

(No Model.)

S. H. HARRINGTON.

CAR COUPLING.

No. 376,713.

Patented Jan. 17, 1888.

Fig. 4.

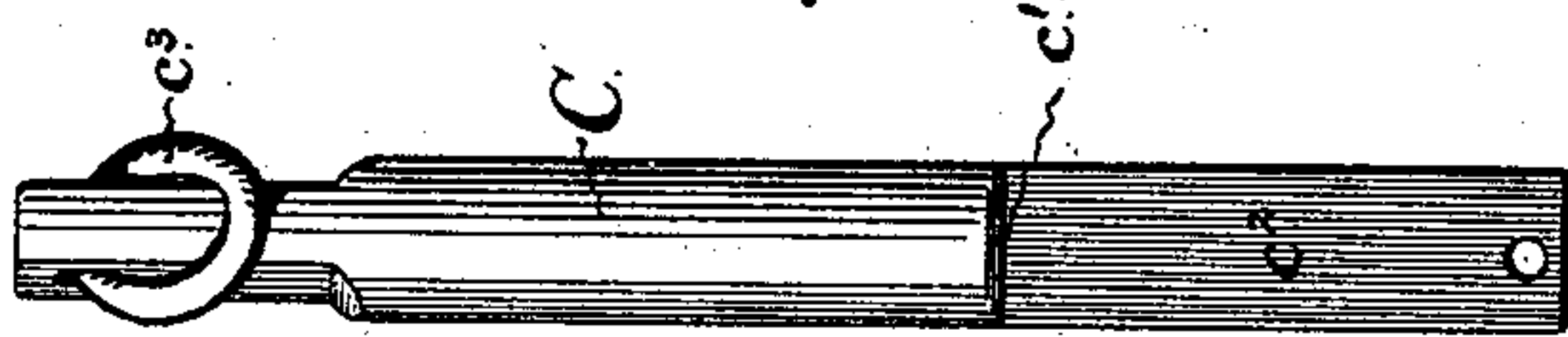


Fig. 3.

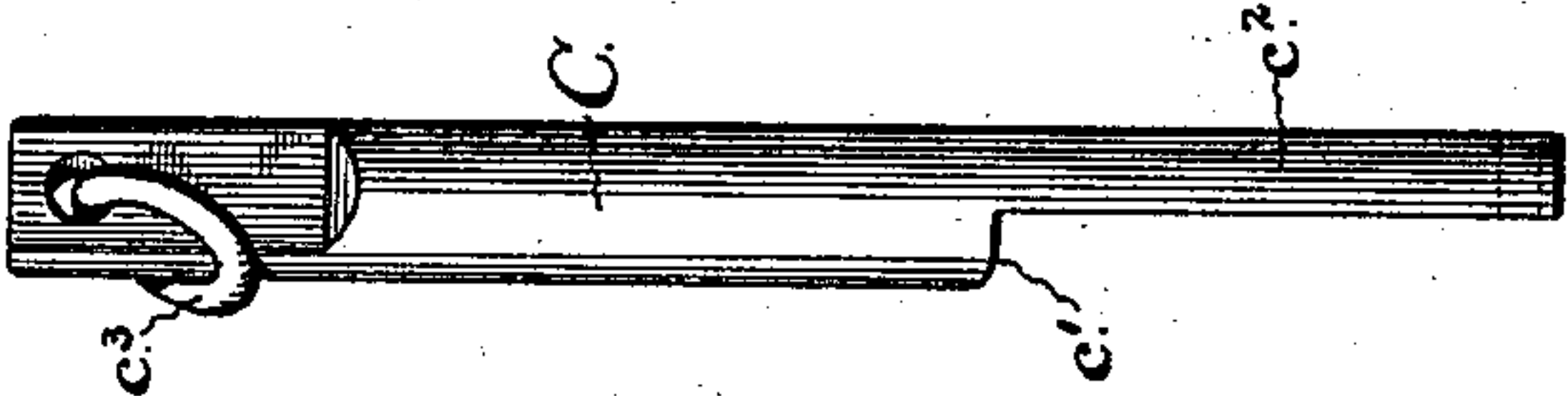


Fig. 2.

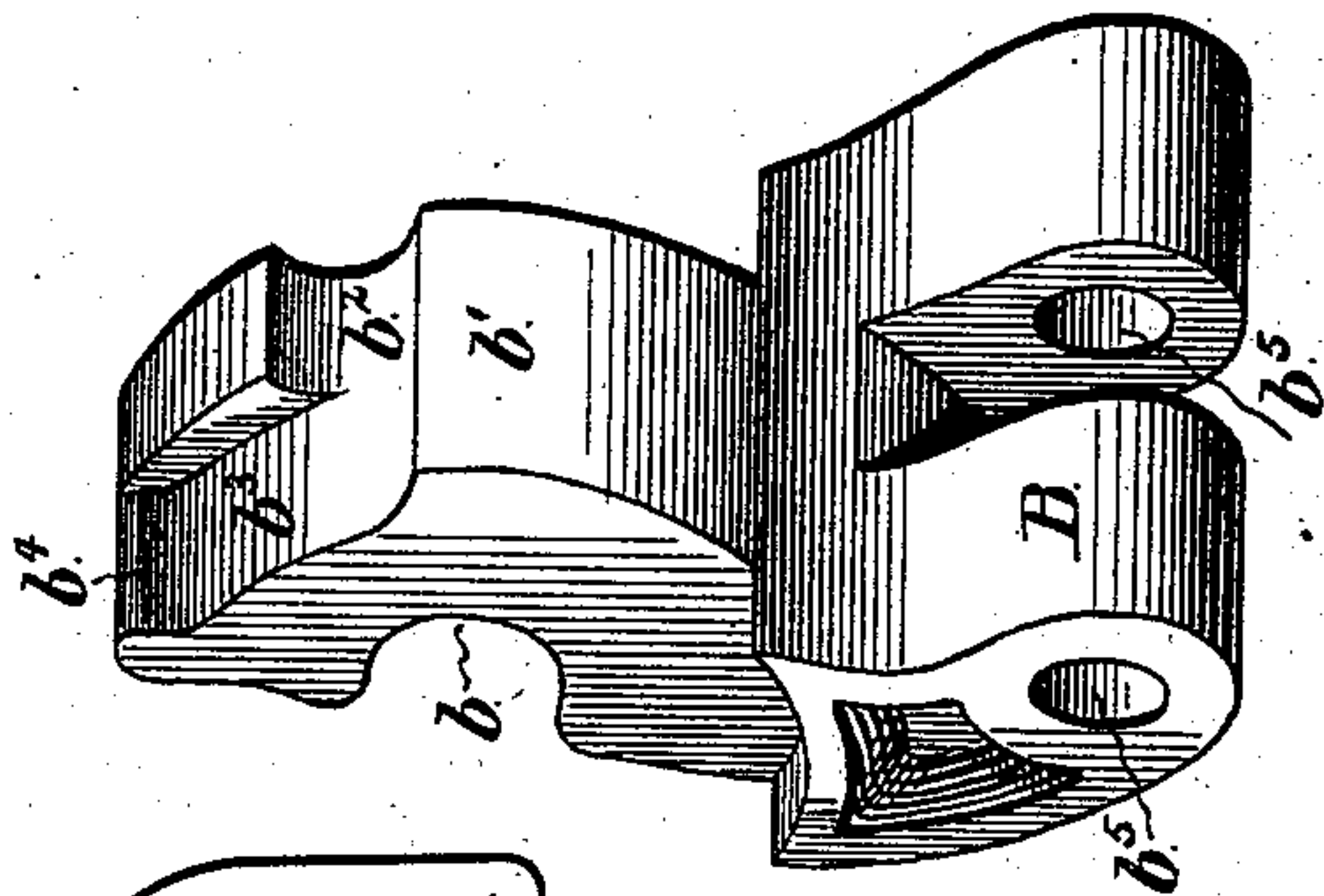
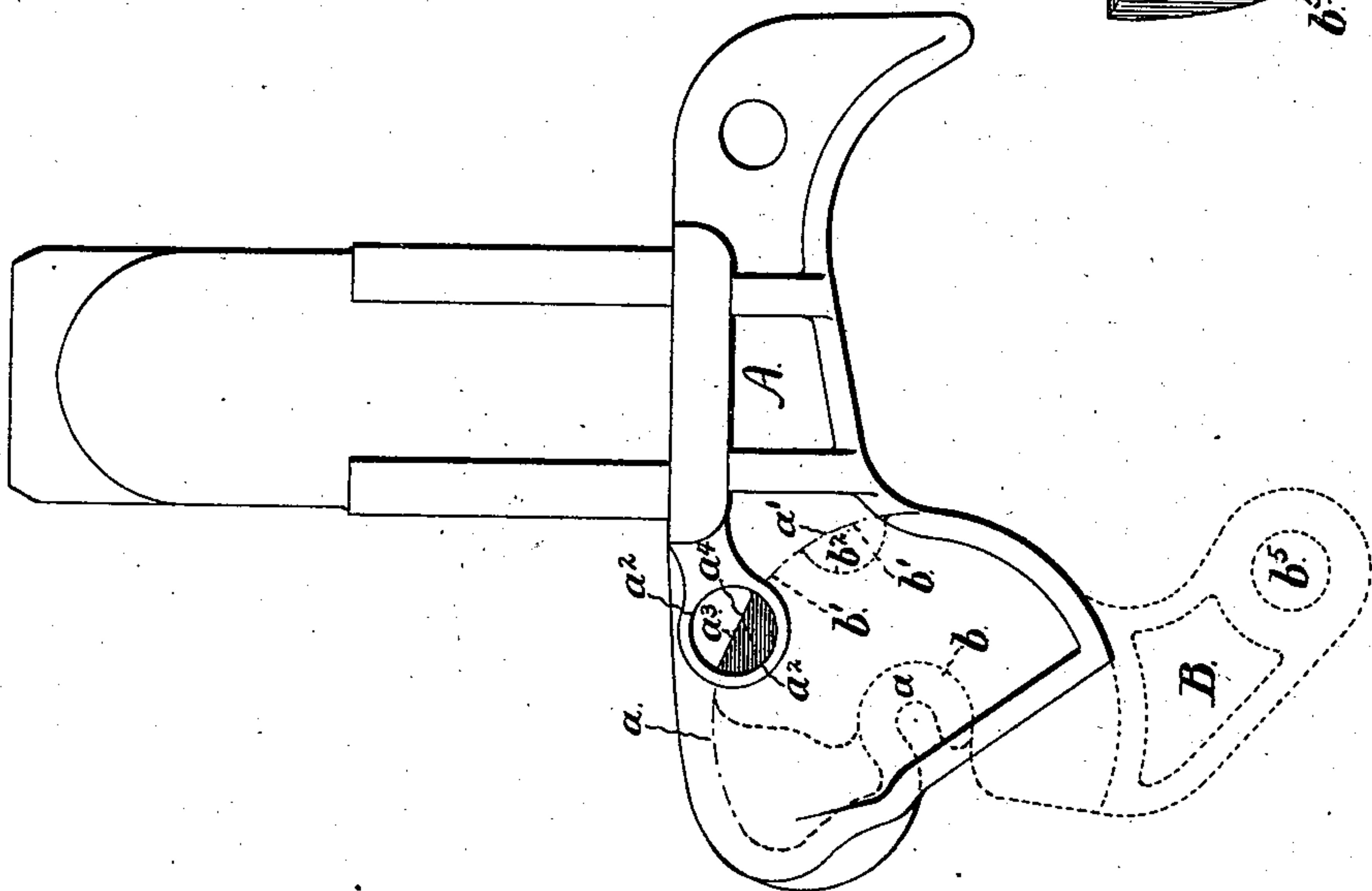


Fig. 1.



WITNESSES:

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CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 376,713, dated January 17, 1888.

Application filed June 23, 1887. Serial No. 242,243. (No model.)

To all whom it may concern:

Be it known that I, SAMUEL H. HARRINGTON, of Columbus, county of Franklin, State of Ohio, have invented a new and useful Improvement in Car-Couplers, of which the following is a true and exact description, reference being had to the accompanying drawings, which form part of this specification.

My invention has especial reference to the construction of vertical plain couplers of the type generally known as the "Dowling coupler," and it is an improvement upon the device patented by myself, August 12, 1886, in Letters Patent No. 350,486.

The object of my invention is to increase the hold of the latch-pin upon the movable jaw of such couplers and to strengthen the pin in those parts which are exposed in use to shearing strains. This I accomplish by constructing the coupler head, jaw, and pin in the manner illustrated in the accompanying drawings, in which—

Figure 1 is a plan view of the coupler-head, the jaw being indicated by dotted lines. Fig. 2 is a perspective view of the movable jaw; Fig. 3, an elevation of the latch-pin, and Fig. 4 a similar elevation taken at right angles to the view of Fig. 3.

A is the coupler-head, which is recessed for the entrance of the jaw B in the usual way; a projection, a , being formed with a cylindrical surface to serve as the hinge on which the jaw B turns, and the opposite face, a' , of the recess being made concentric with the cylindrical projection a . The surfaces b and b' of the jaw B are made of similar curvature to the surfaces a and a' , respectively.

a^2 a^2 is a circular hole formed in the upper portion of the coupler-head A and centered in or nearly in the curved surface a' at the bottom of the coupler-head and below the recess formed for the entrance of the jaw B. The hole is contracted to the substantially semi-circular form indicated by the lines a^2 a^3 , the metal of the head being carried across the hole a^2 a^2 , so as to form the shoulder a^4 within its recessed portion, the semicircular hole a^2 a^3 lying outside of the curved surface a' , which bounds the recess left for the jaw.

In the jaw B a semi-cylindrical recess, b^2 , is formed, through which the latch-pin can pass when the jaw is closed, and the jaw is further recessed in its upper edge, as shown at b^3 , said recess being of a breadth equal to that of

the pin-hole b^2 and bounded at its end by a shoulder, b^4 .

C is my improved latch-pin. It is cylindrical in its upper portion, c , and preferably of the size of an ordinary coupling-pin. At c' it is cut away to form the shoulder c' , and continued in the semi-cylindrical form indicated at c^2 . c^3 is a ring, to which a chain may be attached, as described in my before-mentioned Letters Patent.

The operation of this device does not differ from that described in my patent No. 350,486; but by forming the latch-pin and latch-pin hole as described I am enabled to deepen the recesses b^2 and b^3 in the jaw and cause the latch-pin C to project farther to the inside of the jaw-recess in the head A, thus more effectually latching the jaw.

In the old construction, when the jaw B was used to couple with a link by means of its pin-hole b^2 and the jaw not latched in its closed position, the portion of the latch-pin which by engaging with the shoulder b^4 prevented the jaw B from being pulled out of the recess in the head A was found not strong enough to resist the shearing strains put upon it; but by making the portion c^2 of the pin C of the semi-cylindrical form shown, a great increase of metal and consequently of strength is gained in the portion of the pin subject to such strains, and the shearing strains come upon it across its largest diameter.

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

1. In a car coupler substantially as specified, a latch-pin hole, substantially concentric with the curved inner surface of the recess in the coupler-head, said latch-pin hole being contracted at the bottom of the coupler-head to a substantially semi-cylindrical form and lying entirely outside of the path in which the jaw moves, as and for the purpose shown and described.

2. As a latch-pin for a car-coupler constructed substantially as specified, the pin C in its upper portion, c , substantially cylindrical, terminating in a substantially semi-cylindrical end, c^2 , and having a shoulder, c' , as and for the purpose specified.

SAMUEL H. HARRINGTON.

Witnesses:

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