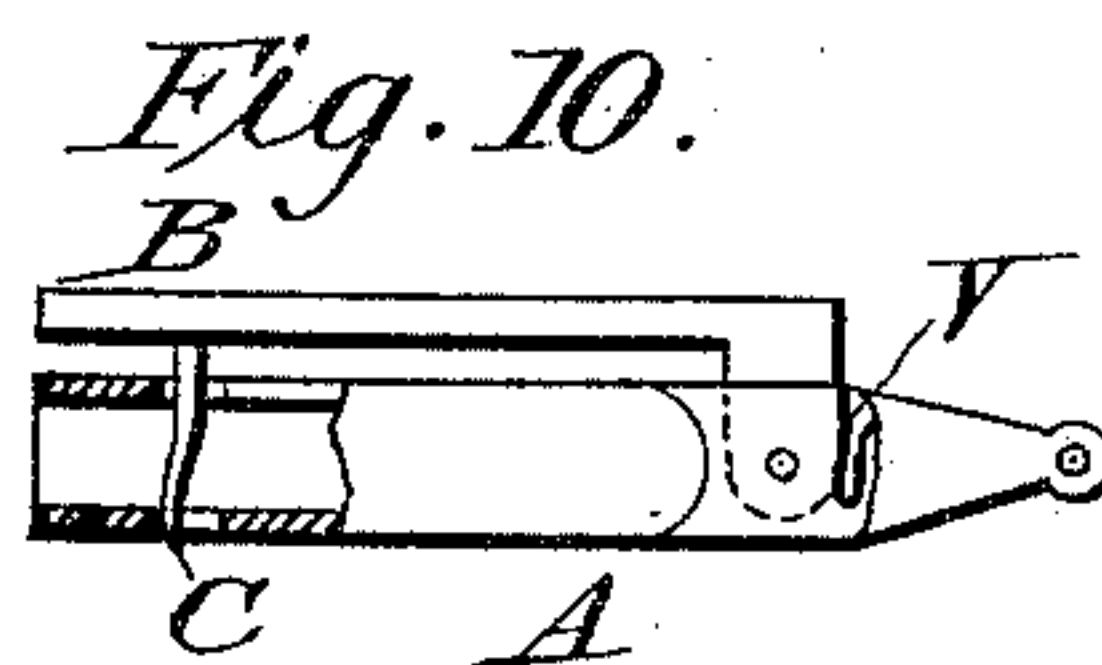
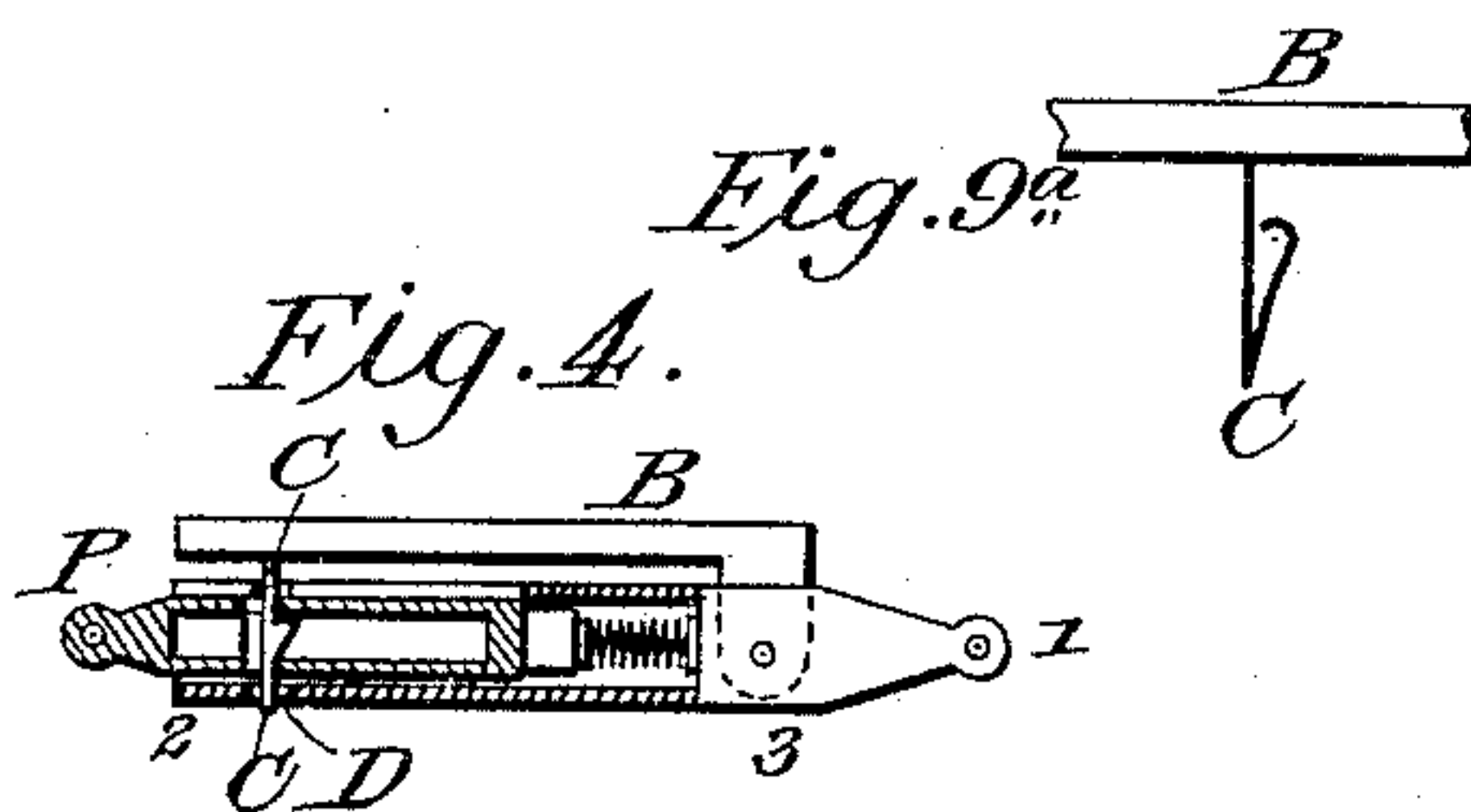
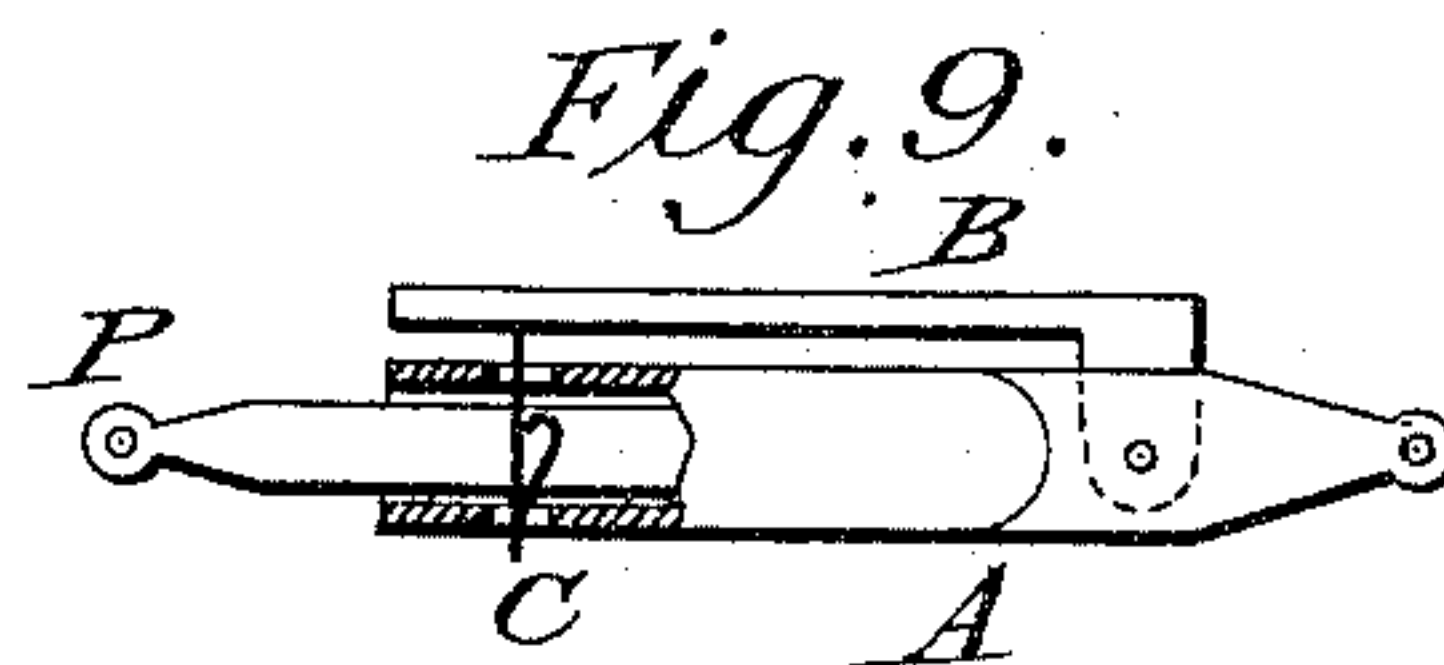
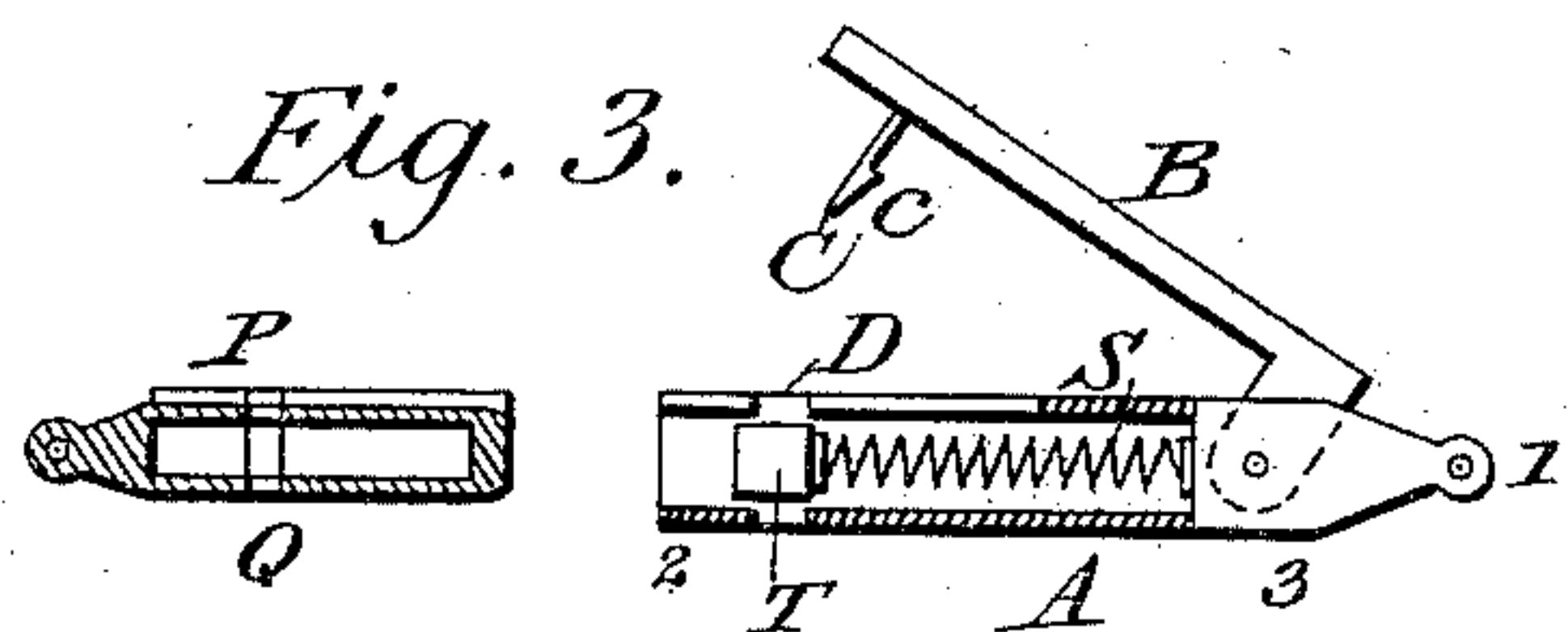
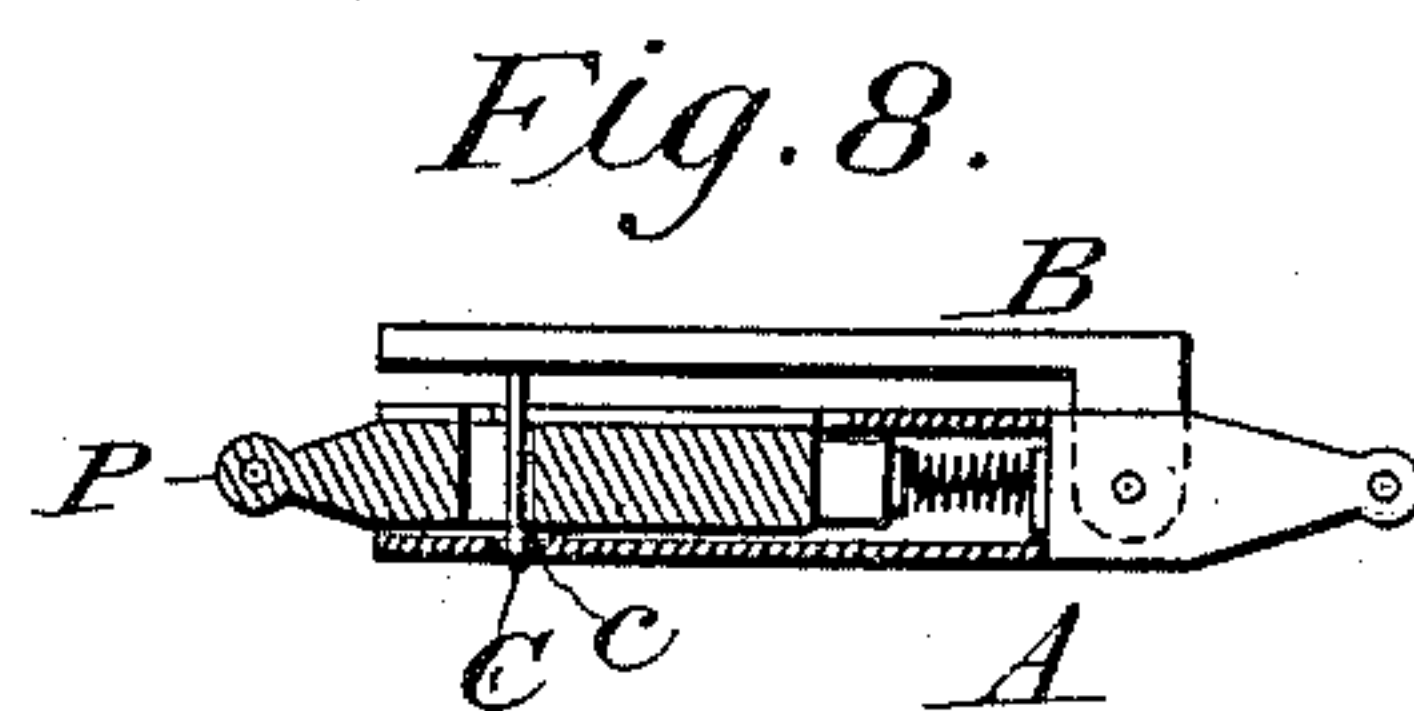
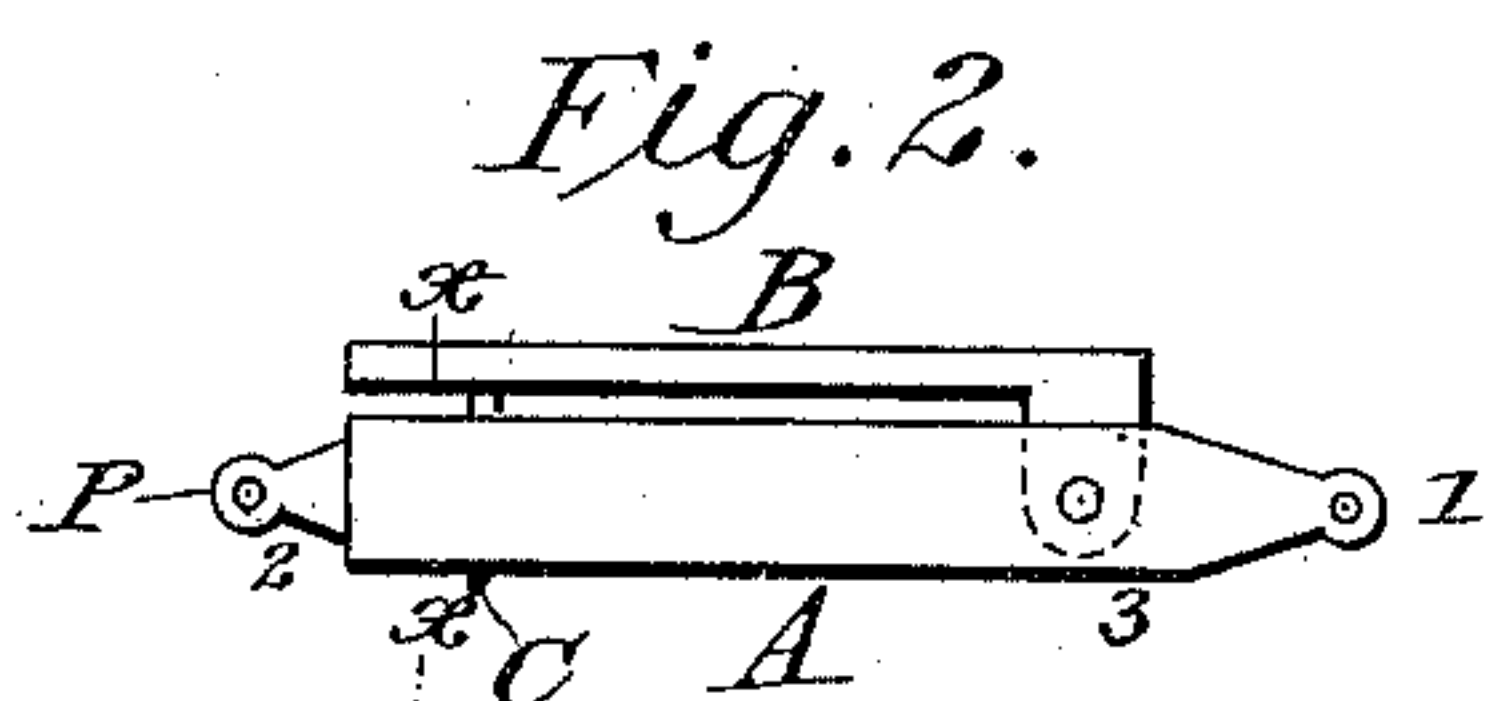
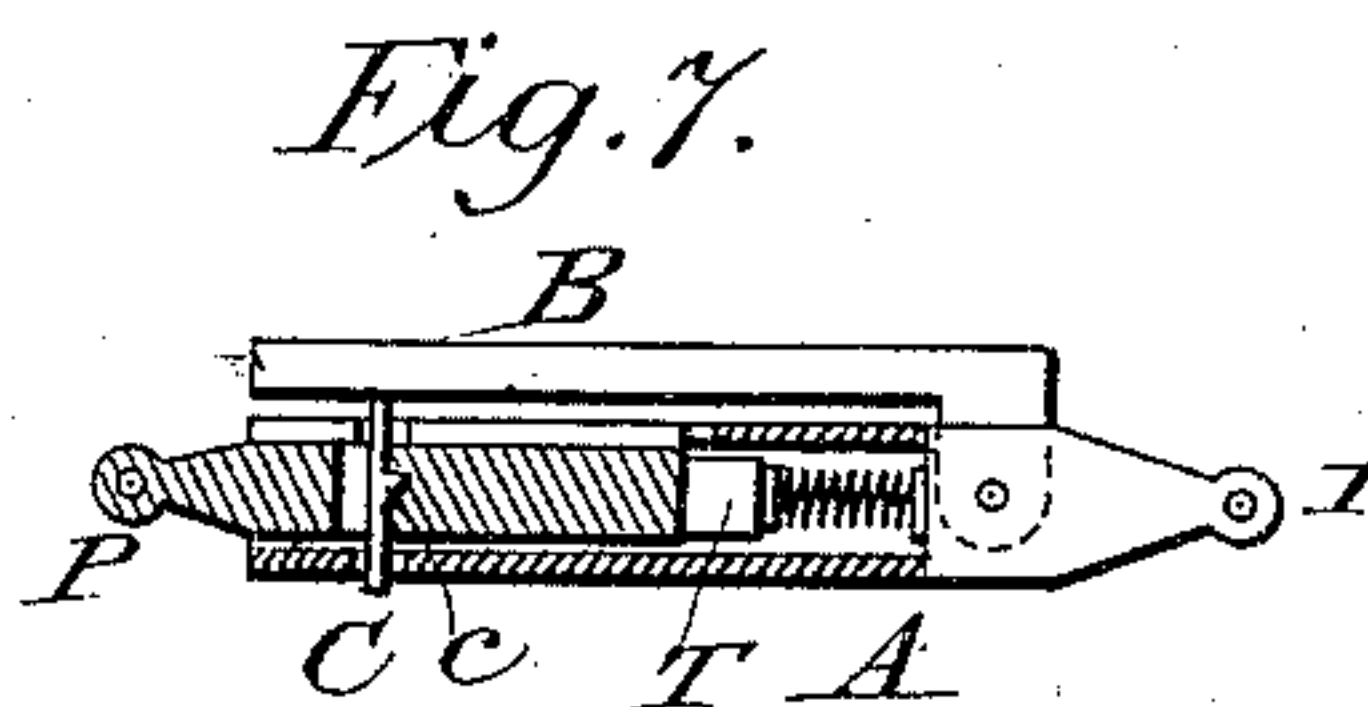
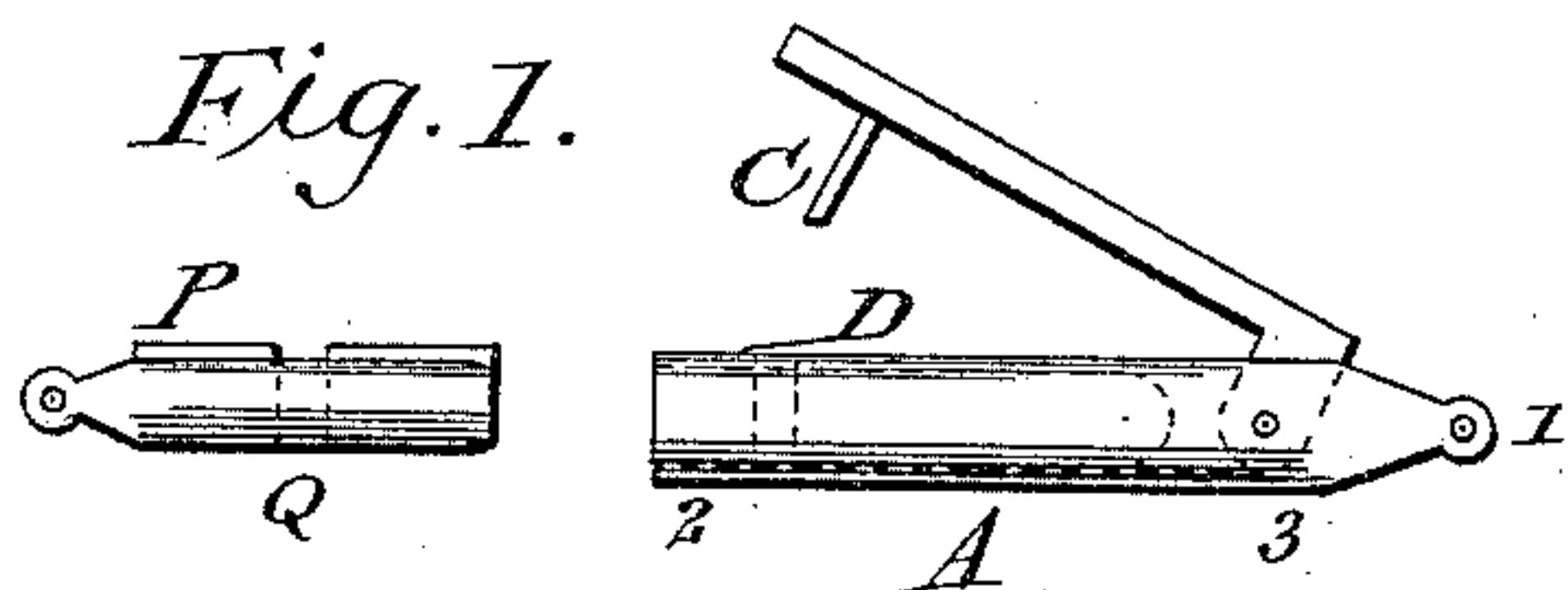


(No Model.)

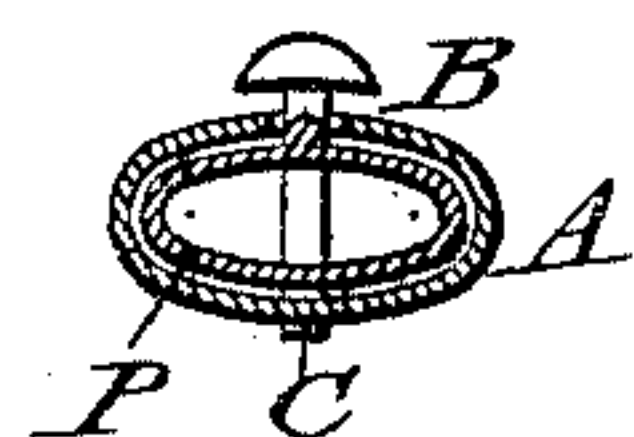
A. KELLER.  
CLASP FOR NECKLACES.

No. 408,308.

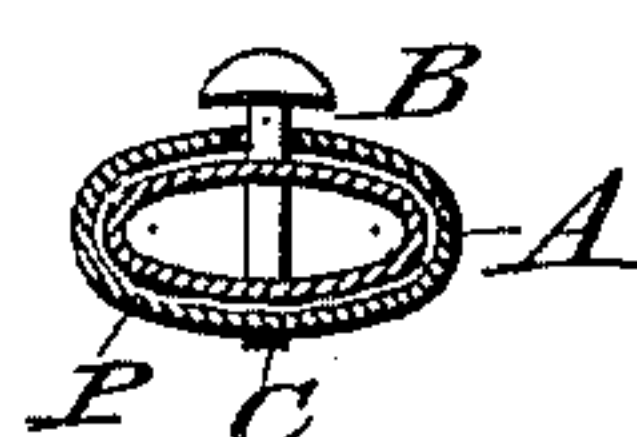
Patented Aug. 6, 1889.



*Fig. 5.*



*Fig. 6.*



Witnesses:  
Joseph Sullivan  
John C. Elmendorf

Inventor.  
Adam Keller  
by J. F. Feltgenhausen  
His Atty.



# UNITED STATES PATENT OFFICE.

ADAM KELLER, OF NEW YORK, N. Y., ASSIGNOR TO HIMSELF, AND JOHN C. DOWNING, OF NEWARK, NEW JERSEY.

## CLASP FOR NECKLACES.

SPECIFICATION forming part of Letters Patent No. 408,308, dated August 6, 1889.

Application filed February 16, 1889. Serial No. 300,205. (No model.)

*To all whom it may concern:*

Be it known that I, ADAM KELLER, of New York city, New York, have invented a new and useful Improvement in Clasps for Necklaces and like Articles, of which the following is such full, clear, and exact description as will enable others skilled in the art to which it most nearly appertains to make and use the same, when taken in connection with the accompanying drawings, in which—

Figure 1 is a side view of the clasp in an open position. Fig. 2 is a side view of the clasp in a closed position. Fig. 3 is a vertical section of a modification of the clasp open. Fig. 4 is a vertical section of a modification of the clasp closed. Fig. 5 is a cross-section of the clasp in a closed position. Fig. 6 is a cross-section of a modification of clasp in a closed position. Figs. 7 and 8 are vertical sections of modifications. Fig. 9 is a view of a modification partially broken away to show sections. Fig. 9<sup>a</sup> is a detail of the same. Fig. 10 is a view of a modification partially broken away to show sections.

This my invention relates to clasps for necklaces and similar articles of jewelry; and it consists of two barrels, one of which fits within the other, and a pin on a pivoted arm which passes through the two barrels and holds them together, and the various combinations hereinafter specified.

Heretofore and before this my invention great difficulty has been experienced in making a clasp for necklaces which would be secure and at the same time present a good appearance and be readily adjusted to the wearer.

The clasp consists of the barrel A, to one end of which, as at 1, an end of the necklace is secured. The barrel A is hollow, open at one end, as at 2. Pivoted at or near one end of the barrel A, as at 3, is the arm B, carrying the pin C. A hole D is made through the barrel B, at right angles to the axis of it, through which the pin C may freely pass when the arm B is brought down on the barrel A. To the other end of the necklace is secured the plunger or barrel P, of such size as to fit within the barrel A. This has a hole Q through it, at right angles to the axis, which corre-

sponds with the hole D in the barrel A when the two barrels are slipped one within the other in a closed position, so that the pin C on the arm B may pass through both barrels A and P. The barrel A has a slot lengthwise of it on the upper side, as shown at Fig. 5, and the barrel P has a ridge or feather lengthwise of it fitting in the slot in the barrel A when they are in a closed position, as shown in Fig. 5. The feather and slot prevent the clasp being put together in a wrong manner. The feather and slot may, however, be omitted, as shown in Fig. 6; but there will then, of course, be nothing to prevent the barrel P from being put in upside down. The clasp may be used in this form, the friction at the pivot-hinge 3 keeping the pin in position in the corresponding holes in the two barrels A and P when closed. To make the clasp more secure I may put within the barrel A the spiral spring S, (shown at Fig. 3,) attached at one end to the barrel A and at the other to the butt or buffer T, which latter is free to move along the barrel A, being normally in the position shown in Fig. 3 opposite the hole D, so as to intercept or block the same until removed by the introduction of the barrel P within the barrel A. When the butt and spiral spring are used, the pin C has a projection or catch c on its side to "take" on the side of the hole in the barrel P when it is pressed against pin C by the spiral spring S. The barrel P is made hollow, as shown in Figs. 4 and 5, or a recess is made for the projection c on the side of the pin C to enter, as shown in Fig. 7, or the projection c is so placed on the pin C that it catches below the barrel P, as shown in Fig. 8.

The buffer T and spiral spring S may be omitted and a spring-catch put on the pin C, as shown in Fig. 9, which will catch on the inside of one of the barrels A or P, as shown in Fig. 9, part of which is in section to show the pin C with the spring-catch on it. A detail of the pin with a spring-catch is shown in Fig. 9<sup>a</sup>. Instead of the spring-catch on the pin C the pin may be held in its closed position by a spring V at or near the pivot-joint of the arm B, as shown in Fig. 10, when a plain pin C may be used.

The mode of operation is as follows: The



arm B is raised, the barrel P is pushed into the barrel A until the hole Q and hole D correspond with one another, when the arm B is lowered and the pin C is passed through the  
5 holes in the two barrels. If the modification of Figs. 3 and 4 having the buffer T and spiral spring S is used, the barrel P when it enters A forces the buffer T farther into the barrel A, compressing the spiral spring until  
10 the holes Q and D correspond with one another, when the arm B is lowered and the pin C is passed through the holes in the two barrels, the pin C being locked in that position by the projection c on the pin C taking in a  
15 a recess in the inner barrel P, which is pressed against it by the action of the spiral spring S, or the pin C is held in position by the spring-catch shown in Fig. 9 or by the spring V shown in Fig. 10.

20 What I claim as new, and desire to secure by Letters Patent, is—

1. The combination, in a clasp, of two barrels, one of which fits within the other, having corresponding holes through each, and a  
25 pin on a pivoted arm, which passes through the two barrels and holds them together, substantially as specified.

2. The combination, in a clasp, of two bar-

rels, one of which fits within the other, and having corresponding holes through each, a  
30 pin on a pivoted arm, which passes through the two barrels, and a spring to retain the pin in the hole, substantially as specified.

3. The combination, in a clasp, of an outer barrel having a hole through it at right angles  
35 to the axis, and a buffer T on a spiral spring within the same, which normally closes the hole, substantially as described.

4. The combination, in a clasp, of an outer barrel provided with a buffer and spring and  
40 an inner barrel fitting within the outer barrel, the two barrels having corresponding holes through each, and a pin C on a pivoted arm, substantially as specified.

5. The combination, in a clasp, of two bar-  
45 rels, one of which fits within the other, having corresponding holes through each, the outer barrel having a longitudinal slot and the inner barrel a feather to fit into the slot, and a pin on a pivoted arm, and a spring to  
50 retain the pin in the corresponding holes through each barrel, substantially as specified.

ADAM KELLER.

Witnesses:

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JOSEPH J. SULLIVAN.