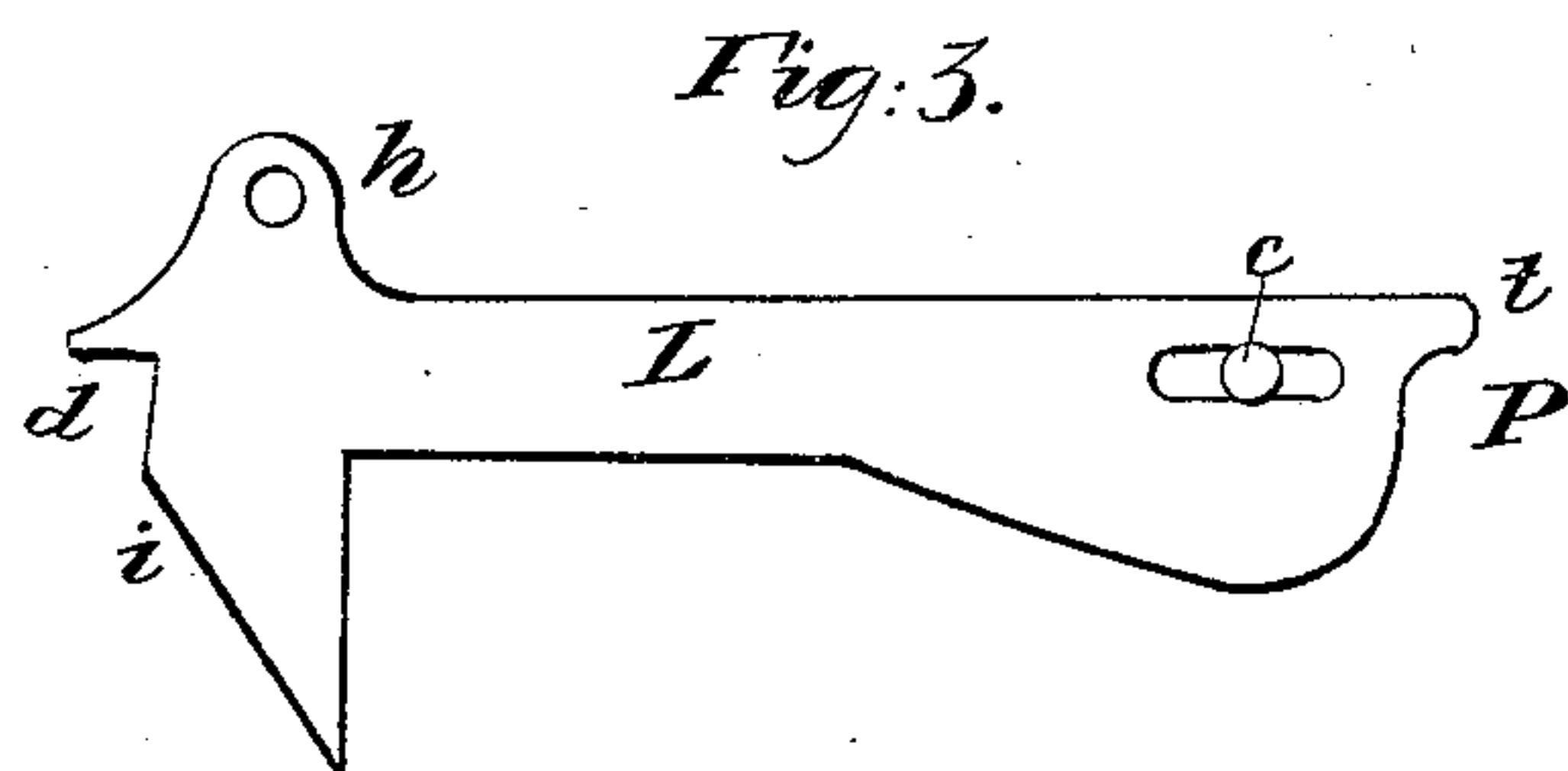
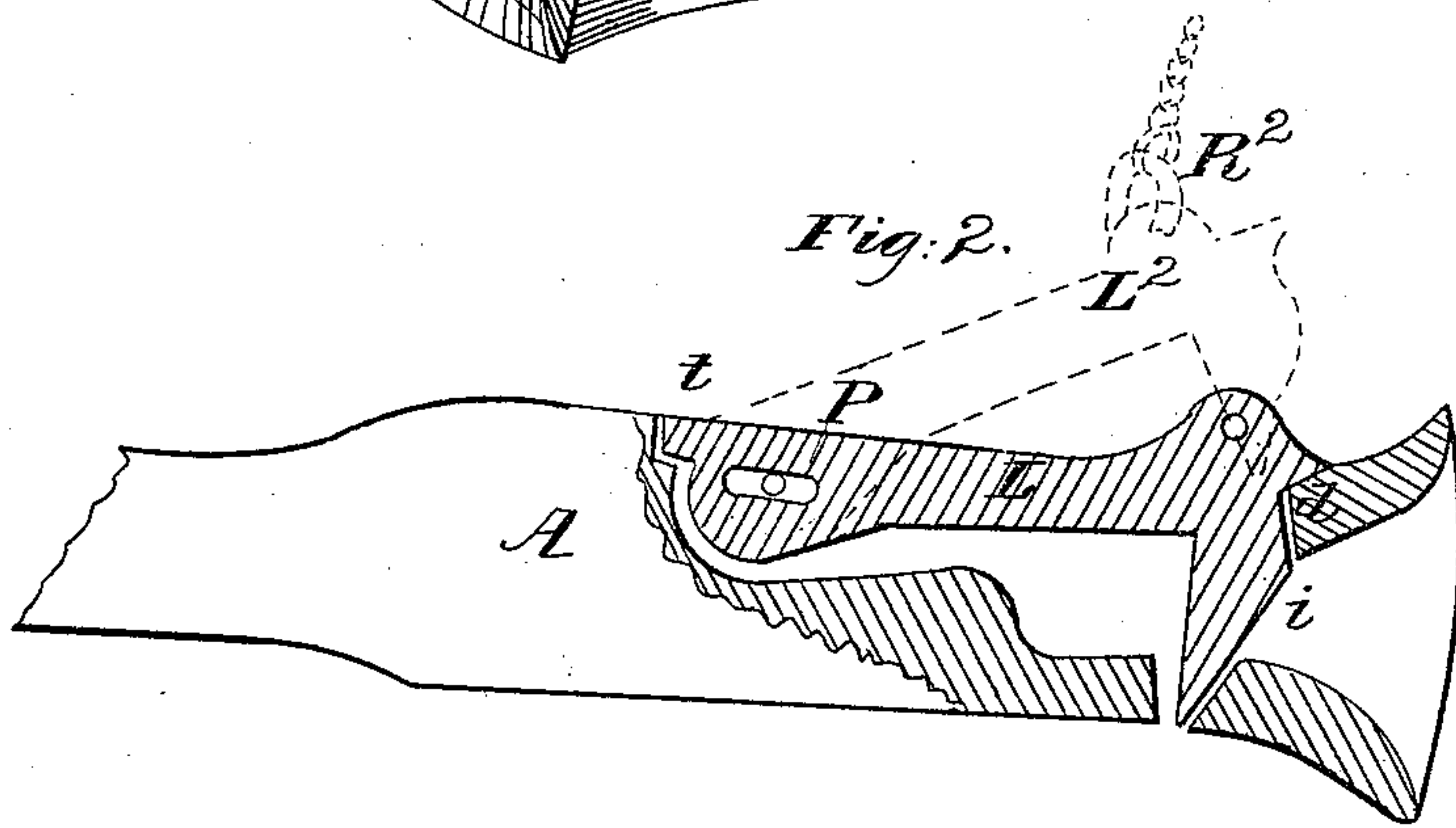
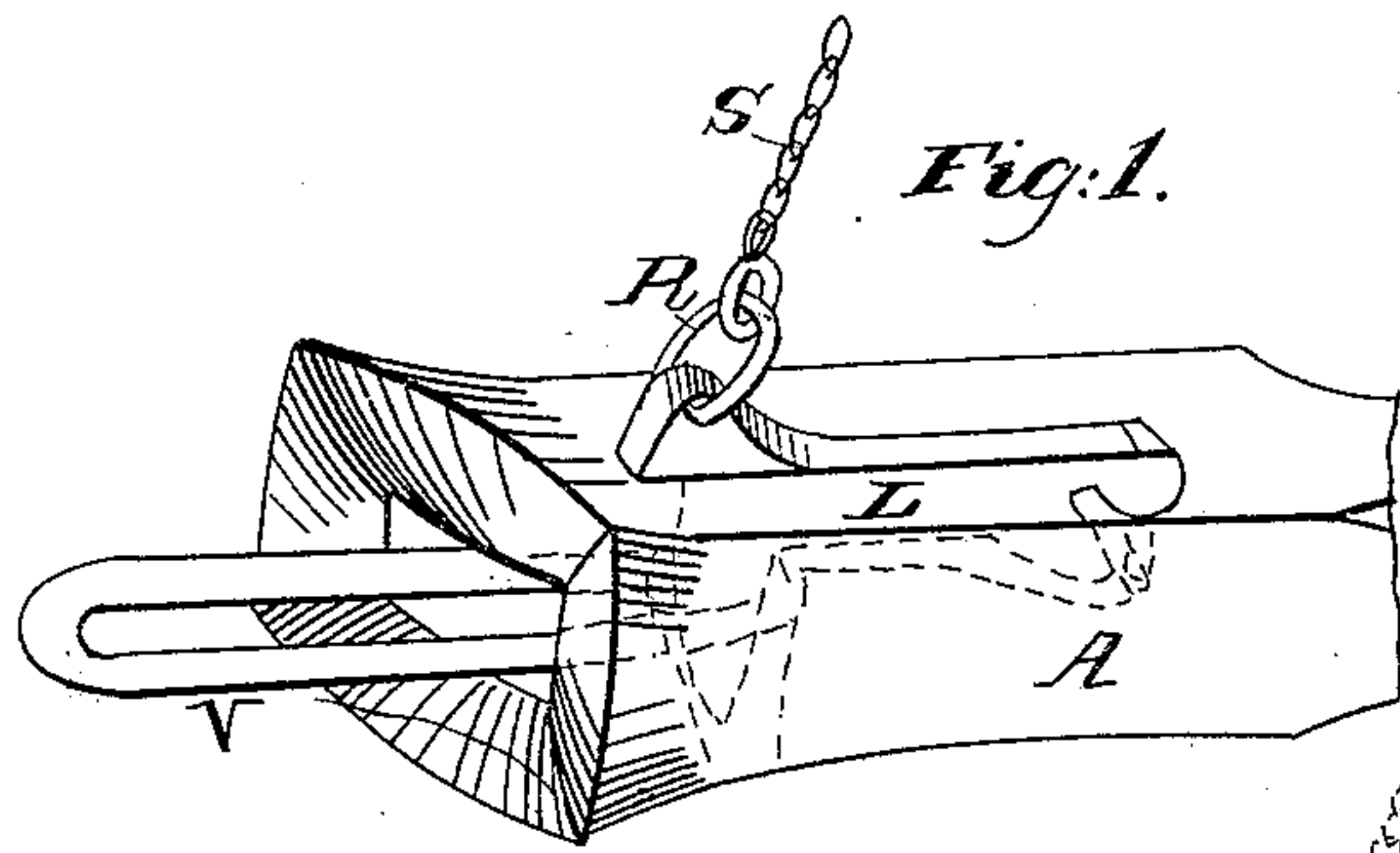


T. J. CHRISTY.
Car Coupling.

No. 53,574.

Patented Apr. 3, 1866.



Witnesses
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UNITED STATES PATENT OFFICE.

THOMAS J. CHRISTY, OF NOBLESVILLE, INDIANA.

IMPROVED RAILWAY-CAR COUPLING.

Specification forming part of Letters Patent No. 53,574, dated April 3, 1866.

To all whom it may concern:

Be it known that I, THOMAS J. CHRISTY, of Noblesville, in the county of Hamilton and State of Indiana, have invented a new and useful Improvement in Railroad-Car Couplings; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, like letters referring to like parts.

The nature of my invention consists in the use of a drop-latch in lieu of the bolt generally used for coupling, the latch being self-acting so far as coupling is concerned, and by a simple contrivance, to be hereinafter described, the uncoupling is performed without the brakeman having to go between the cars, thereby diminishing personal risk and accidents that often happen by being crushed between the meeting cars when in the act of making up a train.

To enable others skilled in the art to make and use my invention, I will now proceed to describe the same.

Figure 1 is a perspective view of the head of a coupling or draw bar, with a coupling-link in position as the same is held by my drop-latch. Fig. 2 is the same as Fig. 1, with portions of the draw-bar cut away so as to show more fully the position of my coupling drop-latch and its relation to the draw-bar; and Fig. 3 is the coupling drop-latch—the distinctive and main feature of my invention.

The draw-bar or coupling-bar A may be made of wood or iron, or part wood and part iron. It may be made in the usual way, with this difference, viz: The head should be a larger square than those in common use, so as to have a larger mouth leading to the throat where the coupling-link V enters. The necessity for this is found in the variable height of coupling-bars on different cars.

This invention being a self-coupler, by having a large bell-shaped head enables the link V always to strike within the incline which leads to the throat, where it strikes the latch L somewhere on the plane *i*, and thus drives up the latch until it reaches the position indicated by the dotted lines by Fig. 2. When the link reaches the bottom of the throat the latch L drops into it and secures the link as

firmly as though the usual bolt passed through it.

The slot in L at *p* is the pivot for the passage of a pin through the rear end of the latch, securing it in its place. This slot may be one or more inches long, so as to admit of slight forward and back motion of the latch. When the link strikes it at *i* it is moved back just enough to liberate the dovetail incline *d* on forward end of latch, and thus allow it to fly up. The slight projection *t* on the back end of L strikes a corresponding shoulder in the recess of the draw-bar, thereby preventing the latch from raising higher up than necessary.

When two cars are coupled together by this device and a slight pull made by the engine the incline *d* is brought snug into a corresponding recess, and so all danger of the latch flying up and the car becoming uncoupled is removed. This coupling-latch should be made of iron, and a projection formed on the upper forward end for the hole *h*, through which a ring, R, may pass. To this ring a S, strong cord, or small chain must be attached, which must be long enough to reach to the top of the car, when used on freight cars, where it must be securely attached. When it is desirable to uncouple the cars the brakeman can take hold of this cord or chain and, by a slight pull at the proper time, raise the latch L and lets the link V fall.

The advantages from this self-coupler are obvious. A train can be made up more expeditiously than where the ordinary couplings are used, and the brakeman is in no danger of being crushed. Cars can be detached more easily than by the use of the common couplings.

Having described my invention, what I claim is—

The drop-latch L, when the same is constructed, substantially as shown, with pivotal slot *p* and inclines *d* and *i*, each performing the offices described, all constituting a self-acting car-coupling, as set forth in the foregoing specification.

THOMAS J. CHRISTY.

Witnesses:

HENRY C. CARR,
HERBERT G. HULL.