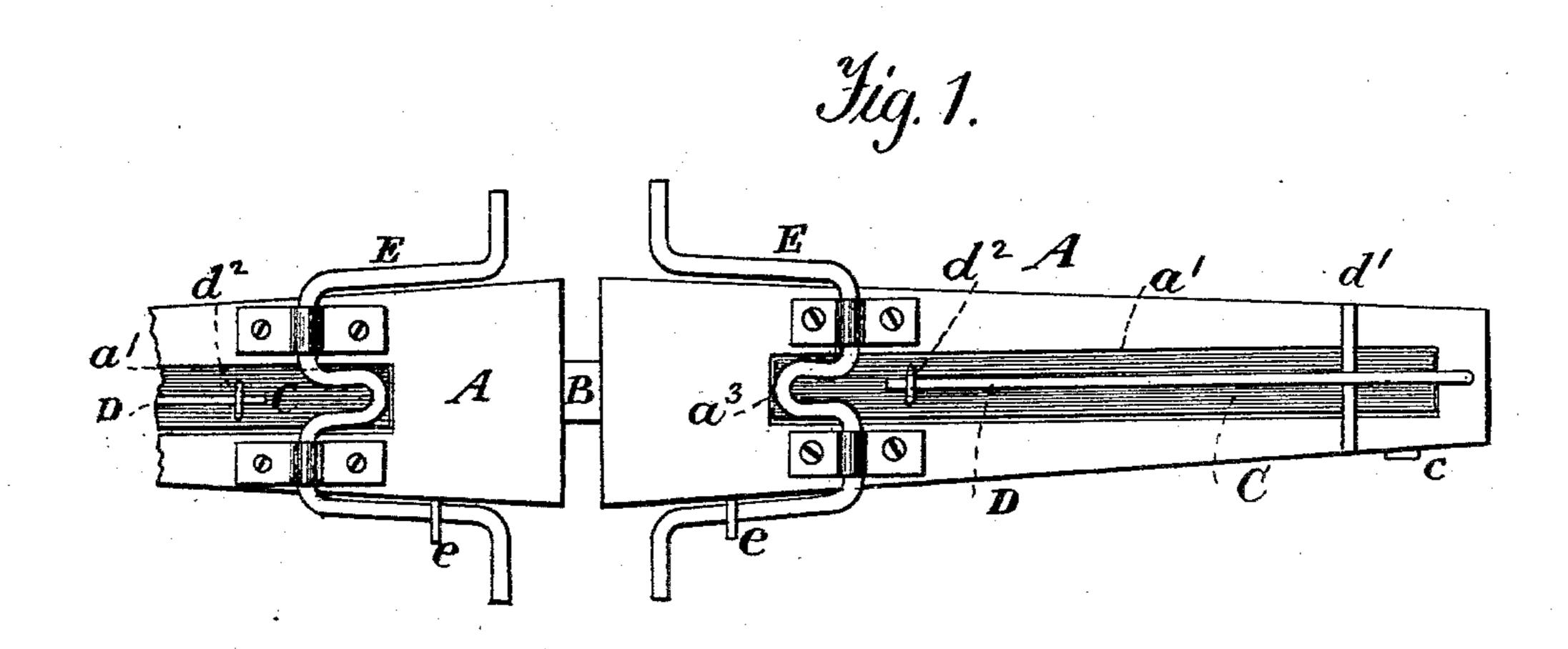
(No Model.)

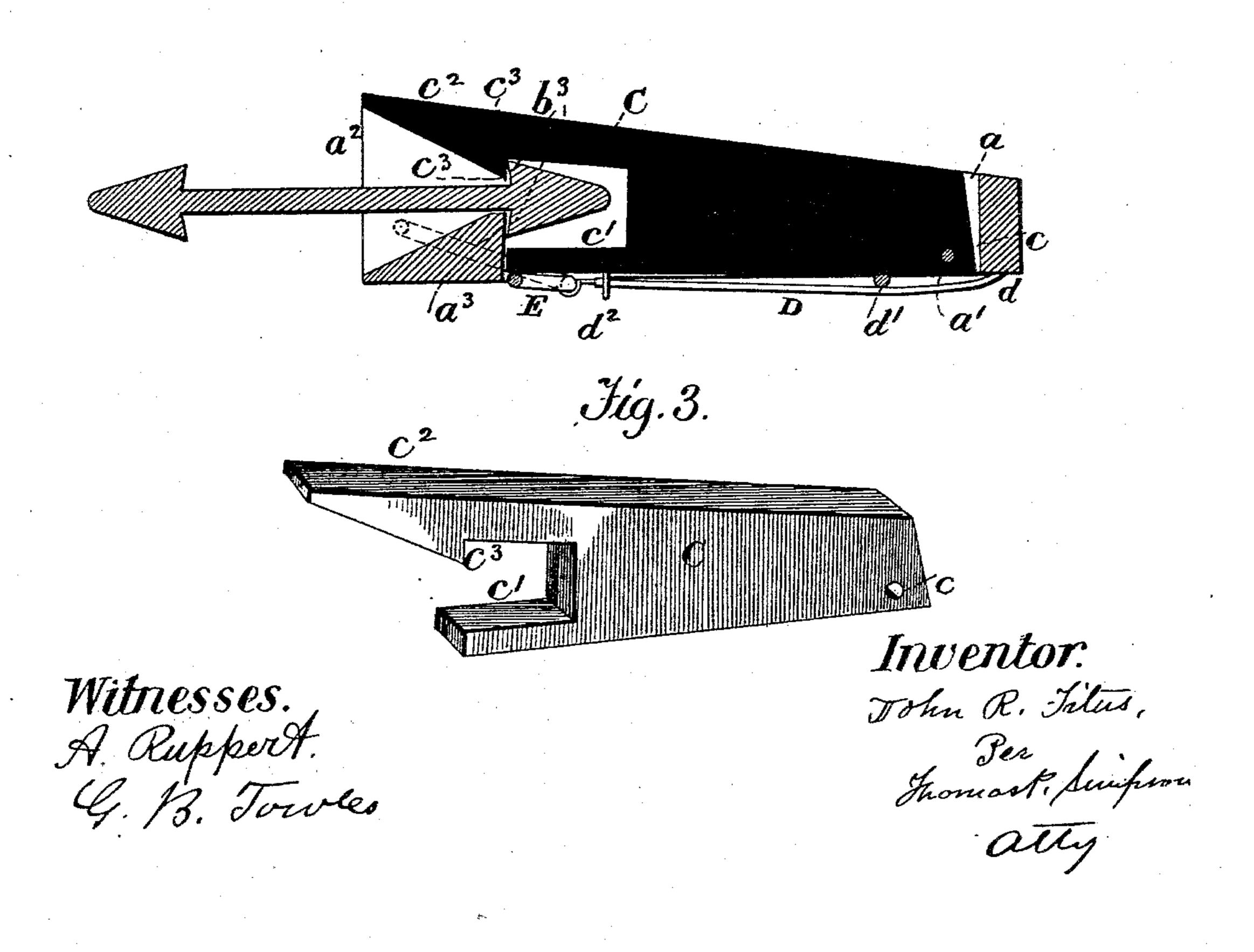
J. R. TITUS.
CAR COUPLING.

No. 414,607.

Patented Nov. 5, 1889.



Hig. 2.



United States Patent Office.

JOHN REYNOLD TITUS, OF TRYONVILLE, PENNSYLVANIA.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 414,607, dated November 5, 1889.

Application filed July 9, 1889. Serial No. 316,951. (No model.)

To all whom it may concern:

Be it known that I, John Reynold Titus, a citizen of the United States, residing at Tryonville, in the county of Crawford and State of Pennsylvania, have invented certain new and useful Improvements in 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 invention relates to automatic hook-couplers in which arrow-head links are employed; and it consists in the particular means which are used for uncoupling the link from the draw-head.

Figure 1 of the drawings is a bottom plan view; Fig. 2, a longitudinal vertical section; Fig. 3, a detail perspective view of my bifurcated link holder and lifter.

In the drawings, A represents the draw25 head, having the slots a a' in the top and bottom, and the usual flaring mouth a^2 . By this
construction there is formed a shoulder a^3 ,
which catches one of the arrow-head shoulders b^3 of the link B, while the other arrow30 head shoulder b^3 catches behind the shoulder c^3 on the arm c^2 of the pivoted link-lifter C.
The latter is pivoted at c to the draw-head, so

as to turn in the slots a a', and constructed with a subjacent arm c', by which the link may be lifted above the shoulder a^3 , while the 35 shoulder c^3 is lifted as it rises slightly above the arrow-head of the link. This allows the link to be drawn out without any obstruction.

D is a spring made fast at d to the bottom of draw-head, carried over a cross-rod d', and 40 passed at its front end through a guide-eye d^2 on the bottom of the arm c', so as to retract and hold down the link-lifter C. The crank E may be turned up a quarter-revolution from the stop e, so as to raise the lifter C and carry 45 the link up for uncoupling, while it may be turned down, when the spring will draw it tightly, so that the shoulders $a^3 c^3$ will lock with the shoulders $b^3 b^3$ of the link.

What I claim as new is—
In a car-coupling, the combination of a drawhead having the open slot a in the top, and end closed slot a' in the bottom, a bifurcated link-holder C, pivoted at its rear end, a subjacent longitudinal spring, and a lifting-crank 55 E, arranged under the front end of link-holder, all relatively arranged as shown, and for the

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

JOHN REYNOLD TITUS.

Witnesses:

CHAS. E. RICHMOND, A. B. RICHMOND.