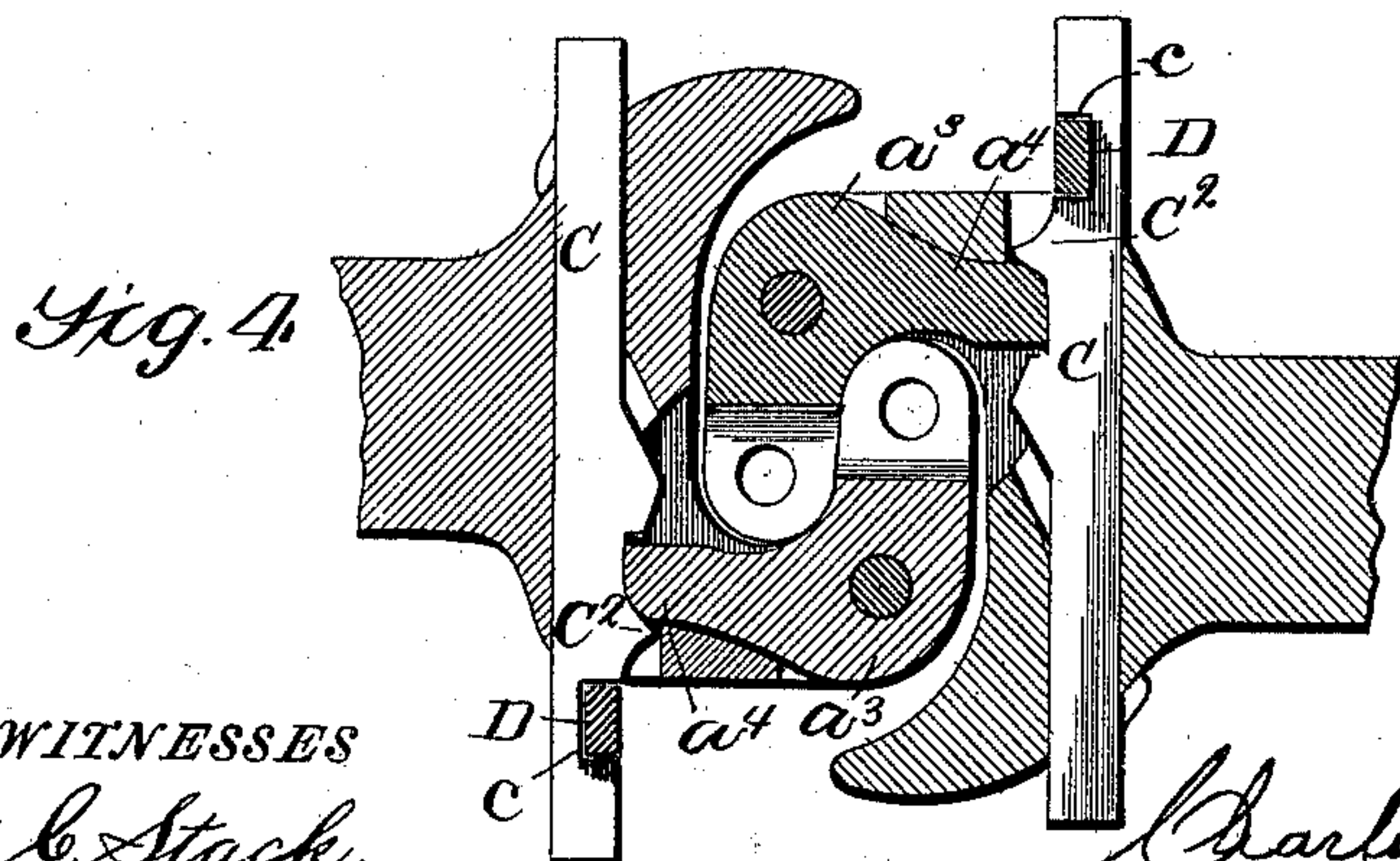
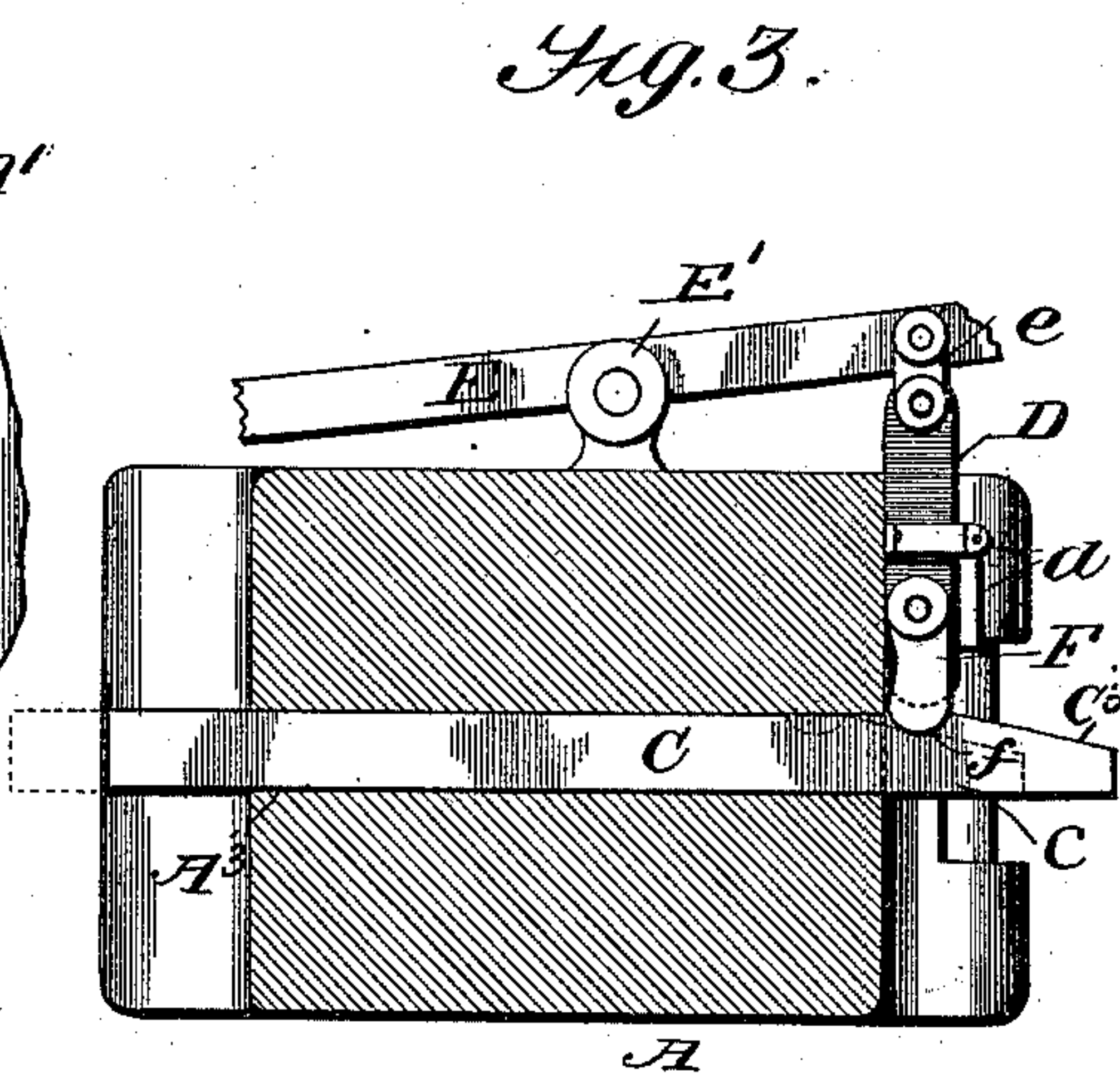
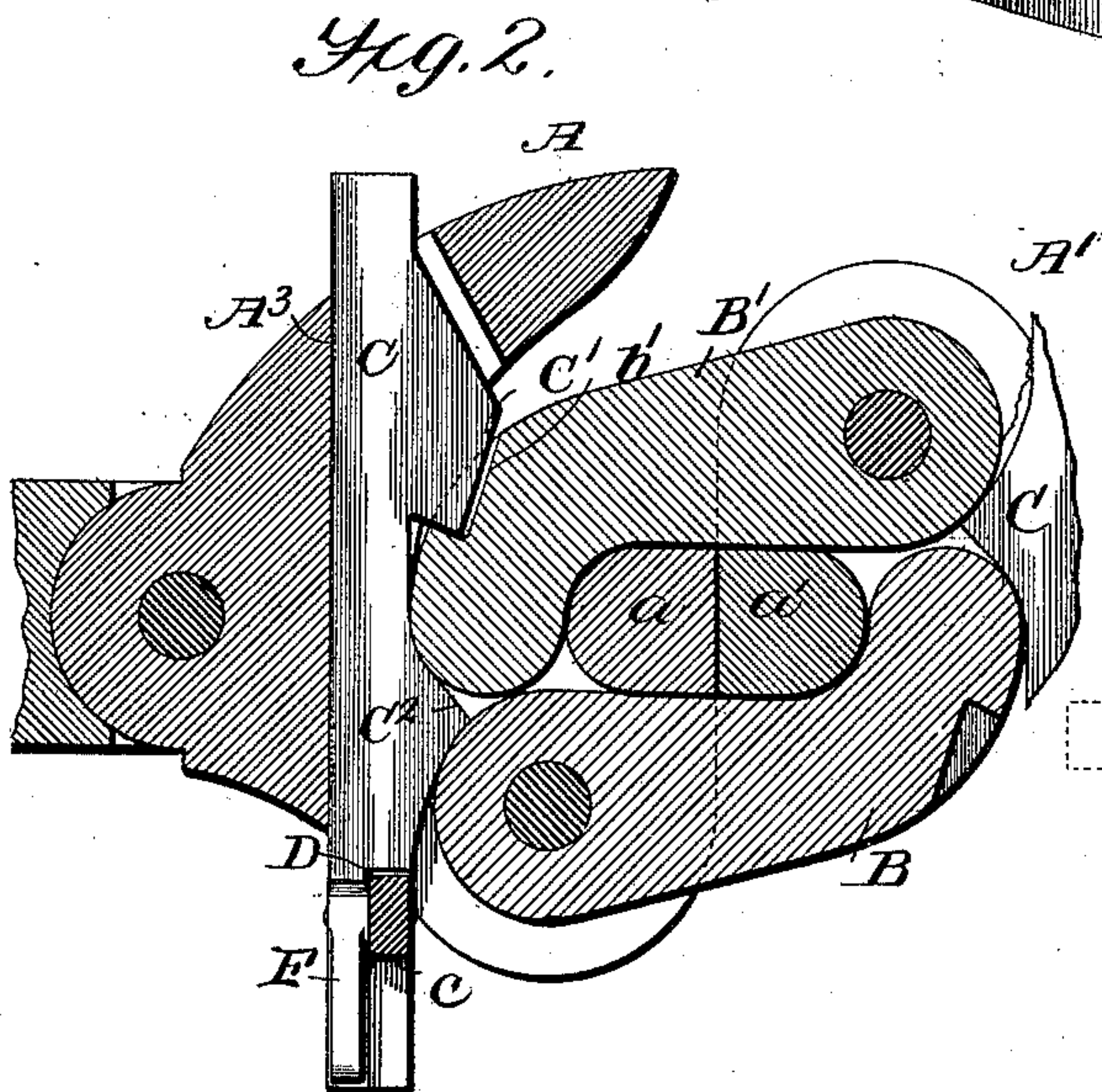
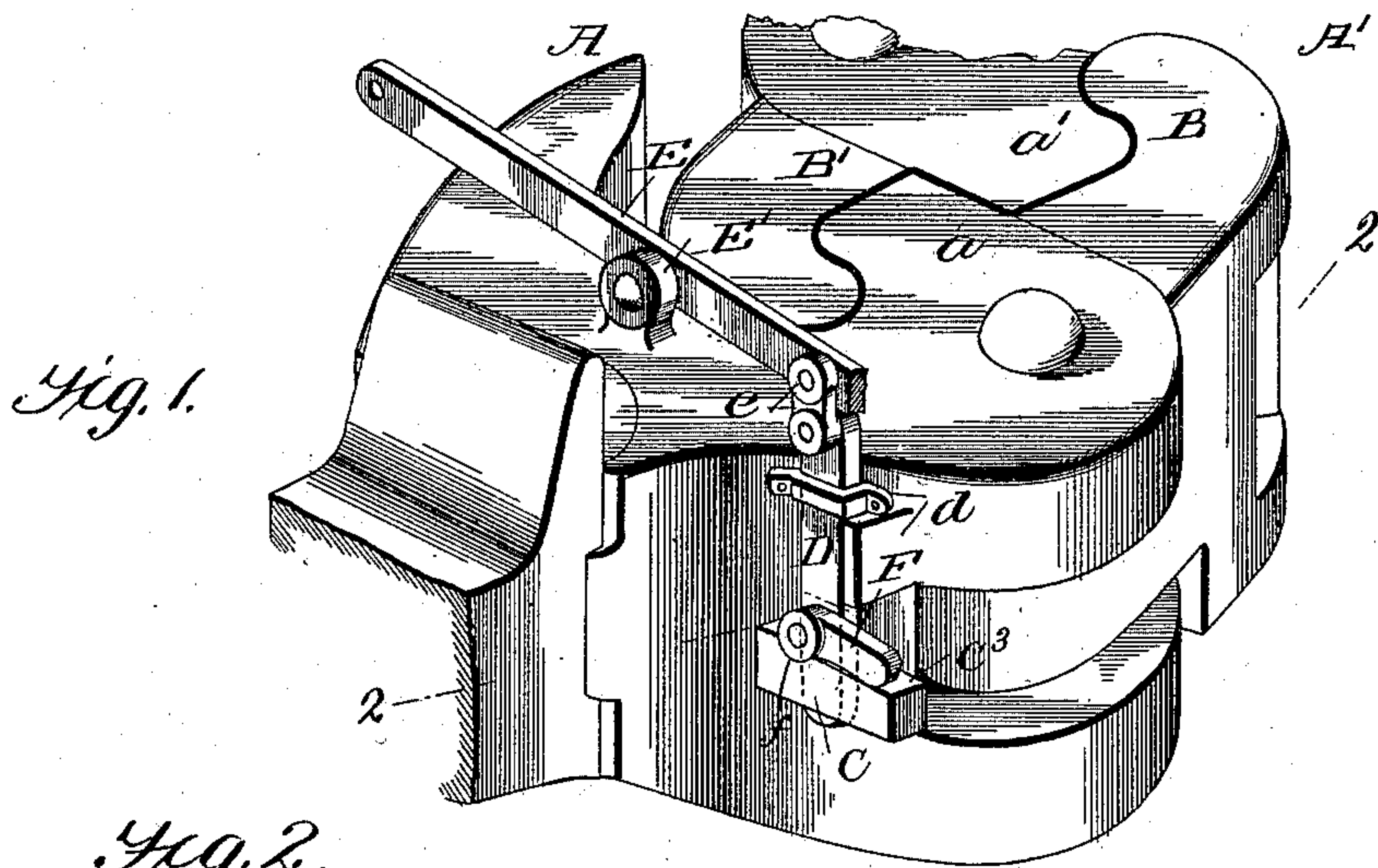


(No Model.)

C. SCHLEICHER.  
CAR COUPLING.

No. 561,528.

Patented June 2, 1896.



WITNESSES

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# UNITED STATES PATENT OFFICE.

CHARLES SCHLEICHER, OF LOUISVILLE, KENTUCKY, ASSIGNOR OF ONE-HALF TO JOHN HENRY SUMSER, OF SAME PLACE.

## CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 561,528, dated June 2, 1896.

Application filed January 20, 1896. Serial No. 576,191. (No model.)

*To all whom it may concern:*

Be it known that I, CHARLES SCHLEICHER, of Louisville, in the county of Jefferson and State of Kentucky, have invented certain new and useful Improvements in Car-Couplings; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form part of this specification.

This invention is an improvement in car-couplings of the twin-jaw and Janney types and is an improved locking device for the swinging jaws thereof.

It is especially designed for use in couplings such as are shown in my application filed January 14, 1896, Serial No. 575,497; and it consists in the construction and combination of parts summarized in the claims and illustrated in the drawings, in which—

Figure 1 is a rear perspective view of part of a coupling, showing my improved locking device locked. Fig. 2 is a horizontal section on line 2 2, Fig. 1. Fig. 3 is a detail transverse section looking from the rear, showing the device in position to be locked in full lines and unlocked in dotted lines. Fig. 4 is a detail horizontal section showing the device as applied to ordinary Janney type of couplings.

In the drawings, A designates a draw-bar constructed with a rigid hook *a* and a swinging hook B, pivoted to the side of the rigid hook. A' designates part of a similar but opposite draw-bar having a rigid hook *a'* and a swinging hook B', which, as shown, engages with the rigid hook *a* of draw-bar A. These parts may be constructed substantially like the improved couplings shown in my application for patent above referred to, and therefore need no further description herein.

C designates a lock-bar which lies in a transverse horizontal slot A<sup>3</sup> in draw-bar A, just in rear of and opening into a jaw-recess, so that the lock-bar can be engaged by the inner end of the swinging hook B'. This locking-bar has on its front side a beveled catch C', which is adapted to engage a recess *b'* in the end of jaw B' when the latter is engaged with hook *a*, as shown in Fig. 1, and if the lock-bar be

then locked so that it cannot move longitudinally the jaw B' will be locked to draw-bar A, as is evident from the drawings. The lock-bar may also have another projection C<sup>2</sup> on its front edge, which will be struck by the entering end of the jaw B' in the act of coupling, and thus the lock-bar be moved into locking position. One end of bar C projects outside the draw-bar in rear of the head thereof and has a vertical slot or notch *c* in its front face, into which drops a bolt D. This bolt is retained in a vertical position above lock-bar C by suitable guides *d* on the sides of the draw-bar, and the upper end of bolt D is connected by a link *e* to end of a lever E, fulcrumed near its center on a stud E' on top of the draw-bar, as shown.

To the bolt D, above lock-bar C, is pivoted a dog F, which lies on top of the lock-bar in a horizontal position, Fig. 1, when the lock-bar is locked; but when lever E is depressed so as to lift bolt D dog F is brought to a vertical position and its lower end rests in a shallow notch *f* in the upper edge of lock-bar C, as shown in full lines, Fig. 3, and in this position upholds bolt D so that it cannot engage slot *c*. Then when the lock-bar is moved inward by the uncoupling movement of the swinging jaw B' dog F remains in upright position and the lock-bar slips thereunder. The lock-bar is thus left in position to be moved back into locking position freely. When the lock-bar is moved back, the lower end of dog F, resting on the lock-bar, is moved to one side until it ceases to uphold bolt D, which then drops by gravity onto lock-bar C and into slot *c*, securely locking the bar.

The drawings make further explanation of the operation of the device unnecessary.

If desired to reduce the friction between the dog and lock-bar, the rear end of the lock-bar may be tapered downward, as at C<sup>3</sup>, and the lower end of the dog rounded, as shown, so that the unlocking movement of the bar is not seriously retarded by the weight of the dog, bolt, and lever thereon, and the locking movement of the bar throws the dog out of perpendicular with more certainty.

Fig. 4 shows the locking device adapted to an ordinary Janney-type coupling, in which, instead of a rigid jaw *a* and swinging jaw



B, a swinging jaw  $a^3$ , having a locking-shank  $a^4$ , is used.

The end of shank  $a^4$  strikes the locking-bar and is retained thereby in substantially the same manner that jaw B' would be retained.

Having thus described my invention, what I therefore claim as new, and desire to secure by Letters Patent thereon, is—

1. In a car-coupling the combination of a draw-bar and a swinging jaw, with a locking-bar, a bolt adapted to lock said bar, and a dog pivoted to the bolt and adapted to hold the same out of engagement with the locking-bar when it is desired to uncouple, substantially as described.

2. In a swinging-jaw-locking device for car-couplings the combination of the draw-bar, the transverse locking-bar having a slot in one end, a bolt adapted to engage said slot,

means for raising said bolt, and a dog pivoted to the bolt and adapted to uphold it when once raised so as to leave the locking-bar free to be moved, substantially as described.

3. In a swinging-jaw-locking device for car-couplings the combination of the draw-bar, a transverse locking-bar C, having a slot  $c$ , and tapered end; a vertically-movable bolt D, means for raising said bolt, and a swinging dog F pivoted to said bolt, all substantially as and for the purpose set forth.

In testimony that I claim the foregoing as my own I affix my signature in presence of two witnesses.

CHARLES SCHLEICHER.

Witnesses:

CLAUDE W. JOHNSON,  
A. G. RONALD.