

S. OTT.
Car-Couplings.

No. 158,973.

Patented Jan. 19, 1875.

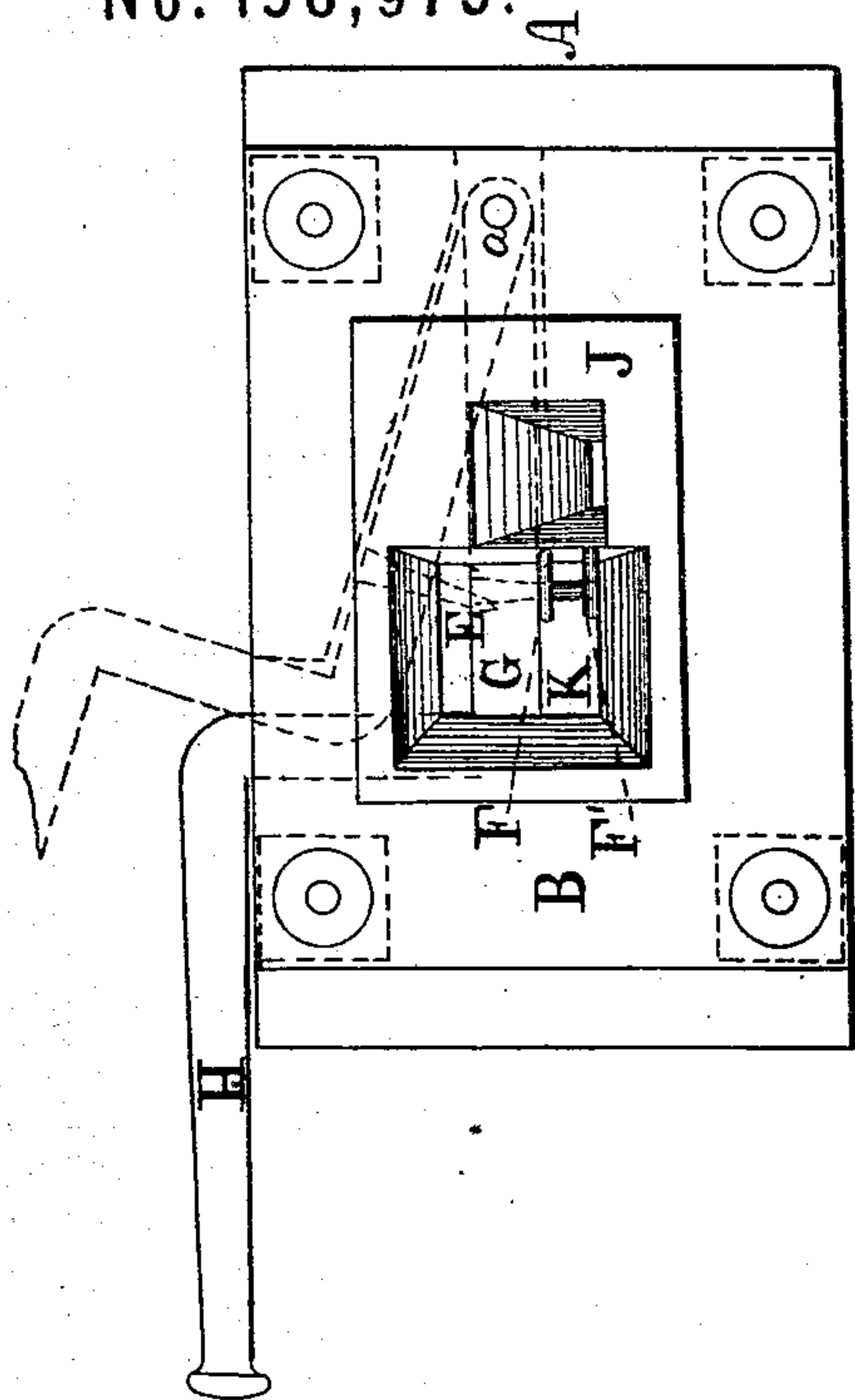


Fig. 1.

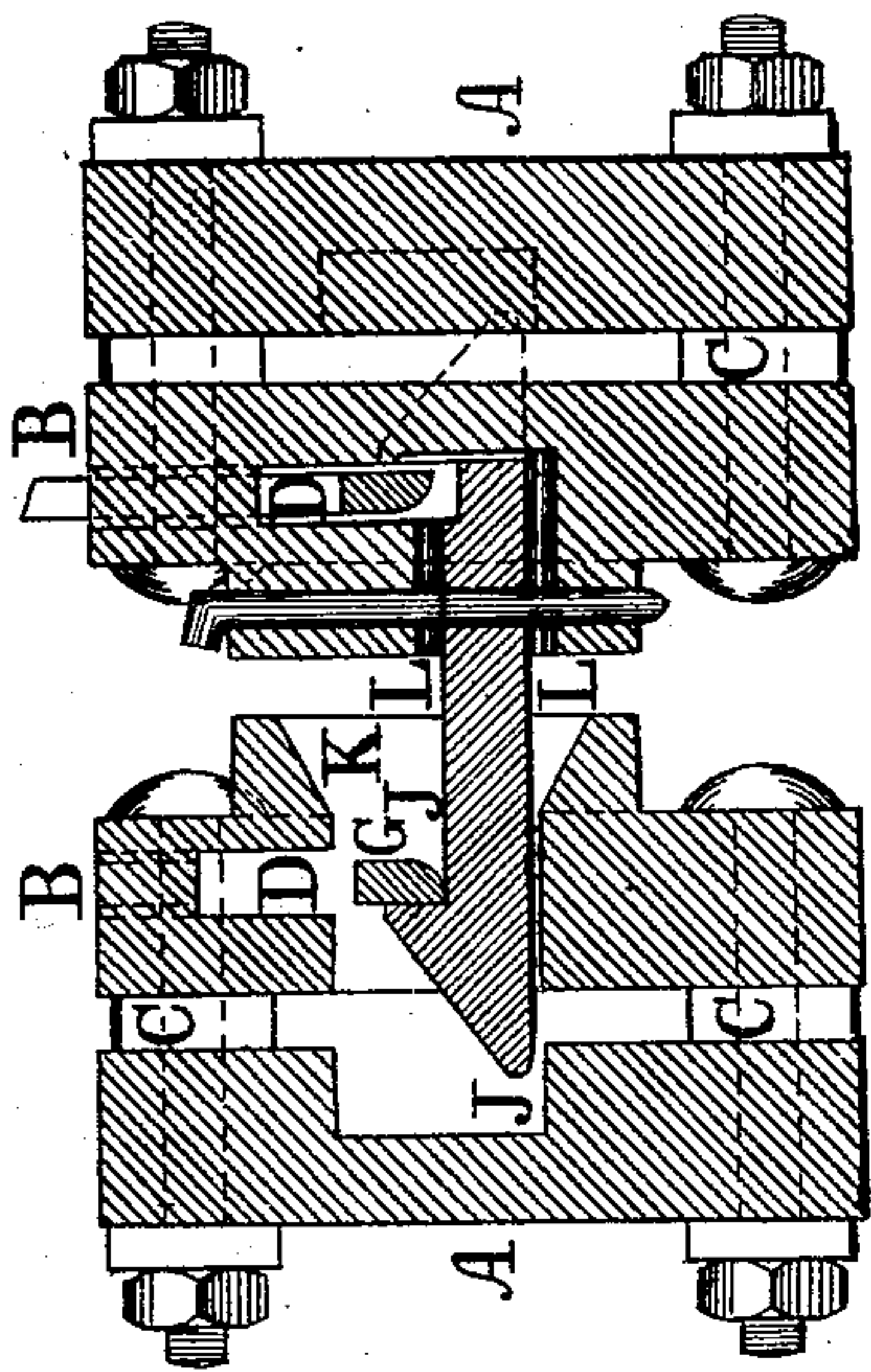


Fig. 2.

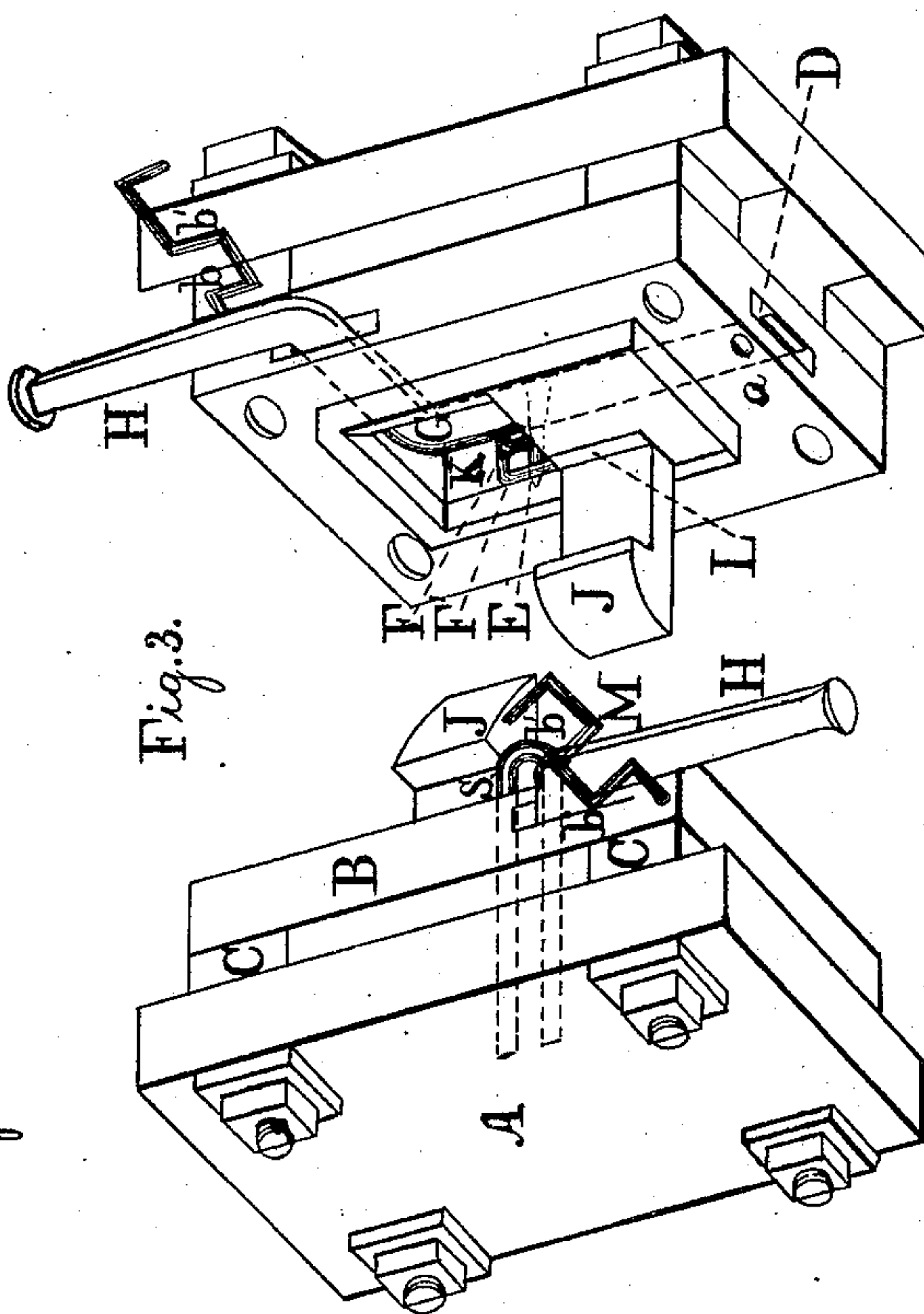


Fig. 3.

Witnesses:

No. P. Grant.

L. F. Brown.

Inventor:
Stephen Ott,
by John A. Biedersheim & Co.
Attys.

UNITED STATES PATENT OFFICE.

STEPHEN OTT, OF NEWARK, DELAWARE.

IMPROVEMENT IN CAR-COUPPLINGS.

Specification forming part of Letters Patent No. **158,973**, dated January 19, 1875; application filed May 27, 1874.

To all whom it may concern:

Be it known that I, STEPHEN OTT, of Newark, in the county of New Castle and the State of Delaware, have invented a new and useful Improvement in Car-Couplings; and I do hereby declare the following to be a clear and exact description of the nature thereof, sufficient to enable others skilled in the art to which my invention appertains to fully understand, make, and use the same, reference being had to the accompanying drawings making a part of this specification, in which—

Figure 1 is a face view of the device embodying my invention. Fig. 2 is a vertical longitudinal section of the two parts of the coupling in the line $x\ x$, Fig. 1. Fig. 3 is a perspective view.

Similar letters of reference indicate corresponding parts in the several figures.

This invention consists of a transversely-arranged self-coupling bar, having connected thereto a pin, and suitable eyes on the block or stay of the platform, so that provision is made for employing the usual coupling-link. It also consists in a lock for the bar. It also consists in combination of parts.

Referring to the drawings, A represents a stay or block, which may be attached to the platform, bolster, truck, or other portion of the car, in any well-known manner. In front of the block A is attached a block, B, and between the said blocks are interposed pieces of rubber, C, for preventing or breaking shocks to the cars, incident to the coupling operation, &c. A chamber, D, is formed within the block B, and in said chamber is arranged a gravitating locking-bar, G, which consists of a piece of suitable metal or material hinged at one end, as at a , to one side of the block B; then extends horizontally and transversely through the chamber D to the side opposite to the axis; then upwardly, and finally out from the block, forming the handle H. A coupling, J, projects from the face of the block B, and an opening, K, is formed in the block aside of said hook C, being in such position that, when two couplings are brought together, the hook of the block B will enter the opening of the other. Rubber or other packing, L, may be arranged between the hook J and adjacent parts of the block B, so as to prevent strain on the hook

during the coupling operation and subsequent use. M represents a rotary rod, which is bent laterally at $b\ b'$, to form means for locking or holding the locking-bar G in both its operative and inoperative positions.

The operation is as follows: The rod M being clear of the bar G, and the latter being in its lowermost position, crossing the opening K, the cars approaching each other, the coupling-hook of one car enters the opening C opposite thereto in the other car, and, reaching the coupling-bar, the beveled faces of the hook and bar permit the latter to pass under, and thus raise the former. When the back of the head or shoulders of the hooks have cleared the bars, then the bars drop and engage the hooks, and thus the cars are coupled. The uncoupling of the cars is readily effected by raising the bars by means of the handle H, whereby the hooks are released from the bars, the result of which is apparent.

It will be seen that, when the cars are coupled, each bar G in the chamber D is braced against adjacent portions of the block B, so as to firmly withstand the strain naturally occurring.

Secured to the bar G is a vertically-arranged pin, E, which passes between eyes $F\ F'$, projecting from the block B.

When one of the cars has the ordinary link or shackle, the latter may be readily employed to couple with the bar G, by raising the latter so that the pin E will emerge from the eye F' ; then inserting the link or shackle (represented at S) between the eyes F and F' , and lowering the bar so that the pin E enters the link or shackle, whereby the cars are coupled, vertical displacement of the link or shackle being prevented by the eyes $F\ F'$.

When the cars are coupled the rods M are turned so as to bring the bend b over the handles of the coupling-bars, and thereby prevent the rising of the latter.

When the cars are to be uncoupled the coupling-bars are elevated; then the rods M are turned so that the bend b' will come under and support the handles of the bars, and thereby keep the bars in their elevated position.

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

1. The combination, with the transverse

locking-bar G, of the pin E connected thereto, and the eyes F F', substantially as and for the purpose set forth.

2. The rotating rod M, with bends *b b'*, in combination with the locking-bar G, substantially as and for the purpose set forth.

3. The combination of the block A, formed with chamber D and opening K, the hook J, the hinged coupling-bar G, extending trans-

versely in the chamber D, and formed with handle H, the pin E secured to the bar G, and the eyes F F' secured to block B, all constructed to operate substantially as and for the purpose set forth.

STEPHEN OTT.

Witnesses:

JOHN A. WIEDERSHEIM,
L. F. BROUS.