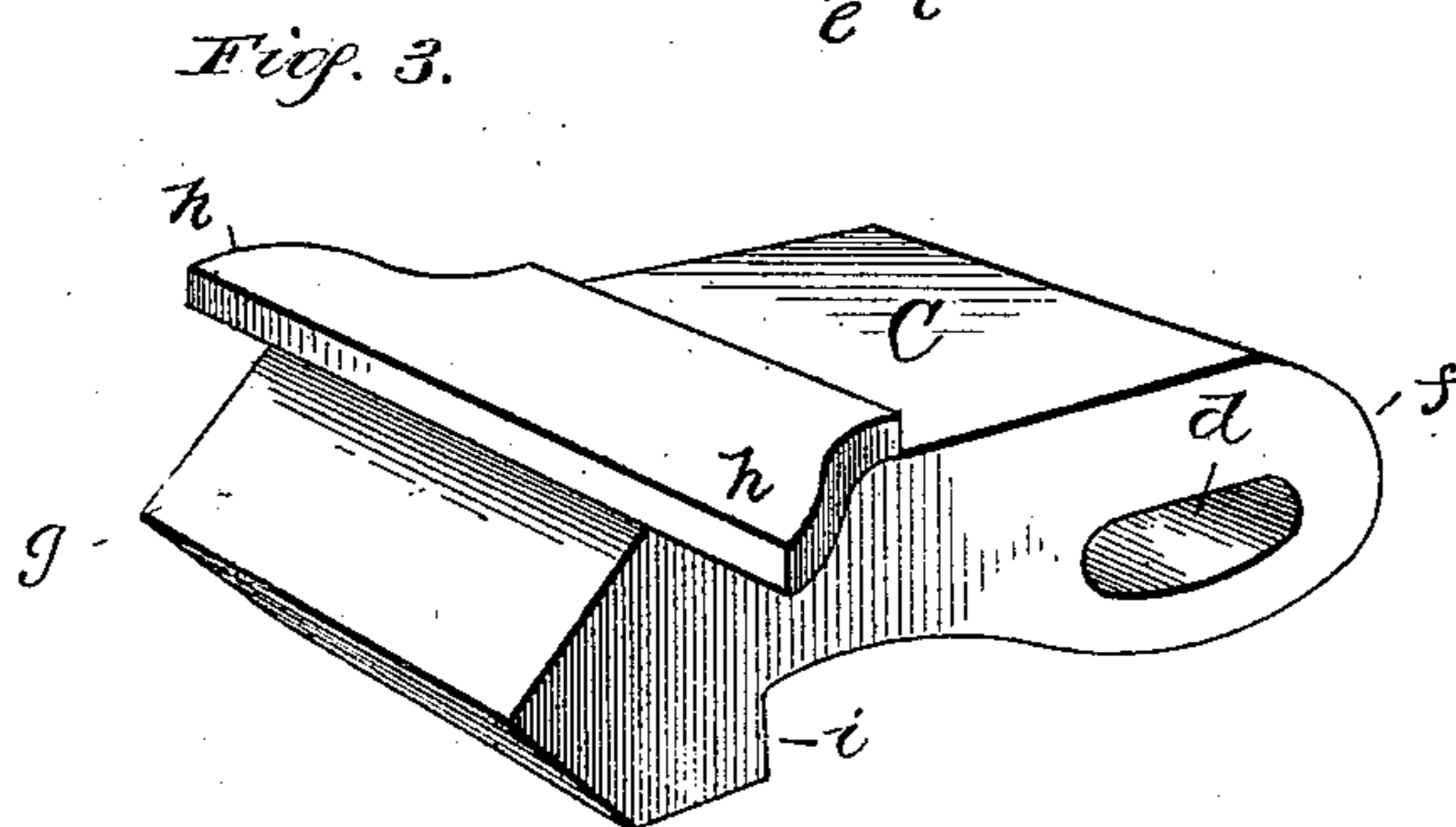
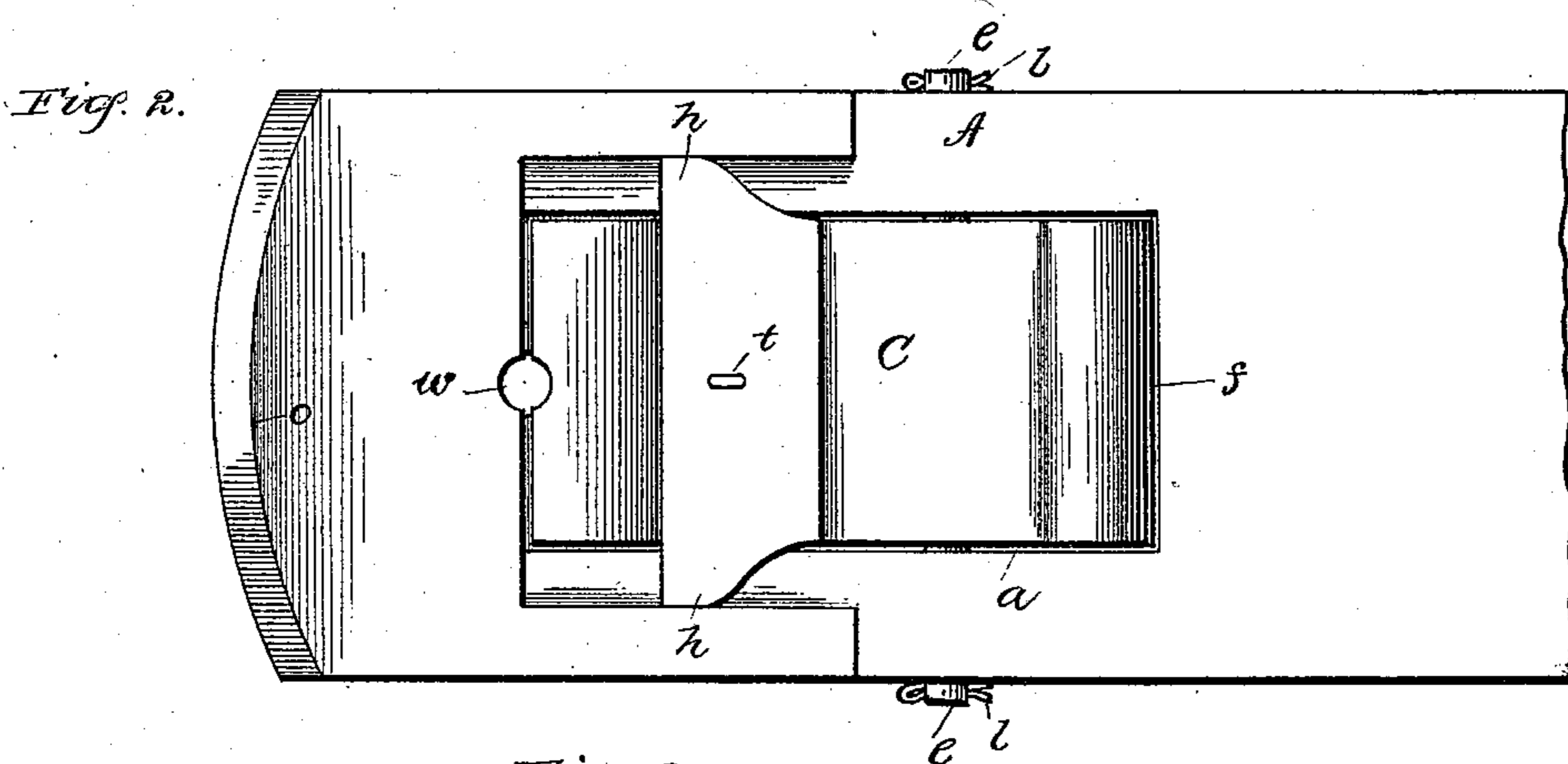
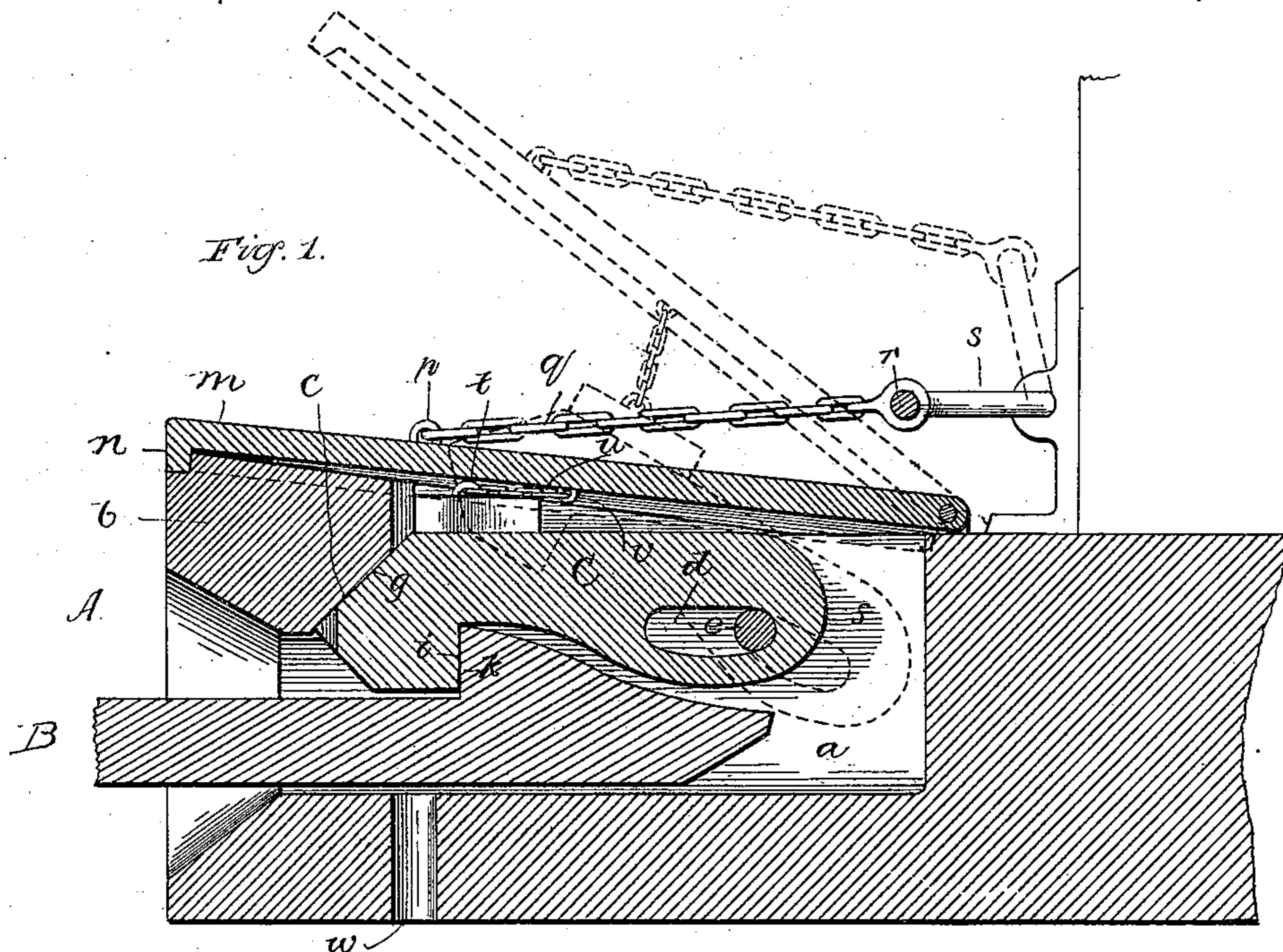


(No Model.)

A. C. HIGHT.
CAR COUPLING.

No. 555,445.

Patented Feb. 25, 1896.



Witnesses.

Victor J. Evans.
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UNITED STATES PATENT OFFICE.

ARCHEY C. HIGHT, OF MILTON, TENNESSEE.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 555,445, dated February 25, 1896.

Application filed March 19, 1895. Serial No. 542,408. (No model.)

To all whom it may concern:

Be it known that I, ARCHEY C. HIGHT, a citizen of the United States, residing at Milton, in the county of Rutherford and State of Tennessee, have invented certain new and useful Improvements in Car-Couplings; 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.

This invention relates, generally, to car-coupling devices, and particularly to that class of such devices wherein a gravity-latch is employed to hold or lock a hook in the draw-head, and it has for its object to provide a simple, durable, and comparatively inexpensive coupling device of few parts with the latch removed from liability to damage from the ordinary concussive blows between draw-heads in use; and it consists of the parts and combinations of parts hereinafter fully described and claimed.

In the accompanying drawings, forming a part of this specification, Figure 1 is a longitudinal vertical section through my improved car-coupling; Fig. 2, a plan view with cover removed, and Fig. 3 a detail perspective view of the latch.

Similar letters refer to similar parts throughout the several views.

A represents a draw-head which is formed with the draw-bar in the usual manner, the latter being secured or attached to the car by the usual or any desired draft-rigging.

The draw-head A is formed with a rectangular cavity *a*, open at the top, across the front end of which a bar *b* is formed in casting, said bar having an inclined under surface *c*, as shown in Fig. 1. The mouth of the cavity is rounded off on its edges, as is usual, to permit the ready entrance of the hooked link B.

C represents the latch by which the link B is held or locked in the cavity *a* of the draw-head. The latch is cast solid and with an elongated slot or opening *d* therein near its rear end, through which a pin or bolt *e* passes to secure the latch in place in the cavity, said bolt being inserted in openings formed therefor in the draw-head, the slot permitting of a limited longitudinal movement of the latch

back and forth in the cavity and the bolt forming the pivot on which it may be raised or one of its ends swung upwardly out of the cavity to permit of the withdrawal of the link when it is desired to uncouple the cars. As will be observed, the rear end *f* of the latch is rounded so as to render its movement, when raised or lowered, free and without liability of interference with the rear wall of the cavity *a*. At its forward end the latch is chamfered off to form an inclined surface *g*, corresponding to the under surface *c* of the bar *b*, so that when said parts are in the position shown in Fig. 1 any forward or upward strain on the latch will be resisted by the bar *b*, thereby assisting in holding the link and latch in locked position and taking the strain exerted by the cars, when coupled together and in use, off the latch and its pin and transferring the same to the draw-bar, and leaving the latch to perform its legitimate duty of simply locking the link firmly and securely in place. The latch is cast with lateral wings or projections *h* at each side, which rest on the draw-head at each side of the cavity *a*, and serve to limit the downward movement of the latch and thus hold it, when down, in the proper position to permit of the ready entrance of the link beneath the same when the cars are being coupled. The latch is formed with the hook *i*, and a corresponding hook *k* is formed on the link B, and the end of the latter is reduced and tapered, so as to facilitate its entrance beneath the latch.

The bolt *e* is removably held in place by a key *l* inserted therethrough at one or both ends, so that the latch may be easily removed when desired. A cover or lid *m*, as shown in Fig. 1, is hinged at one end to the upper part of the draw-head so as to cover the cavity *a* therein, said cover or lid being formed with a flange *n*, adapted to fit closely against a shoulder *o* formed on the front end of the draw-head and thus exclude dirt, snow, and water from the cavity, which, if admitted, might have a tendency to clog the latch. To a staple or eye *p*, secured in the cover or lid, one end of a chain *q* is attached, the other end of said chain being connected to the crank portion *r* of a bent lever *s*, which is pivotally mounted in suitable bearings secured to the

end of the car, said lever extending across the car to each side and having crank-handles whereby the same may be turned.

To an eyebolt *t*, secured in the top of the latch, a short chain *u* is attached, the other end of said chain being connected to a similar eyebolt *v* in the under side of the cover, whereby when the lever *s* is turned the cover will be raised, thus drawing back the latch on its bolt or pin *e* and disengaging it from the bar *b* and raising the latch so as to release the link B, as indicated in dotted lines, Fig. 1.

The draw-head is perforated, as at *w*, to receive a pin to enable my coupling to be used with the ordinary link-and-pin coupling device when necessary.

Having thus described my invention, what

I claim as new, and desire to secure by Letters Patent, is—

The combination, in a car-coupler, of the draw-head having a cavity therein, a latch pivotally secured in said draw-head and having an elongated slot therein, a cover or lid for said cavity, a chain connecting said latch and cover and means for raising said cover or lid, whereby said latch may be moved horizontally and swung on its pivot substantially as described.

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

ARCHIE C. HIGHT.

Witnesses:

B. T. JOHNSON,

W. R. SINGLETON.