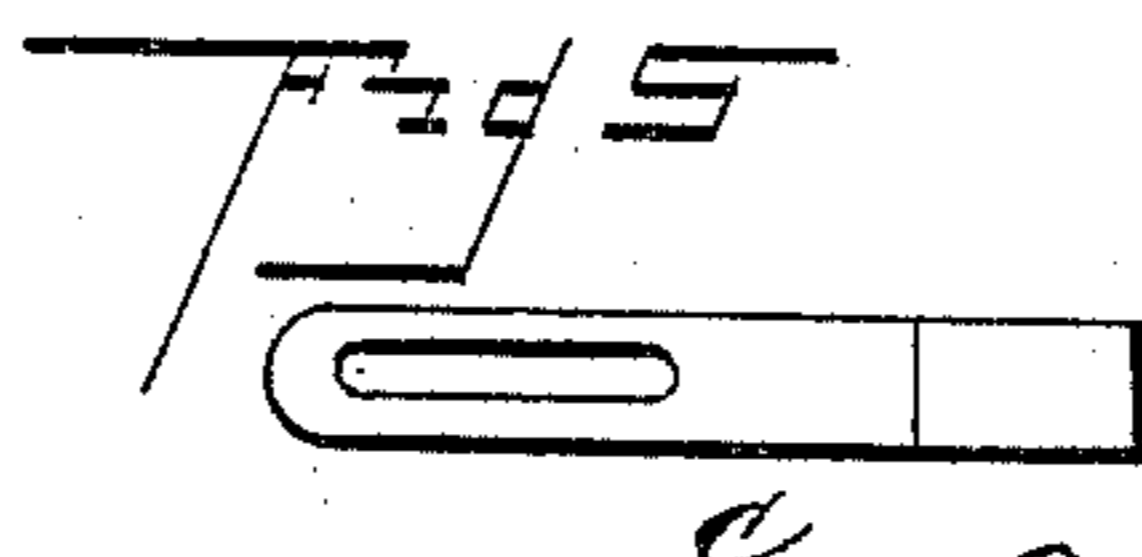
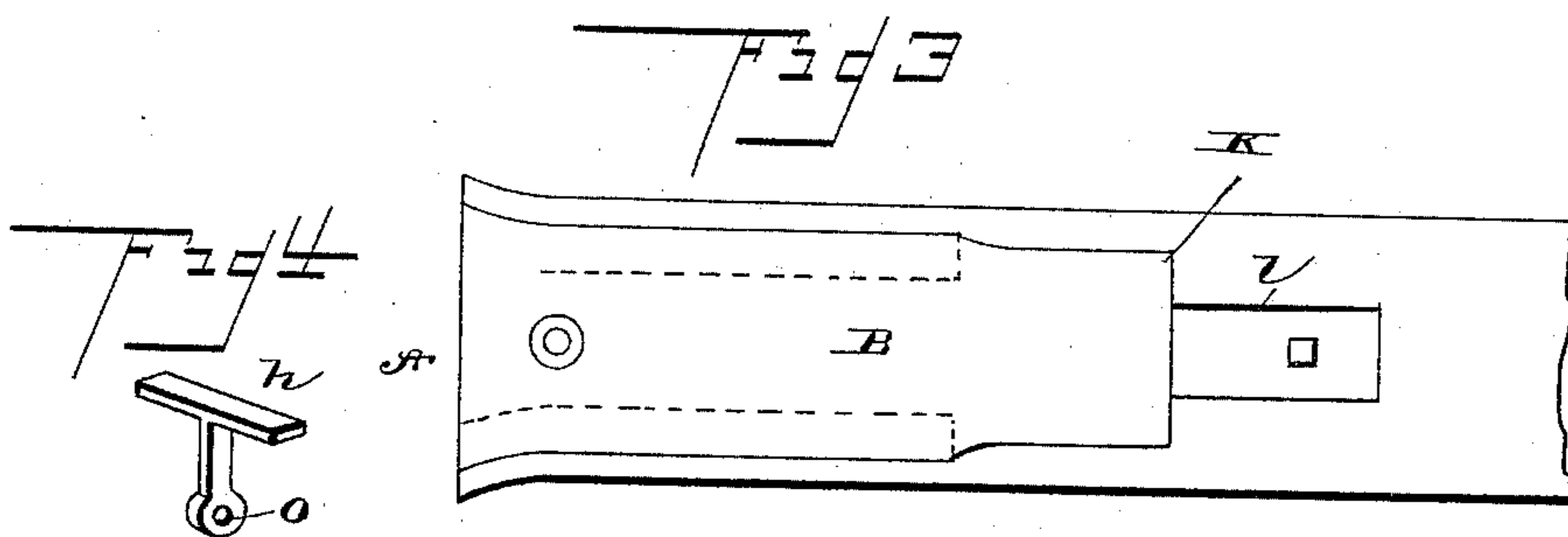
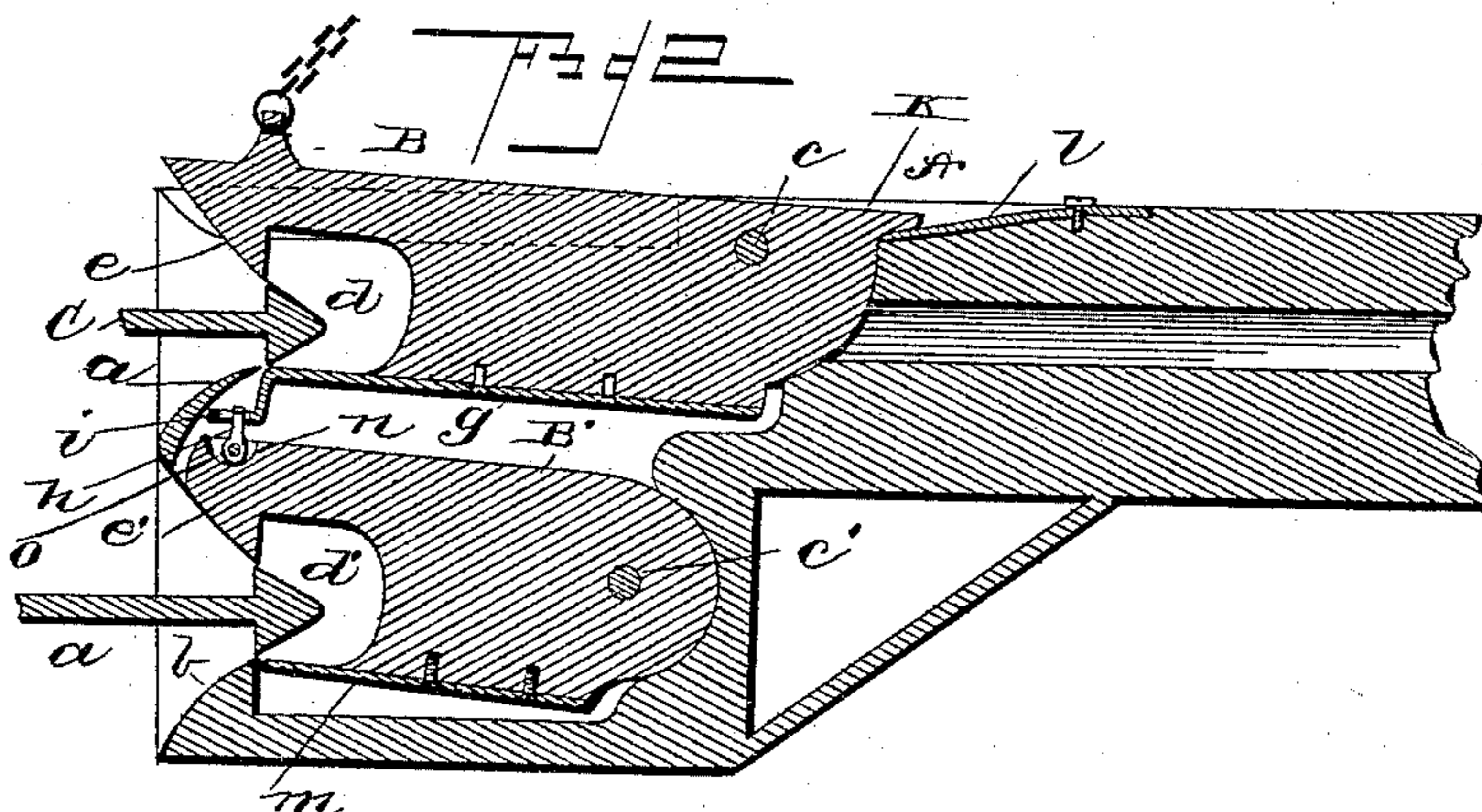
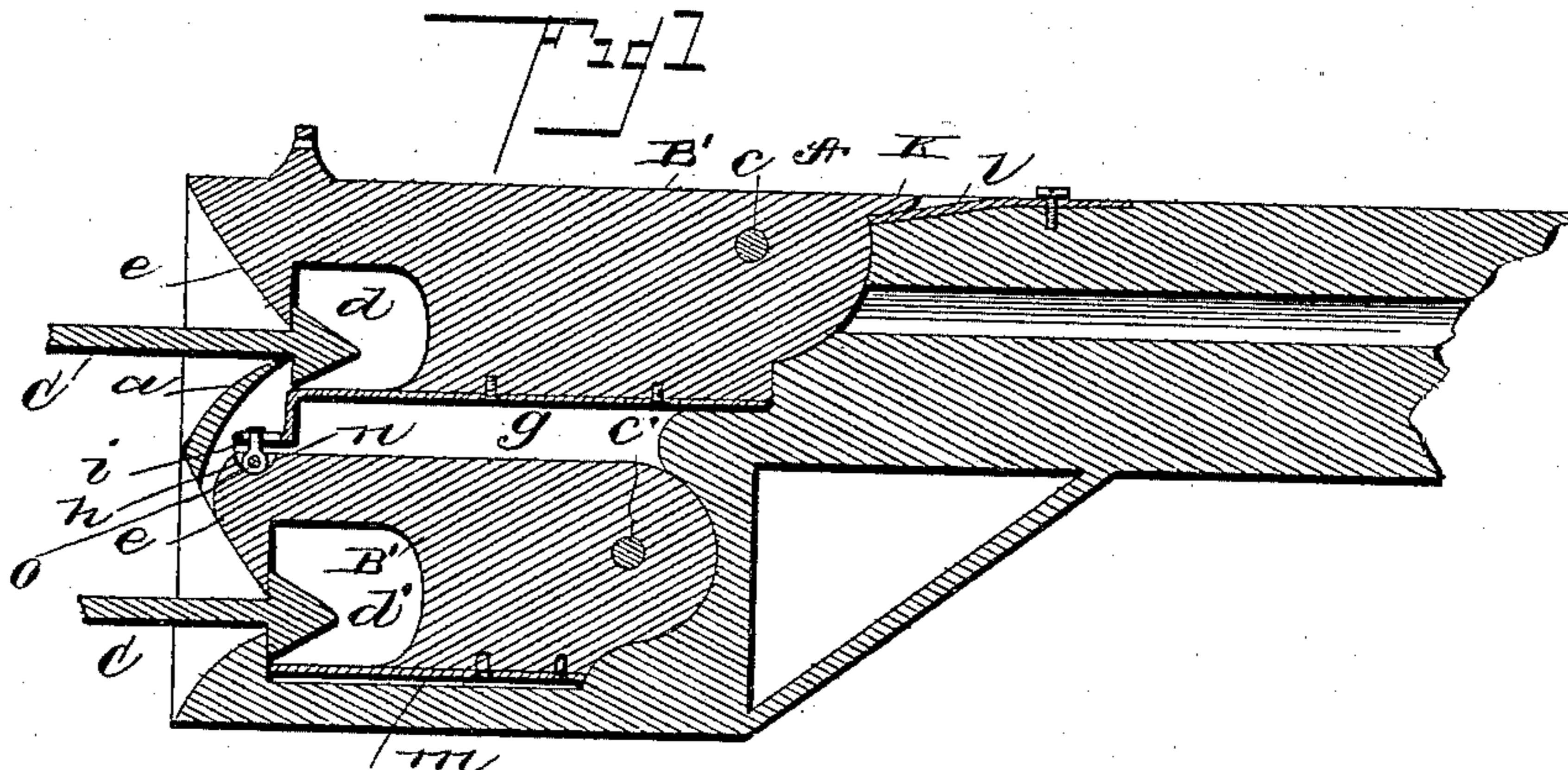


(No Model.)

J. S. REAMER.  
CAR COUPLING.

No. 440,652.

Patented Nov. 18, 1890.



Witnesses

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By his Attorney

John Smurfit

# UNITED STATES PATENT OFFICE.

JAMES S. REAMER, OF PORTVILLE, NEW YORK.

## CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 440,652, dated November 18, 1890.

Application filed September 5, 1890. Serial No. 364,087. (No model.)

*To all whom it may concern:*

Be it known that I, JAMES S. REAMER, a citizen of the United States, residing at Portville, in the county of Cattaraugus and State of New York, have invented certain new and useful Improvements in Car-Couplings; and I do 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, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

This invention relates to that class of car-couplings in which the coupling is effected by means of arrow-headed coupling-bolts and pivoted jaws; and it consists in certain improvements in the construction of the same, as hereinafter described and claimed.

In the accompanying drawings, Figure 1 represents a vertical longitudinal section of a car-coupling provided with my improvements. Fig. 2 is a similar section showing the parts as in the operation of coupling. Fig. 3 is a plan view of the same. Fig. 4 is a detail view of the link that connects the two jaws. Fig. 5 is a detail view of a modified form of coupling-bolt.

A designates a draw-head, which is constructed to receive the jaws B and B', which are pivoted therein, one above the other, as shown. The said draw-head is open at the top, and at its mouth is provided with two rigid catches *a* and *b*, for the purpose hereinafter mentioned. The upper jaw B is pivoted at *c*, and is provided at its front end with a catch *e*, the said jaw being cut out or recessed at *d*, so that it is adapted to receive and retain an arrow-headed coupling-bolt. To the bottom of the jaw B is fastened a plate *g*, which is turned down at its front end and then extended forward somewhat and slotted, as seen at *i*, the slotted portion of the plate being within or under the catch *a*. A coupling piece or link *h*, formed substantially as shown in Fig. 4, is placed in the slot *i*, being thus loosely connected with the upper jaw B and in position for connection with the lower jaw B'. The jaw B has at its rear end a projection K, which is pressed upward by a spring *l*, which tends to keep the jaw closed. The lower jaw B' is pivoted at *c'*, and has

somewhat the same form as jaw B, being provided with a catch *e'* and being recessed at *d'* to receive a coupling-bolt. A plate *m* is fastened to the bottom of the jaw B'. The said lower jaw is provided with a recess *n* in its top, in which an eye *o* of the link *h* is secured by a pin, the two jaws being thus connected at their forward ends.

The coupling-bolts C are provided with arrow-heads and are sustained in position one above the other for coupling with the upper and lower jaws, respectively, the heads of the two bolts entering the draw-head simultaneously, as illustrated in Fig. 2. As the arrow-heads enter, the jaws are both raised and both closed automatically, the upper coupling-bolt being caught by the catch *e* of the upper jaw and the catch *a* of the draw-head, and the lower bolt being caught by the catch *e'* of the lower jaw and the catch *b* of the draw-head.

When it is desired to uncouple, the jaws may be raised by means of a chain connected with the upper jaw, and said jaw being connected by the link *h* with the lower jaw the latter follows in the movement of the former and is also raised.

During coupling the catch *a* serves as a guide for the upper coupling-bolt, and also as a guide for the forward part of the plate *g* and its coupling with the lower jaw.

The walls of the draw-head are rabbeted in the inner sides of the top, and the upper jaw is provided with flanges which sink in the rabbets, so that when the jaw is closed it is held firmly in place.

It will be seen by reference to Fig. 5 that my improved coupler can be readily used with the ordinary coupler now in use.

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

1. In a car-coupling, a draw-head having an open top and provided with a catch *a*, extending across its front, and a lower catch *b*, in combination with two jaws pivoted one above the other in said draw-head and provided with the catches *e* and *e'*, respectively, the upper jaw being provided with a plate fastened to the bottom of the jaw and extended forward, as shown, and a link by which said plate is loosely connected with the lower jaw,

and two arrow-headed coupling-bolts in position to enter said draw-head and connect with said upper and lower jaws, respectively, substantially as and for the purpose described.

- 5 2. The combination, with the draw-head A, provided with catches *a* and *b* at its front, of a pivoted upper jaw B, provided with a catch *e* and a slotted plate *g*, fastened to the bottom of said jaw, a lower jaw B', provided with a  
10 catch *e'*, a link *h*, by which said jaw B' is

loosely connected with said plate *g*, and two coupling-bolts C, substantially as and for the purpose described.

In testimony whereof I affix my signature in presence of two witnesses.

JAMES S. REAMER.

Witnesses:

F. O. LANGWORTHY,  
H. I. LANGWORTHY.