

H. S. SHEPARDSON.

Car Coupling.

No. 50,882.

Patented Nov. 7. 1865.

Fig. 1.

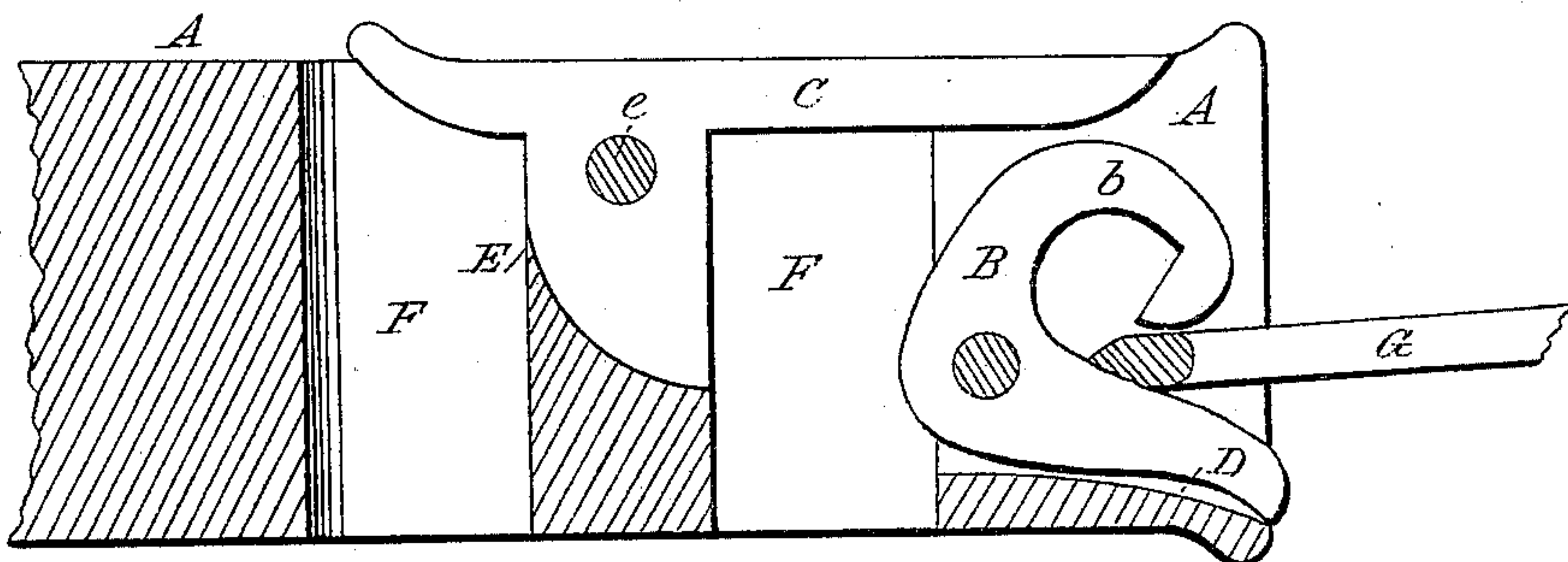


Fig. 2.

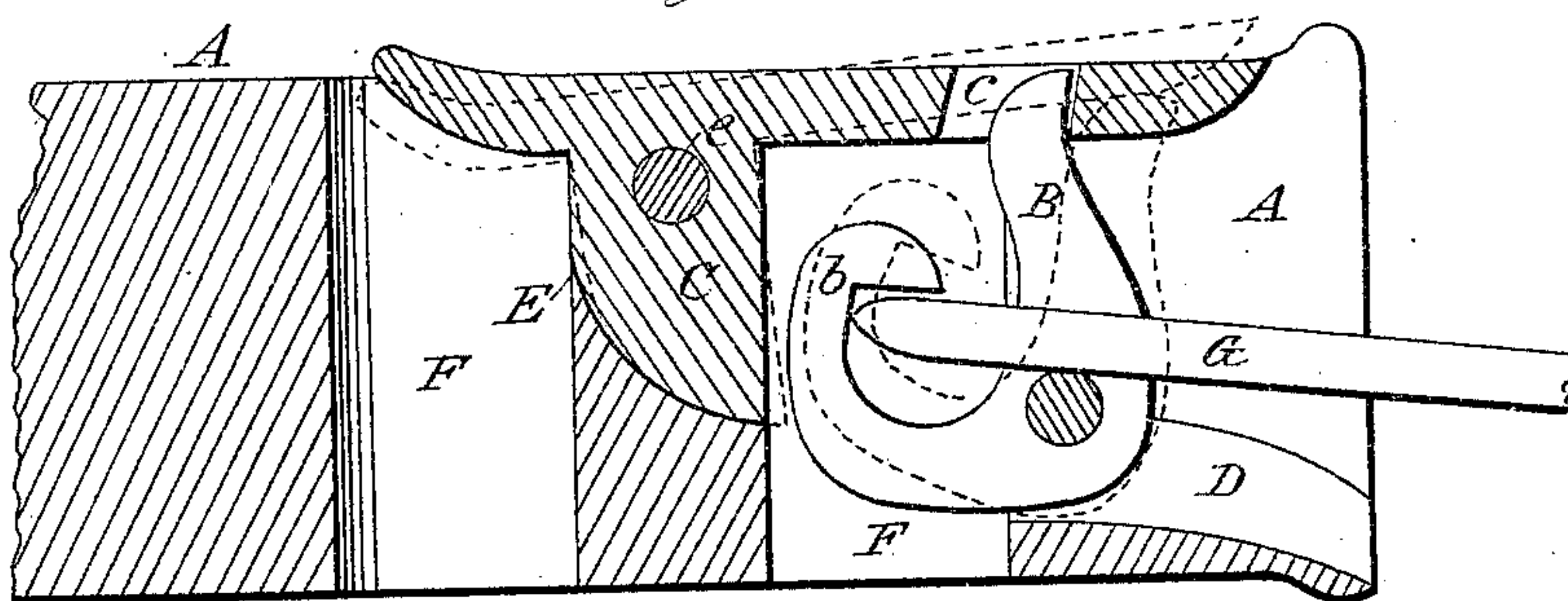


Fig. 4.

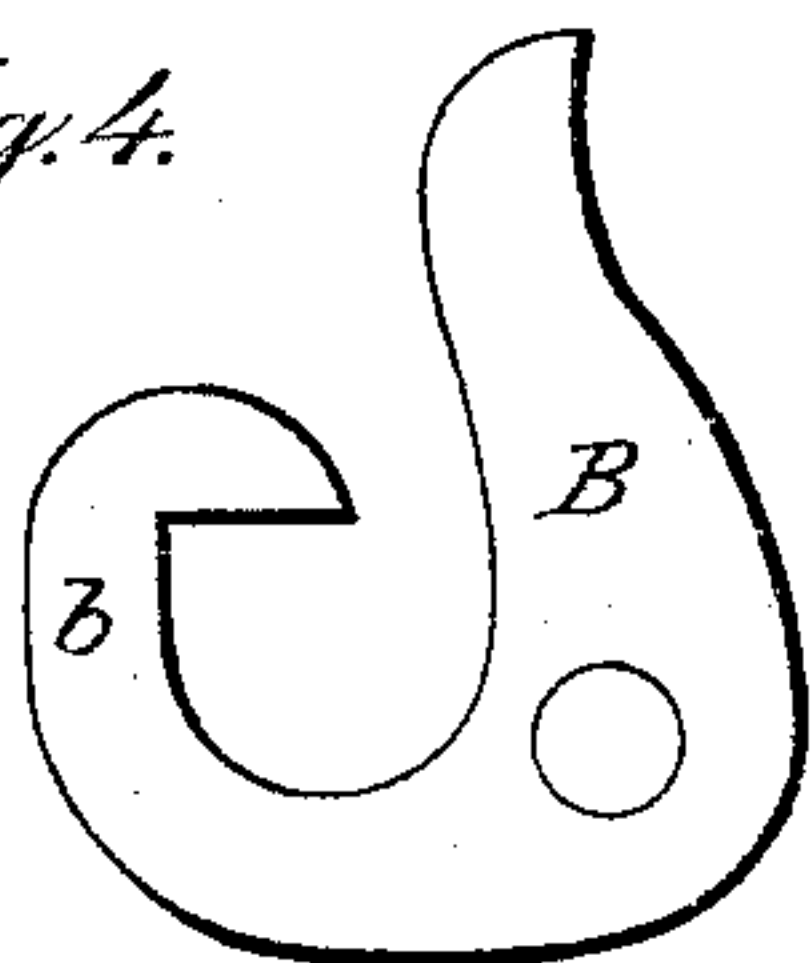


Fig. 3.

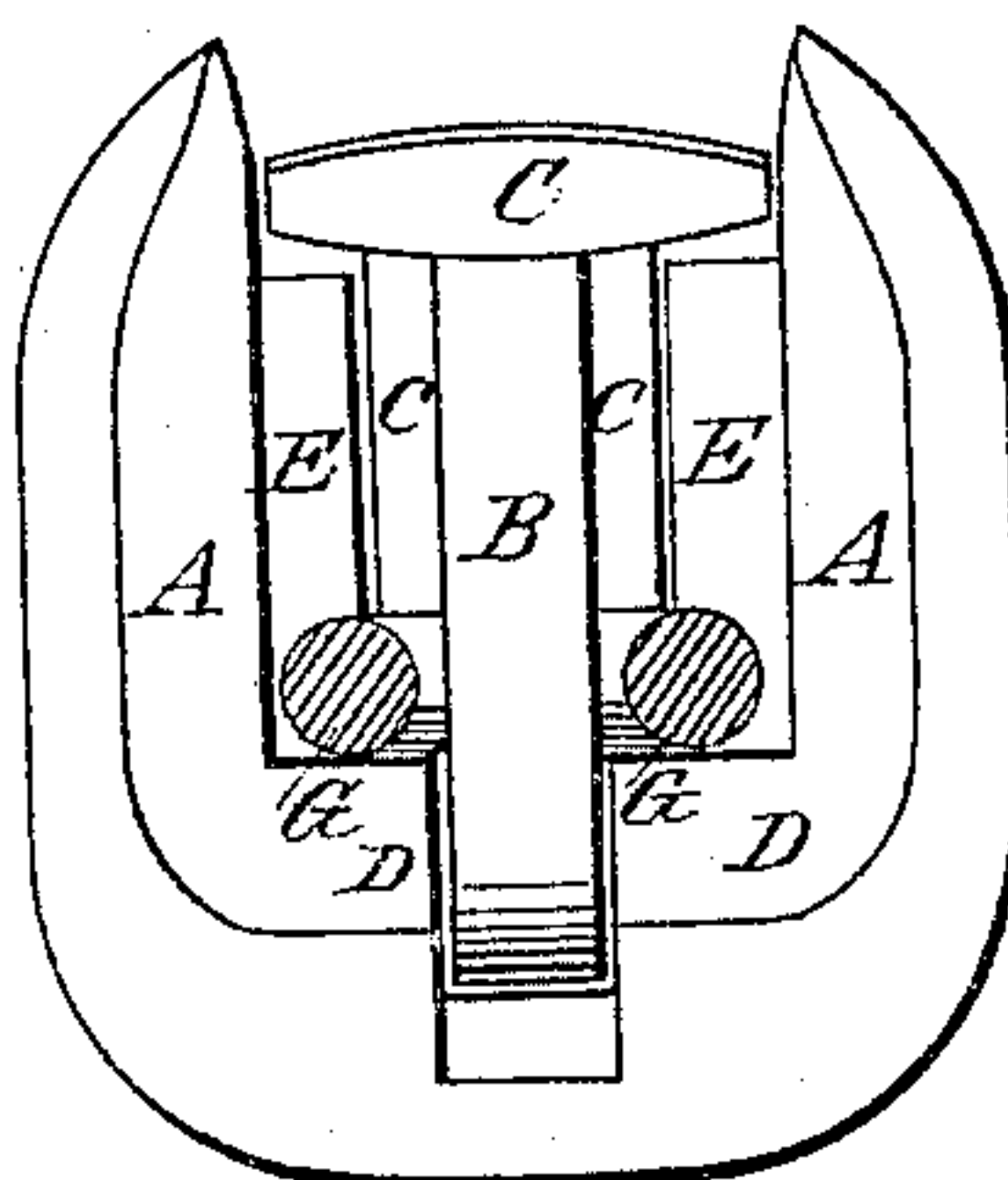
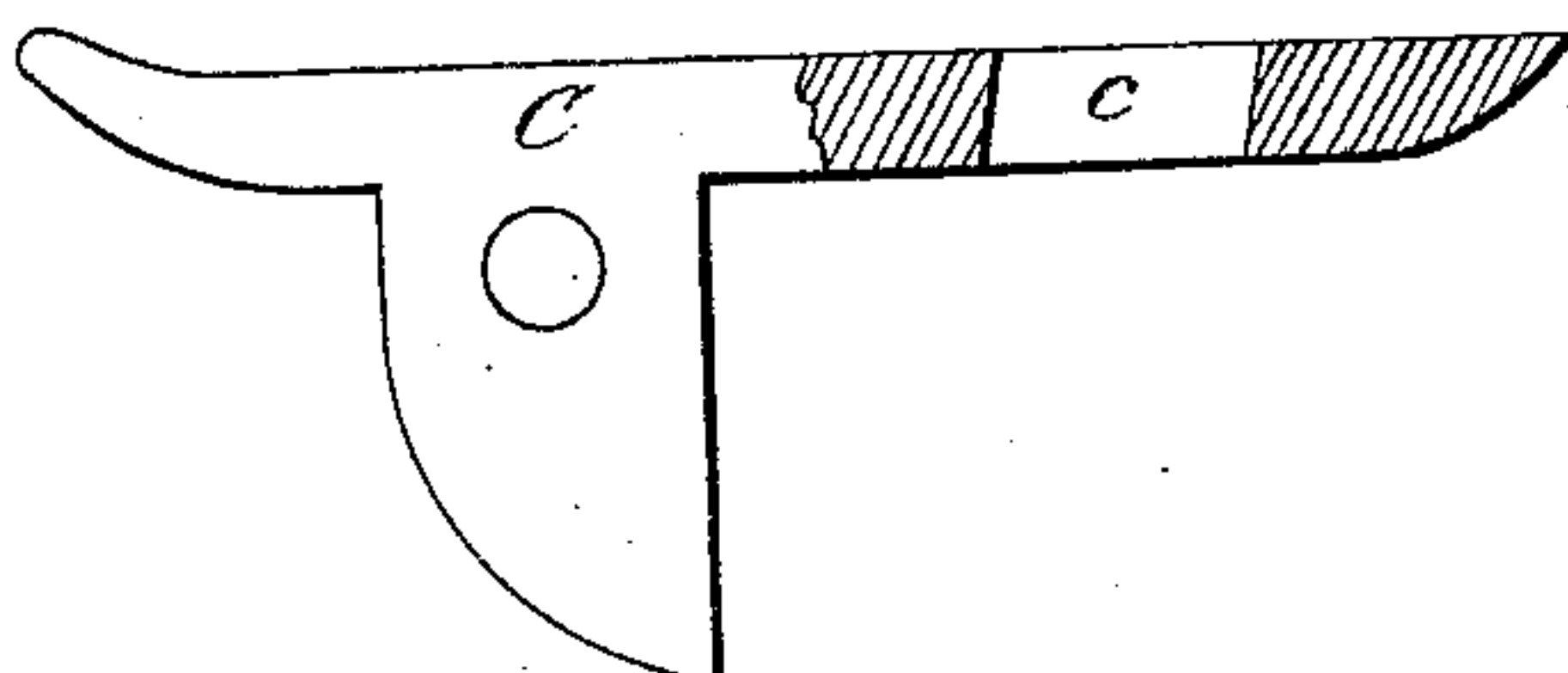


Fig. 5.



Witnesses:

Andrew Muldrey
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UNITED STATES PATENT OFFICE.

HENRY S. SHEPARDSON, OF SHELBURNE FALLS, MASSACHUSETTS, ASSIGNOR
TO H. S. SHEPARDSON & CO.

IMPROVED CAR-COUPLING.

Specification forming part of Letters Patent No. 50,882, dated November 7, 1865.

To all whom it may concern:

Be it known that I, HENRY S. SHEPARDSON, of Shelburne Falls, in the county of Franklin and State of Massachusetts, have invented a new and Improved Shackle for Railroad-Cars; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, in which—

Figure 1 is a vertical longitudinal section, showing the shackle open. Fig. 2 is a vertical longitudinal section, showing the shackle closed. Fig. 3 is an end elevation. Fig. 4 represents the shackle-bolt. Fig. 5 represents the shackle-latch.

The nature of my invention consists in such a construction of devices forming a self-locking shackle for railroad-cars as shall require no springs nor weights other than the weights of the various parts to operate it.

That others may understand the construction and operation of my invention, I will more particularly describe it.

A is the case containing the working parts of my device, which consist of the shackle-bolt B and the latch C.

The case A may be constructed in any suitable way, though I prefer to cast it in one piece of iron. It should have the usual flaring mouth for the easy and sure admission of the coupling-link. Within the mouth are the shoulders D D, Figs. 2 and 3, with a channel between them, in which the shackle-bolt rests when thrown forward, as in Fig. 1, so that the upper surface of the bolt is about flush with the surface of the said shoulders. Behind the shoulders D D are two other shoulders, E E, between which the shank of the latch C is pivoted by the bolt e. I also, in constructing the case A, leave or form two vertical cavities, F, extending from the top through the bottom of the case, for the purpose of allowing dirt, &c., to drop through and not to clog the movements of the latch or shackle-bolt.

The shackle-bolt B, I prefer to make of the form shown in the drawings, though it is not required that those exact proportions should be observed. The tail b is bent over forward, so that it will catch the end of the link G when it is inserted and confine it, so that as the

link continues to be pushed in by the approach of the car the shackle-bolt will be forced to erect itself, as in Fig. 2, the tongue passing through the link in so doing. As the bolt rises up it strikes the under side of the latch C and pushes its forward end up also until the slot c comes over the end of the bolt B and allows the latch to fall and confine the bolt in its upright position. In inserting the link, (the end of which has been somewhat elongated, as shown, by flattening,) the end of the same passes under the tail b; but when the bolt B has assumed an upright position the flattened end of the link will no longer allow it to pass out from under the tail b, for when it was inserted it was in an edgewise position; but now it presents its side, which is much broader than the edge, so there can be no danger of the latch C being thrown up at any time by an accidental bound of the link. The link is also held in a position nearly horizontal when the cars are uncoupled, as shown in Fig. 2, and there can therefore be no danger of missing the shackle of the car to be coupled. The vertical tang of the latch C is thrown forward at its lower end when the latch is raised, and the proportions of the parts may be such that the said lower end of the tang will strike shackle-bolt or some portion of the tail b if the latch is raised higher than necessary to allow the bolt to pass under it.

The operation of my invention is so obvious that no further description of it is necessary.

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

1. The combination of the shackle-bolt B and latch C with the shackle-case of a railroad-car, substantially as described.

2. The shackle-bolt B, when constructed with the tail b, substantially as and for the purpose described.

3. The shackle-case A, when provided with the openings F, in combination with the shackle-bolt B and latch C.

H. S. SHEPARDSON.

Witnesses:

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