

E. W. Chadwick,
Car Coupling,
No. 81,067 *Patented Aug. 18, 1868*

Fig. 1.

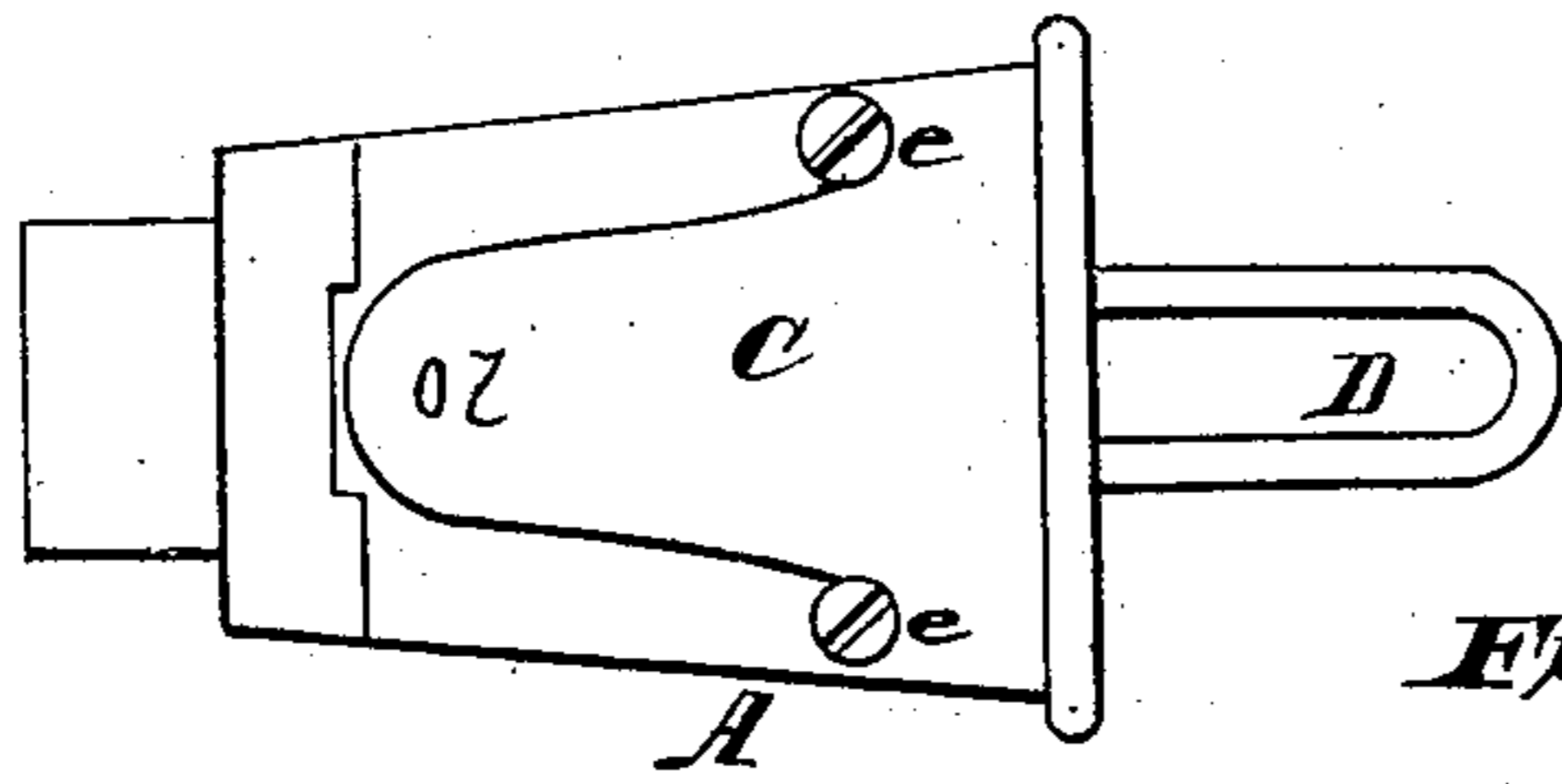


Fig. 5.

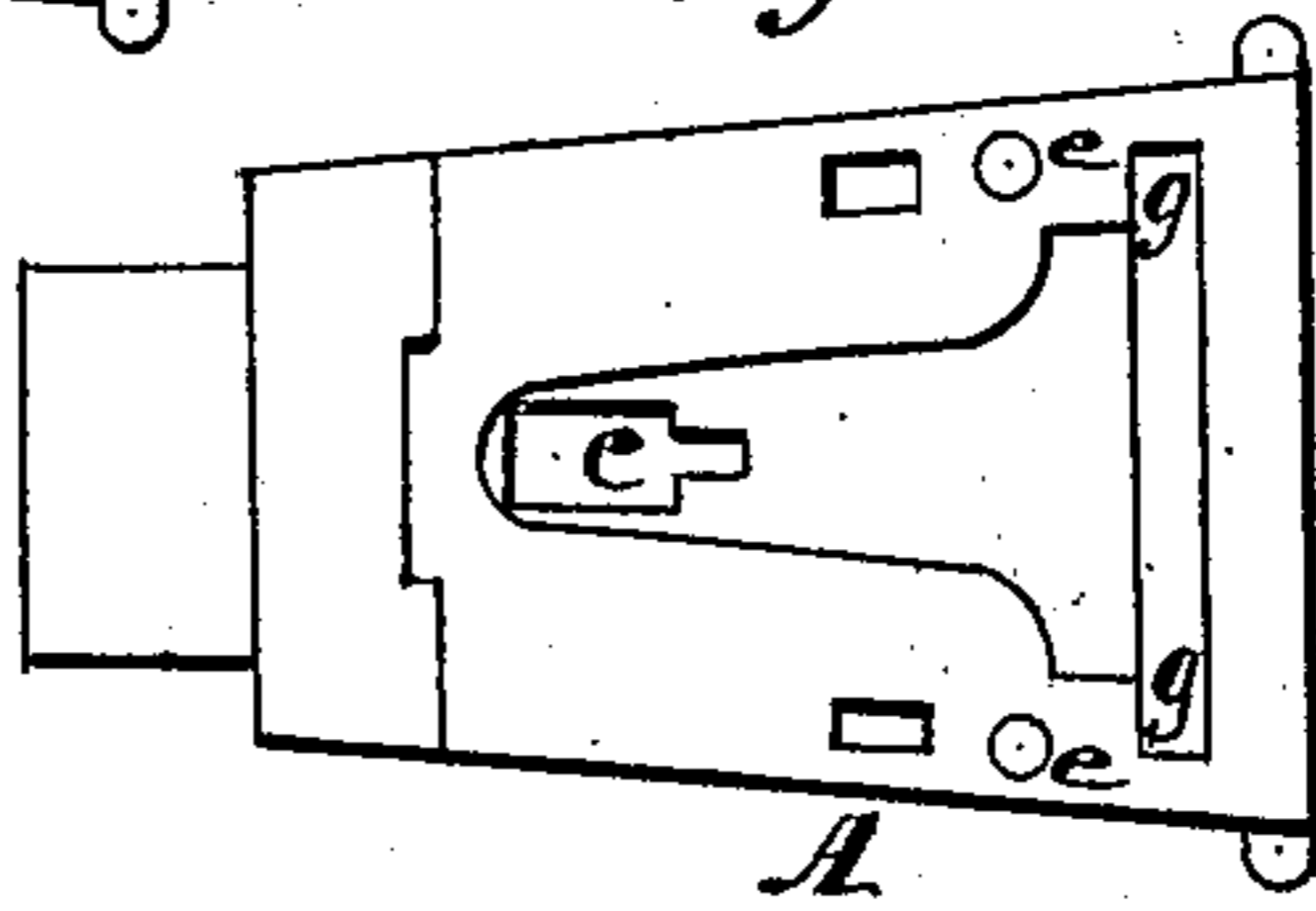


Fig. 2.

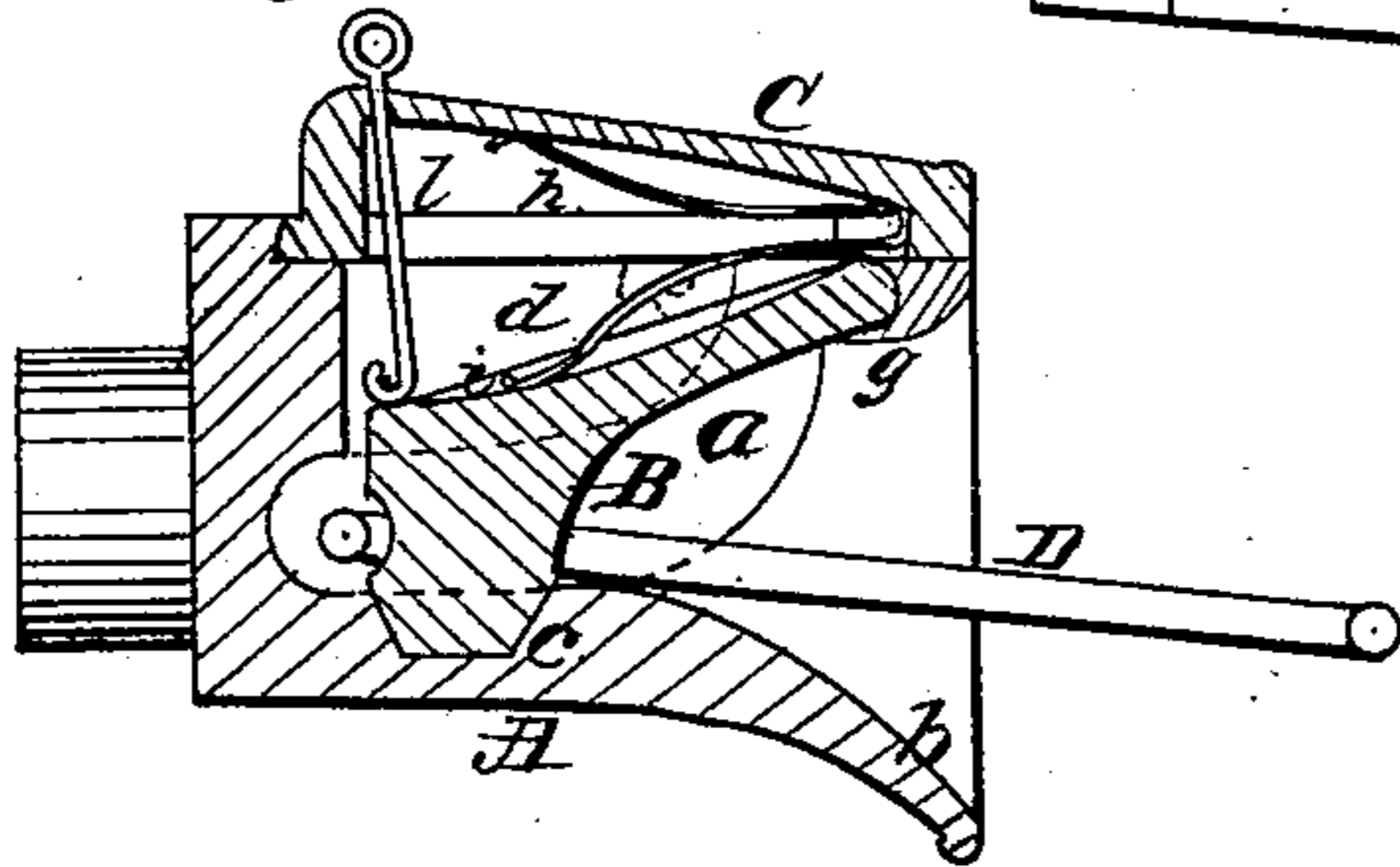


Fig. 3.

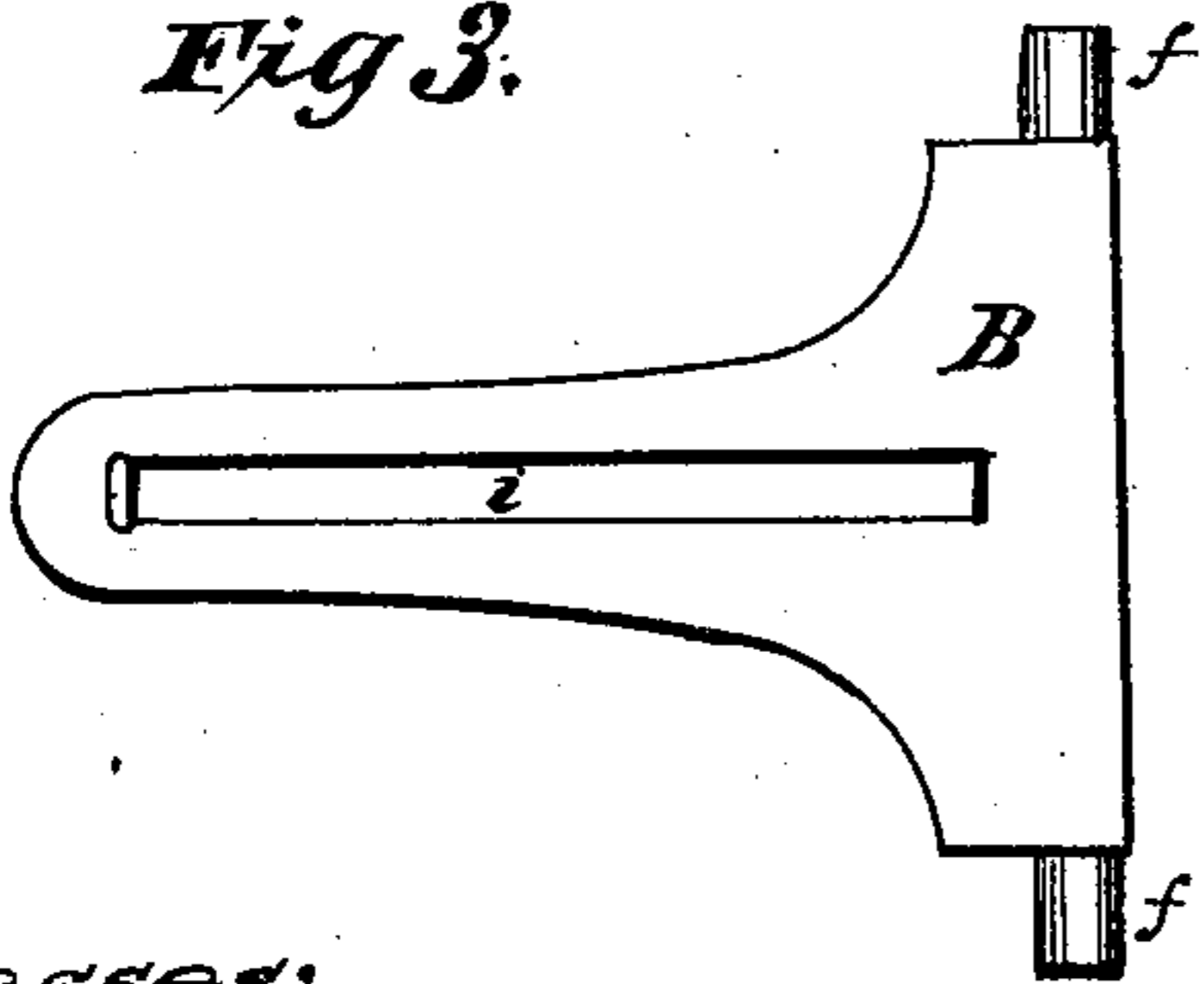
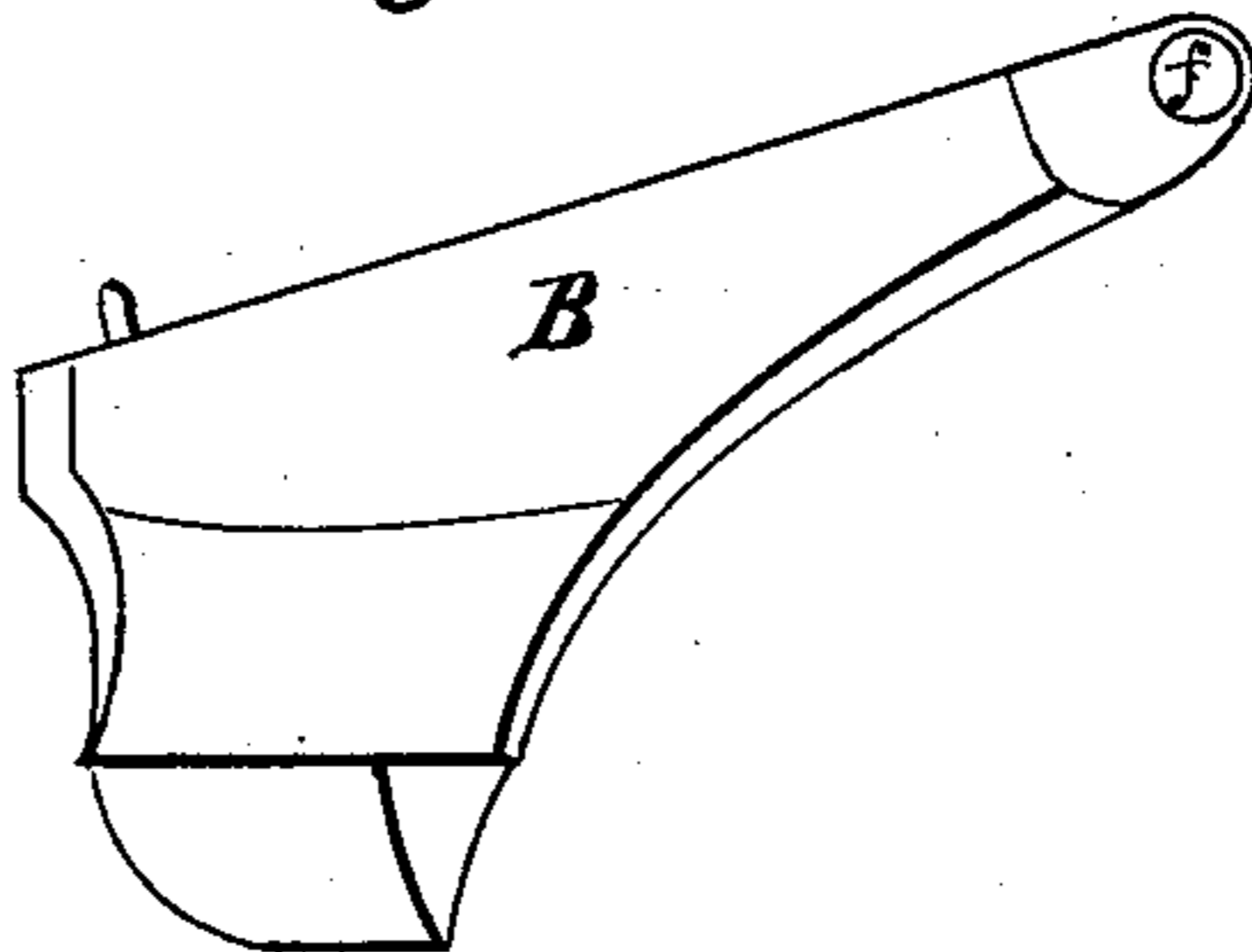


Fig. 4.



Witnesses:
J. M. Piper
J. R. Snow

Inventor:
Edward W. Chadwick.
by his attorney.
R. M. Ledy

United States Patent Office.

EDWARD W. CHADWICK, OF EDGARTOWN, MASSACHUSETTS, ASSIGNOR TO
HIMSELF AND WILLIAM P. CHADWICK, OF SAME PLACE.

Letters Patent No. 81,067, dated August 18, 1868.

IMPROVED CAR-COUPLING.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL PERSONS TO WHOM THESE PRESENTS MAY COME:

Be it known that I, EDWARD W. CHADWICK, of Edgartown, in the county of Dukes, and State of Massachusetts, have invented an Improved Car-Coupling; and I do hereby declare the same to be fully described in the following specification, and represented in the accompanying drawings, of which—

Figure 1 is a top view, and

Figure 2 a vertical and longitudinal section of such coupling and its link.

In such drawings, A denotes a railway-carriage draw-bar, provided with a link-receiving chamber, *a*, having a trumpet-shaped or flaring mouth, *b*, and also a recess or catch-socket, *c*, extending from the said chamber, and formed in manner as represented.

A lever-catch, B, shaped as shown in top view in Figure 3, and in side elevation in Figure 4, is applied to the draw-bar so as to extend into the chamber *a*, in manner as shown in fig. 2.

A cap, C, provided with a spring-receiving chamber, *d*, is arranged in the top of the draw-bar, and fixed thereto by screws, *e e*.

This cap constitutes a cover to the open chamber *a* and the catch-lever, and as a cap to its journals, *f f*, which are arranged within bearings, *g g*, made in the draw-bar, (see Figure 5, which is a top view of the draw-bar, and as it appears without the cap, the catch-lever, and its operative spring, *h*.) The said spring, *h*, is arranged in the chamber *d*, and in a groove, *i*, made in the top of the catch-lever. Such spring is for the purpose of depressing the lever and holding it within the catch-recess *e*. An arm, *l*, extended up from the lever-catch, and through a hole, *m*, in the cap C, enables a person, by means of a rope or chain fixed to such arm, to raise the catch-lever out of the link D, when it may be desirable to unshackle the two. The purpose of the recess *e* is to so support the lever-catch B under the strain of the link, as to prevent such strain from breaking the journals of the catch.

When the link enters the mouth and passes into the chamber of the draw-bar, such link will strike against the inclined lever-catch and force the same upward, and pass beyond it far enough for the spring *h* to depress the catch into the link and the recess *e e*. The link will then be coupled to the draw-bar.

The great strains brought on the catch-bar by the link are liable to break off or bend a bolt, when used as a centre or fulcrum to the catch-lever. When bent in its hole, it often becomes difficult to extract the bolt. With my mode of making the catch-lever, and supporting its fulcrum, no bolt becomes necessary, and as the journals of the lever are protected by the catch-recess from being overstrained, and are covered by the cap, we have not only a means of preserving the lever from injury, but in case of its becoming broken or bent, we can easily remove, and substitute another for it, such lever with its journals being cast in one piece of metal. The cap also serves as a protection for the spring *h*.

I make no claim to the combination of a catch-lever with a chambered draw-bar, as I am aware that such is old. Nor do I claim the arrangement and combination of the recess *e* with the chambered draw-bar and its catch-lever.

The spring *h* is so connected with the chambered cap C as to be removable therewith, the same serving to enable the spring to be raised off the catch with the cap, when it may be desirable to gain ready access to the catch for its removal.

What I claim as my invention is as follows:

The arrangement and combination of the chambered cap C with the chambered draw-bar A, the spring *h*, and the lever-catch B, made as described.

EDWARD W. CHADWICK.

Witnesses:

HEBRON VINCENT,

DAVID J. CHADWICK.