

T. H. VINCENT.
Car-Couplings.

No. 154,730.

Patented Sept. 1, 1874.

Fig. 1.

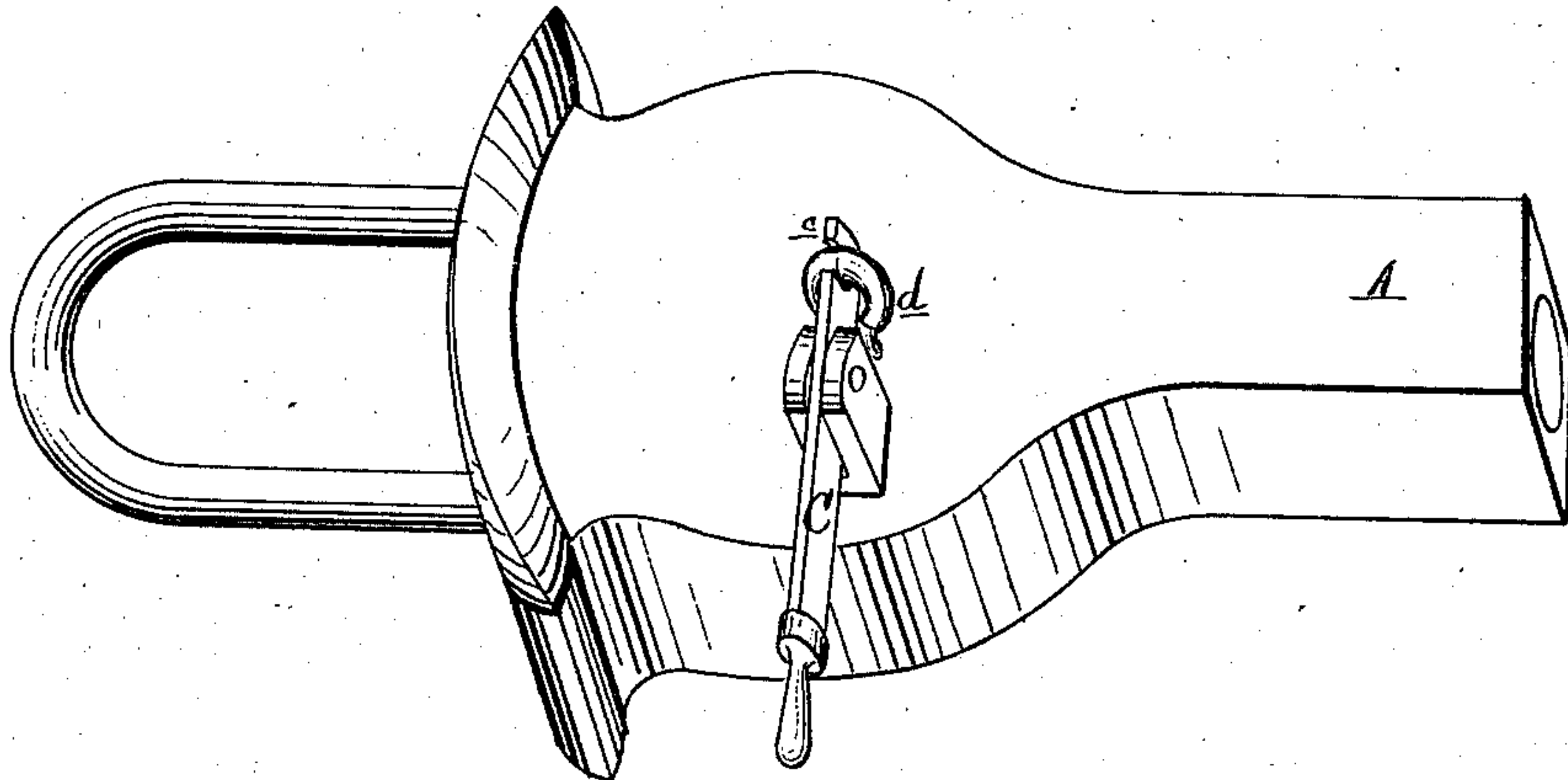


Fig. 2.

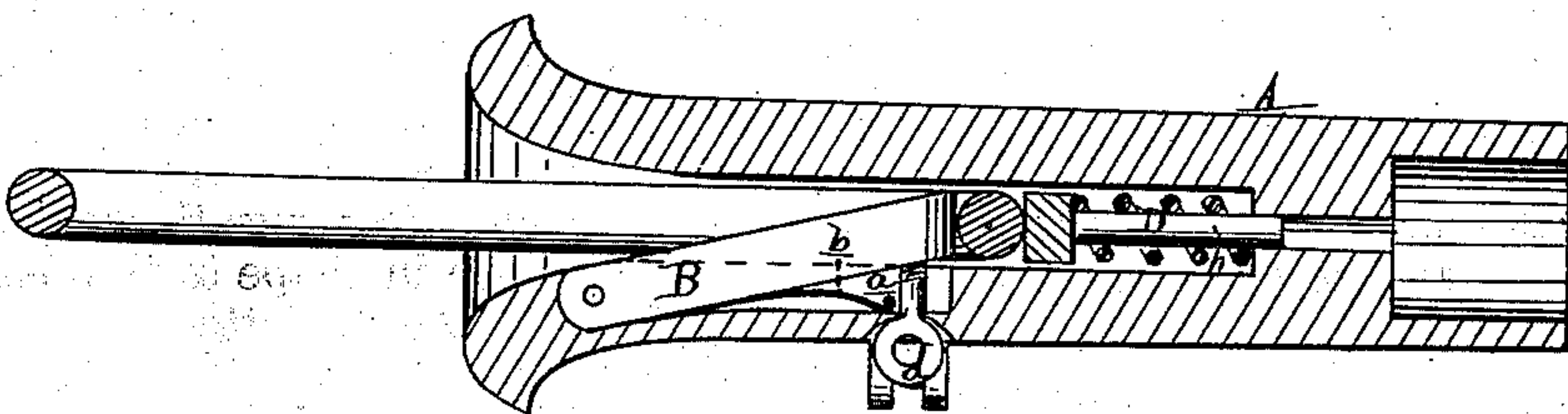
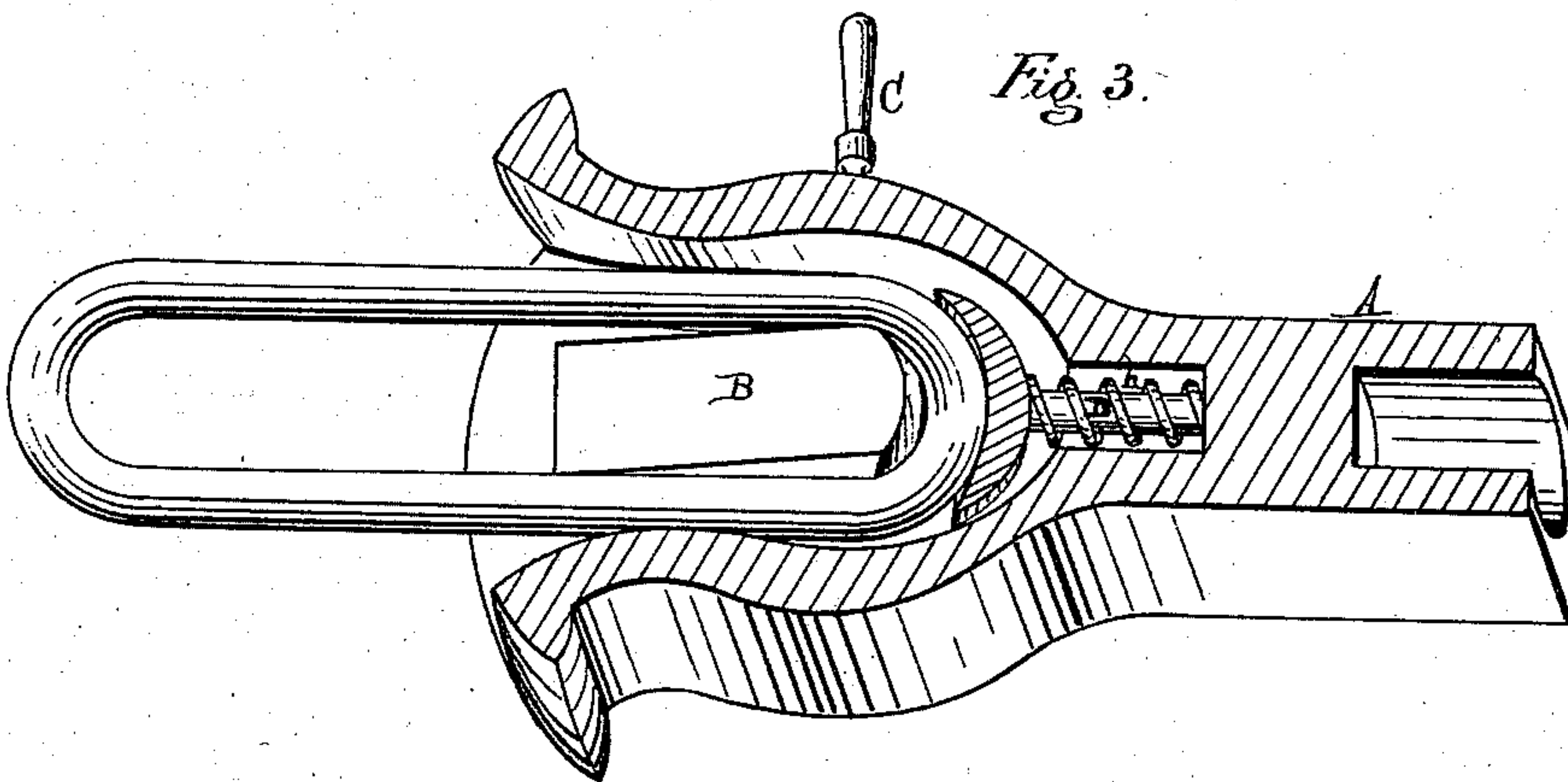


Fig. 3.



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THOMAS H. VINCENT, OF DETROIT, MICHIGAN.

IMPROVEMENT IN CAR-COUPPLINGS.

Specification forming part of Letters Patent No. **154,730**, dated September 1, 1874; application filed April 6, 1874.

To all whom it may concern:

Be it known that I, THOMAS H. VINCENT, of Detroit, in the county of Wayne and State of Michigan, have invented an Improvement in Car-Couplings, of which the following is a specification:

The nature of this invention relates to certain improvements in car-couplings; and its object is to prevent the frequent accidents to life and limb which occur from the necessity, where the ordinary link-and-pin coupling is used, of going between the cars and guiding the pin, as the draw-heads come together, to make the coupling.

Figure 1 is a perspective view of my improvement, employing the ordinary link. Fig. 2 is a longitudinal vertical section. Fig. 3 is a perspective, with the bottom plate of the draw-bar removed, taken from the under side, and showing the interior arrangement.

Like letters indicate like parts in each figure.

In the drawings, A represents a draw-bar, with the usual buffer-head and opening for the link. B is a tongue, fitted into a recess, *a*, in the upper section of the draw-bar, and pivoted near its forward end in said recess, so that its rear end will rest on the lower side of the channel into which the link is inserted. The inner end of this tongue is shaped to conform to the interior face of the end of the link. A leaf or other suitable spring, *b*, compels this tongue, so far as its inner end is concerned, to rest on the lower side of the link-channel, except when forcibly and intentionally with-

drawn, to allow the link to pass under the end of said tongue, to couple or uncouple. C is a lever, suitably fulcrumed, as shown, the shorter arm of the lever terminating in a hook, *c*, which engages with the eye *d* of a connecting-rod, the other end of which is engaged with the inner end of the tongue, so that a depression of the longer arm of the lever will raise the inner end of the tongue into the recess, so that the link may be withdrawn. D is a buffer, the face of which describes the segment of a circle, to conform in shape to the shape of the end of the link. As the latter enters the channel in the draw-bar it raises the inner end of the tongue until the inner end of the link will pass, when the tongue will, by the action of the spring *b*, drop to its original position, and retain the link, the inner end of which impinges against the curved buffer D, which is provided with the usual spring *h*.

As the operation and safety of this device are so simple and self-evident, a further description is deemed unnecessary.

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

In a draw-bar, the combination of the tongue B, spring *b*, fitted in the recess *a*, with the lever C, buffer D, and spring *h*, to engage or disengage the link, as and for the purposes set forth.

THOMAS H. VINCENT.

Witnesses:

H. S. SPRAGUE,
C. E. HUESTIS.