

(No Model.)

S. C. SAMS.
CAR COUPLING.

No. 494,941.

Patented Apr. 4, 1893.

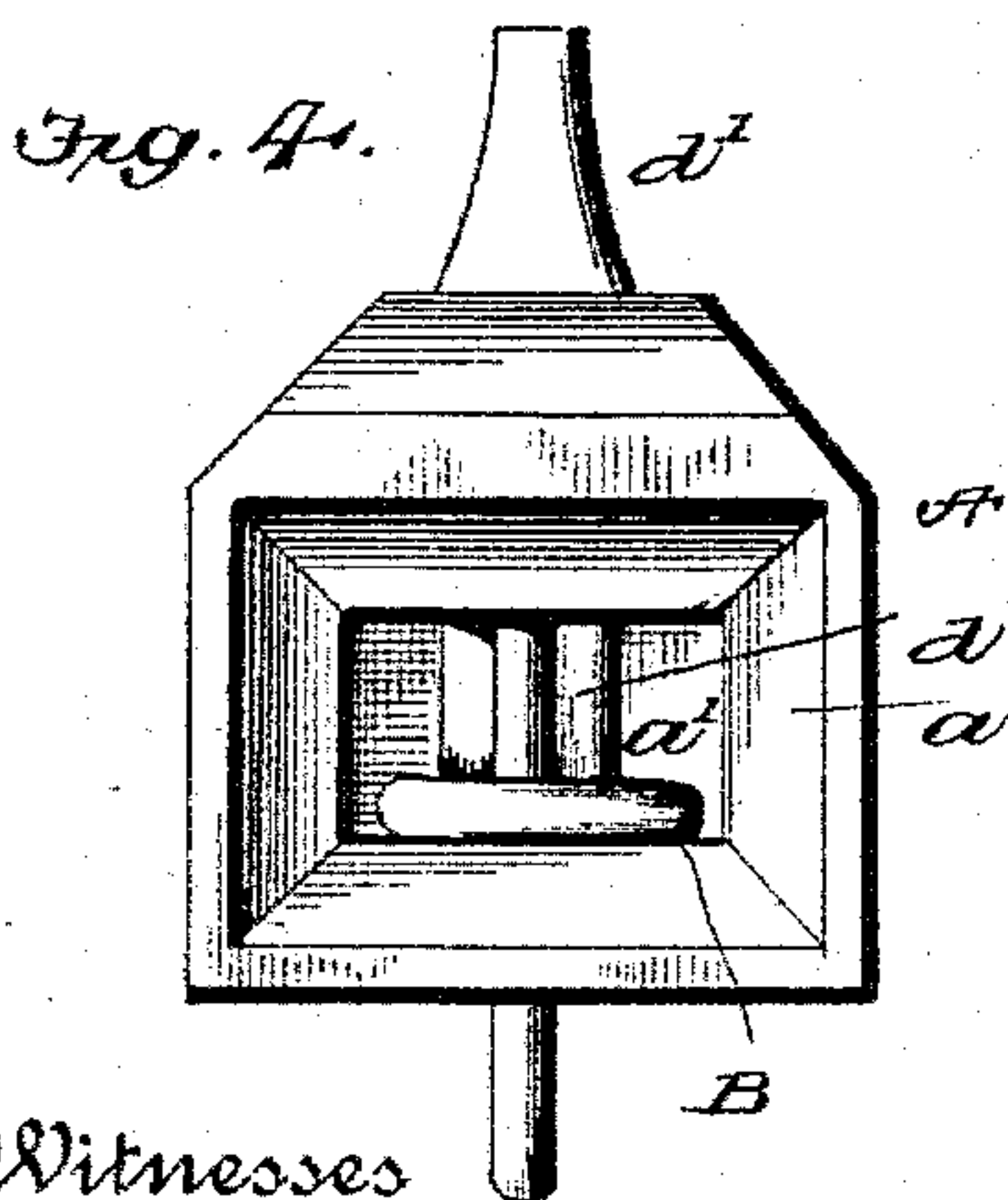
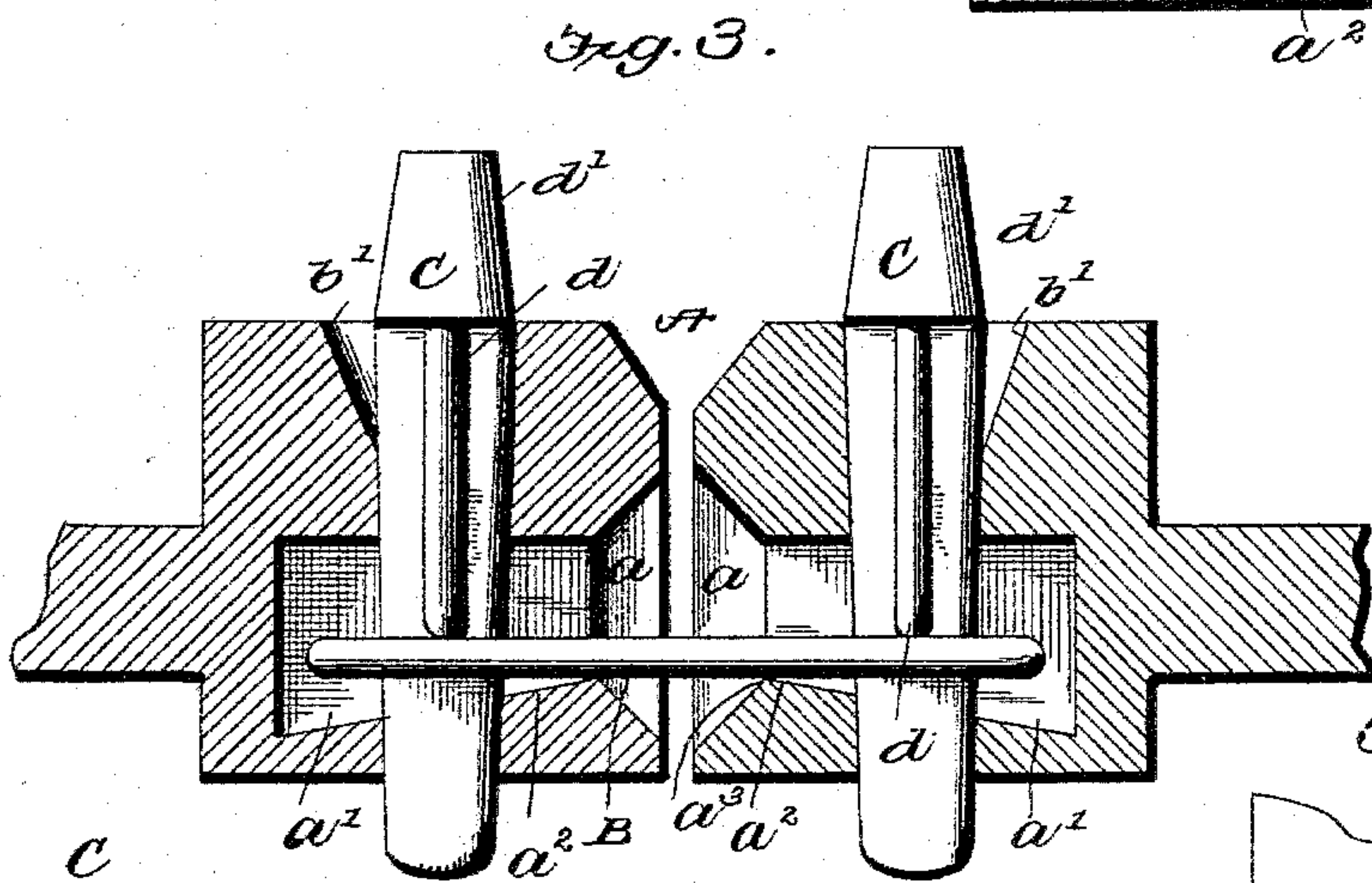
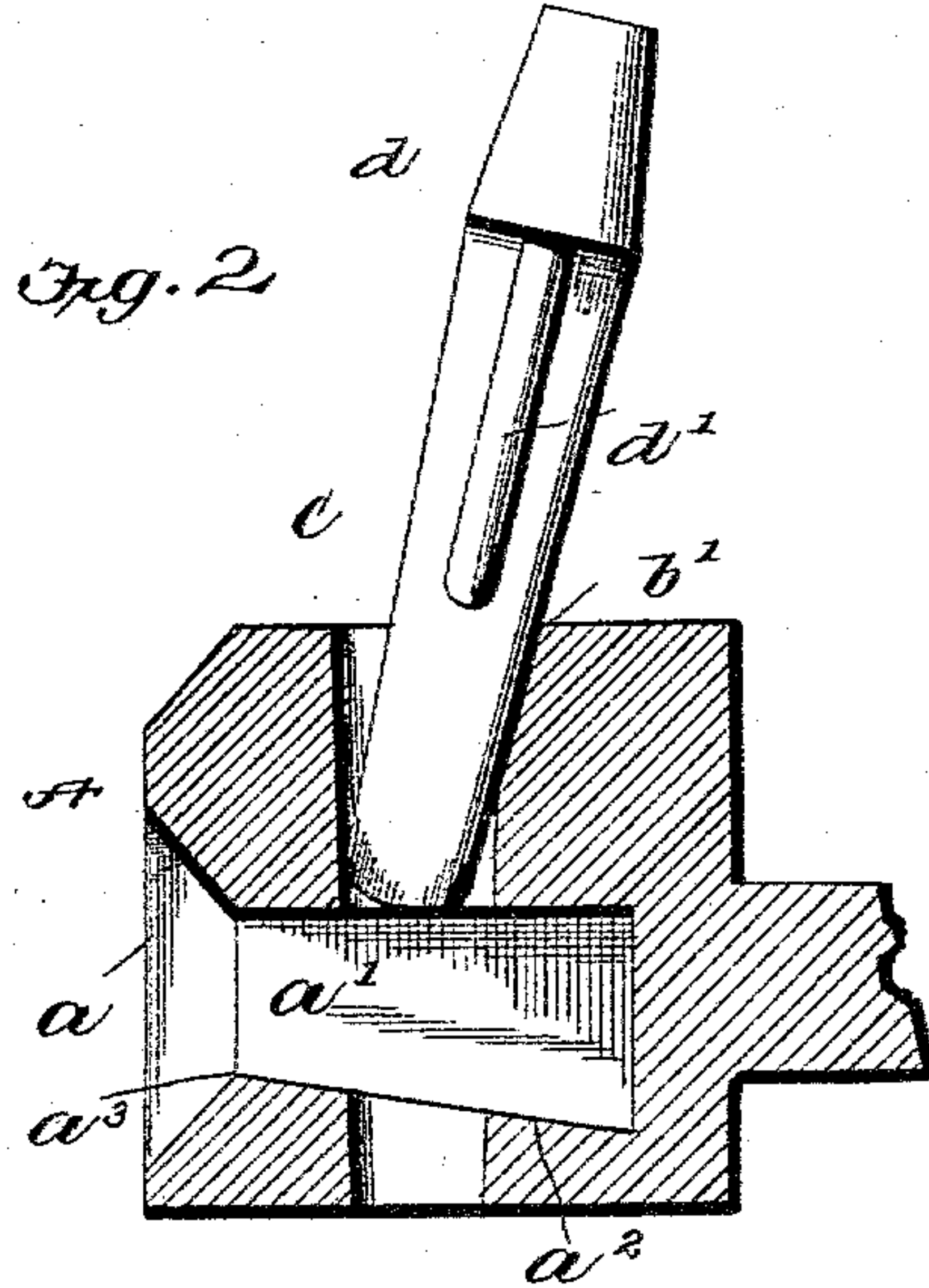
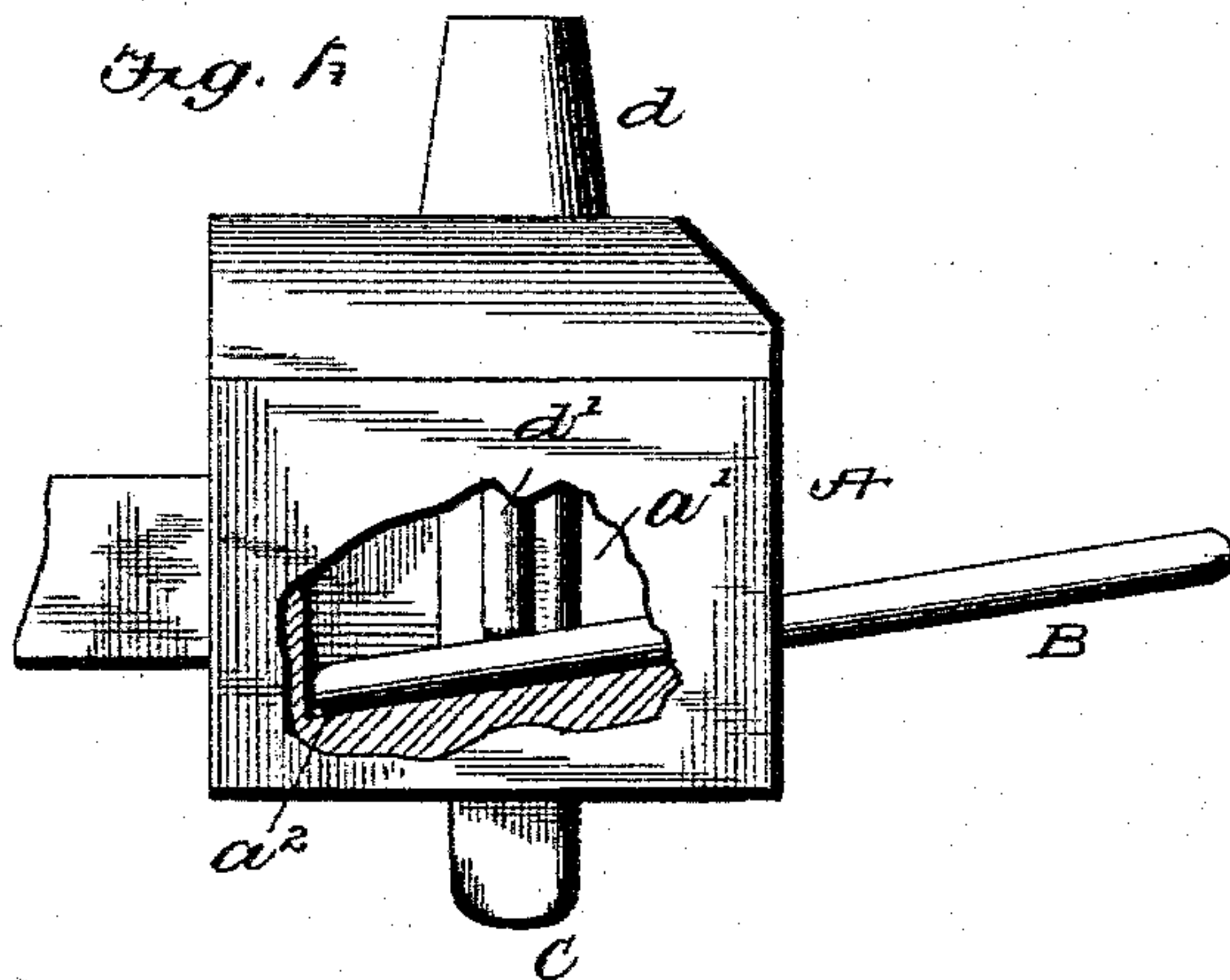
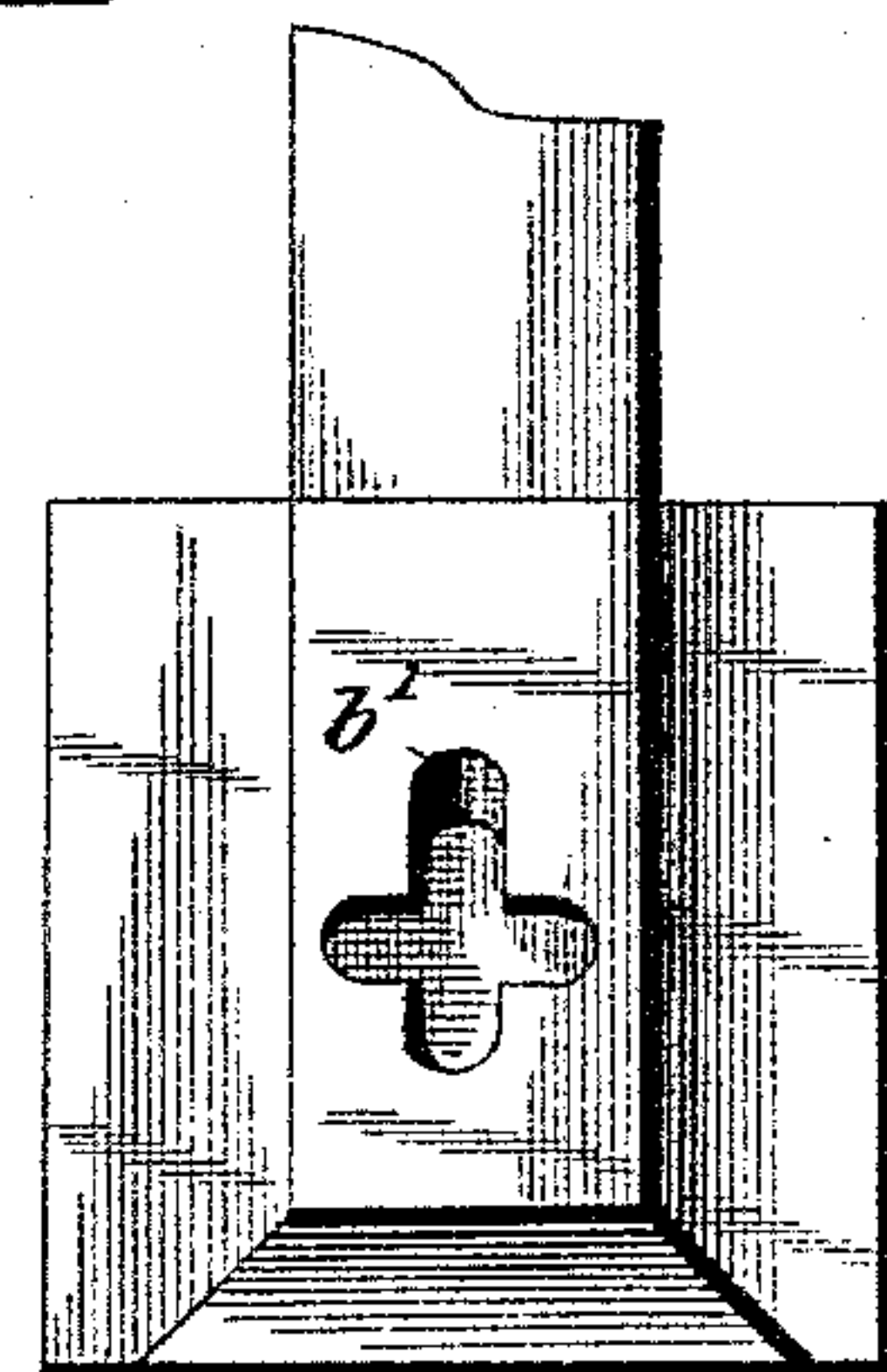
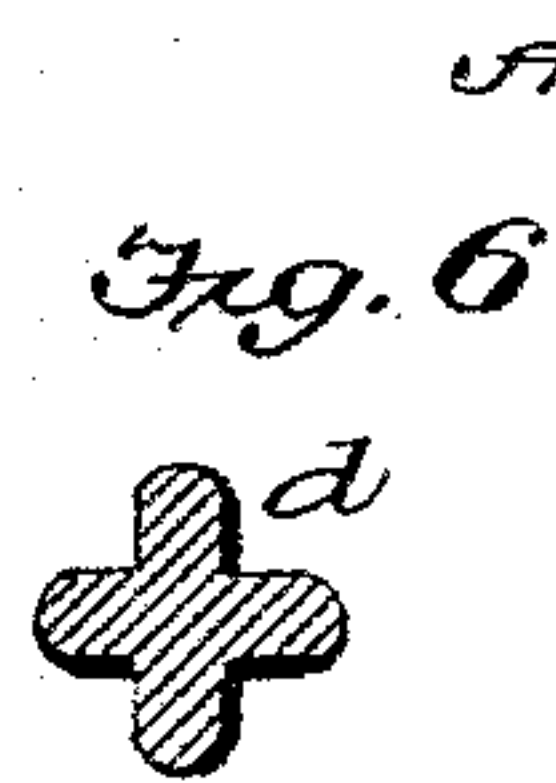
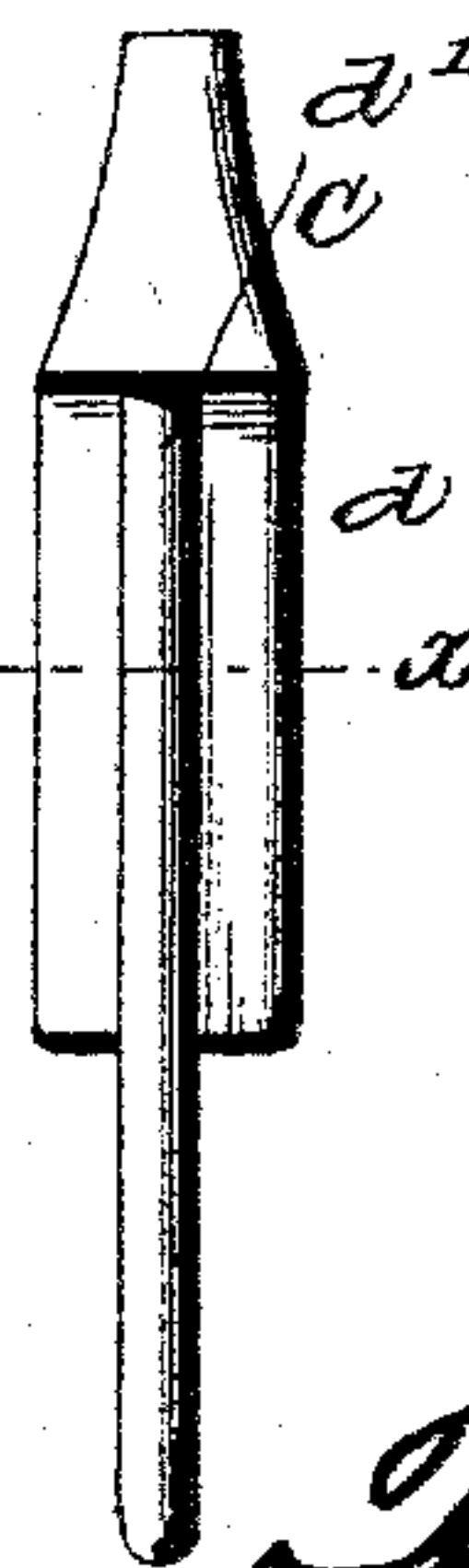


Fig. 5.



Witnesses

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UNITED STATES PATENT OFFICE.

SAMUEL C. SAMS, OF ASPEN, COLORADO, ASSIGNOR OF ONE-HALF TO LOU D. SWEET, OF SAME PLACE.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 494,941, dated April 4, 1893.

Application filed January 14, 1893. Serial No. 458,336. (No model.)

To all whom it may concern:

Be it known that I, SAMUEL C. SAMS, of Aspen, in the county of Pitkin and State of Colorado, have invented certain new and useful
5 Improvements in Car-Couplings; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.
10 This invention contemplates certain new and useful improvements in car-couplings, and it has for its object, first, the production of simple and highly efficient means for properly positioning the link and coupling pin
15 ready for automatic coupling of cars, and second, a new and improved form of pin which will possess increased strength and also serve to hold the coupling-link in position for entrance into an approaching drawhead.
20 The invention consists of a drawhead having a cross-shaped opening provided with an upper rearward inclined wall, and a coupling pin of cross-shape in cross-section designed to rest against said wall when not in use.
25 The invention also comprises the detail construction, combination and arrangement of parts, substantially as hereinafter fully set forth and particularly pointed out in the claims.
30 In the accompanying drawings:—Figure 1 is a view in side elevation, with parts broken away, of a drawhead provided with my improvements. Fig. 2 is a longitudinal sectional view showing the pin in position prior to
35 coupling. Fig. 3 is a vertical longitudinal sectional view of two drawheads coupled together. Fig. 4 is an end view. Fig. 5 is a view of the pin. Fig. 6 is a horizontal sectional view thereof on the line $x-x$. Fig. 7
40 is a top plan view of the drawhead with the pin removed.
Referring to the drawings, A designates the drawhead having a front flared opening a from which extends inwardly a chamber a' .
45 The bottom a^2 of this chamber is rearwardly inclined and forms a rest or shoulder a^3 at its outer end. The object of thus forming the bottom is that the coupling-link B when not coupled to another car will occupy the posi-
50 tion shown in Fig. 1, that is to say, it will be extended upwardly at its outer end ready for

entrance into an approaching drawhead. In the top of drawhead A is an opening of cross-shape and the upper rear wall b' thereof is beveled or rearwardly inclined from a point about midway the top of the drawhead. 55

C is the coupling pin which is preferably made of iron. From opposite sides of this pin project ribs or wings d which extend from the head d' to a point beyond the middle of 60 the pin. Hence the pin is approximately cross-shape in cross-section taken through the ribs or wings. The lower end of the pin, namely, that portion beneath the ends of the ribs or wings, corresponds in thickness with 65 the opening in the link and a bottom opening in the drawhead through both of which it is designed to project. The ribbed portion of the pin corresponds with the cross-shape opening in the top of the drawhead and hence is 70 guided in its movement. When lowered the ends of the ribs or wings rest upon the side bars of the link and the weight of the pin holds said link in the position shown in Fig. 1. When elevated the pin will occupy the 75 position shown in Fig. 2, that is, it will rest against the rearwardly inclined wall, its lower, front end bearing against the front vertical wall of said opening. Upon two cars striking together the concussion will cause the pin to 80 be lowered and its lower end pass through the link carried by the other draw-head.

The advantages of my invention are apparent. By providing the coupling pin with the lateral ribs or wings the strength thereof 85 is greatly enhanced, the link is held firm in its position ready for coupling with the drawhead of an approaching car, and by making the opening in the top of the drawhead to correspond with the shape of the pin the lat- 90 ter is guided in its movement and its entrance through the opening in the link and bottom of the drawhead always insured. By means of my invention it is not necessary for a trainman to pass in between the cars in or- 95 der to effect the coupling thereof, as is the case when the link is held loose, or allowed to hang down.

A car coupling thus constructed is extremely simple and inexpensive and not liable 100 to readily get out of order.

I claim as my invention—

1. The combination with the drawhead having a cross-shaped opening in its top provided with a rearwardly inclined wall, of the coupling pin herein described having lateral wings
5 and designed to fit in said cross-shaped opening, substantially as set forth.

2. The herein-described improved car coupling, comprising the chambered drawhead having a rearwardly inclined bottom and a
10 cross-shaped opening in its top, and the coupling

pin having lateral ribs or wings throughout a portion of its length, substantially as set forth.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

SAMUEL C. SAMS.

Witnesses:

W. T. DOUBT,
JOHN C. COX.