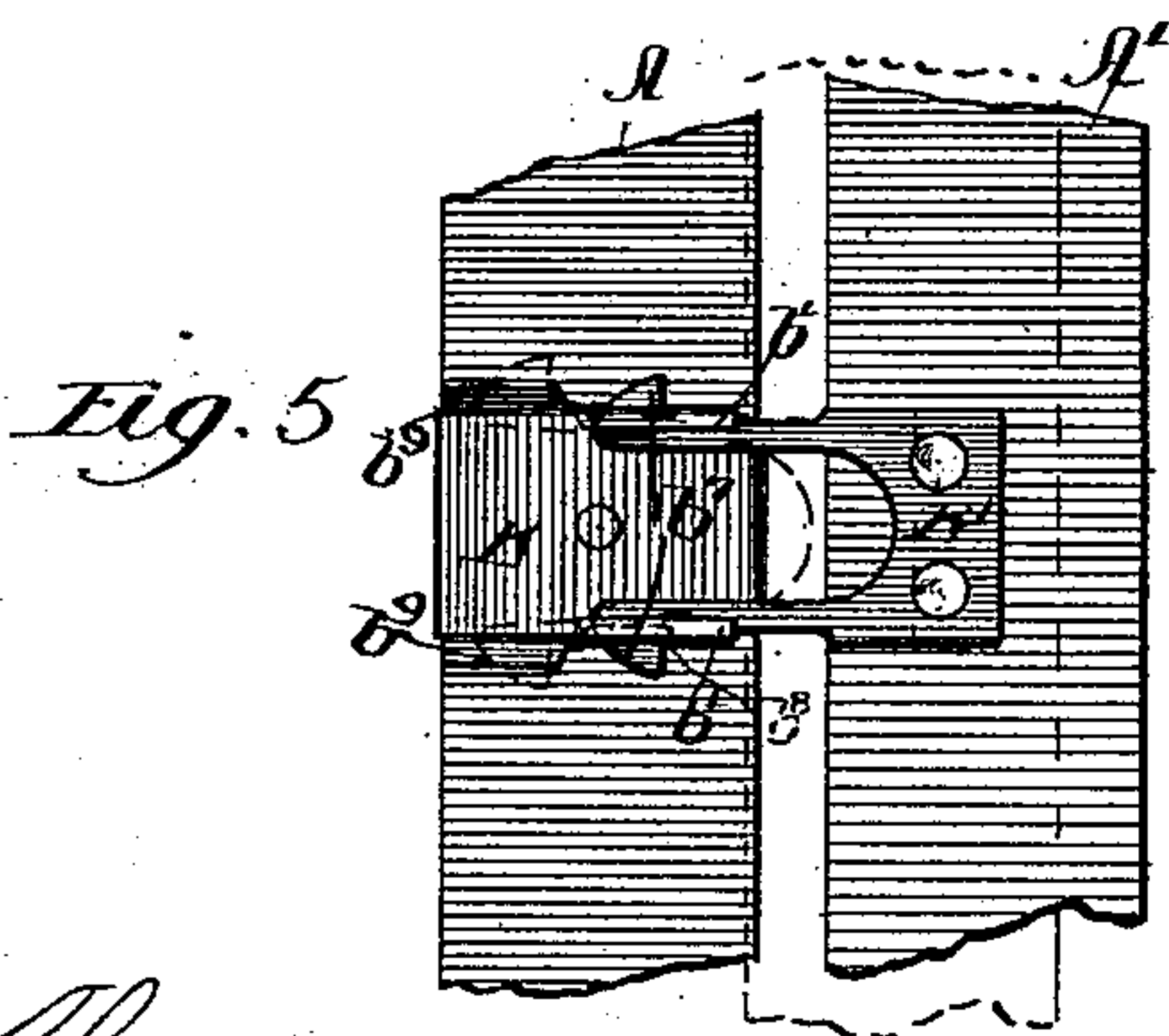
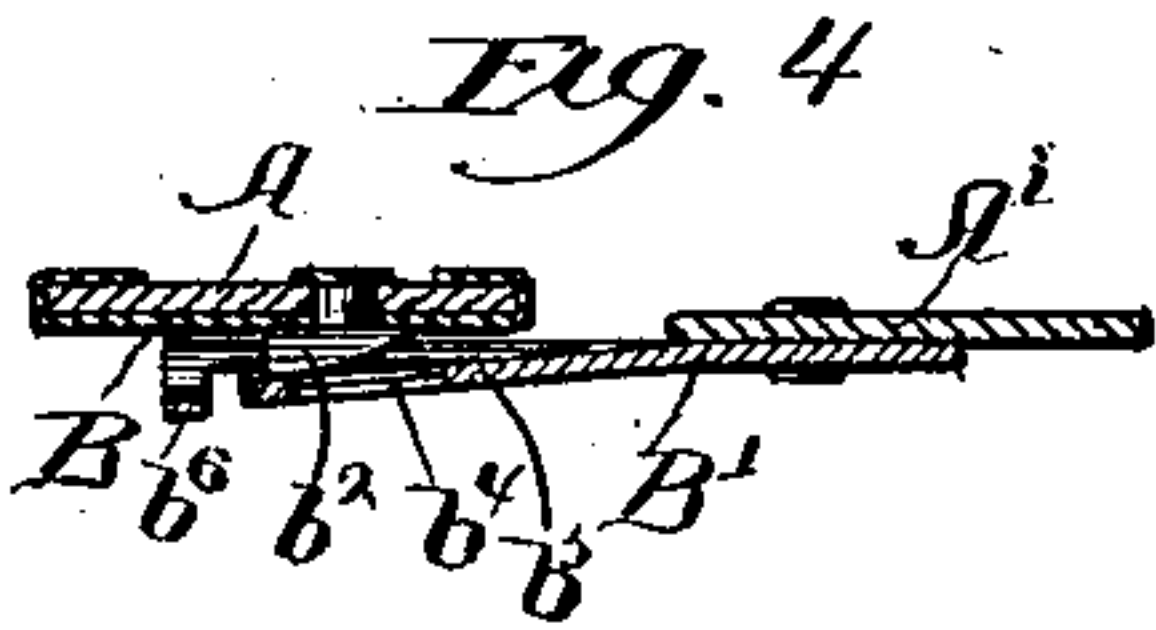
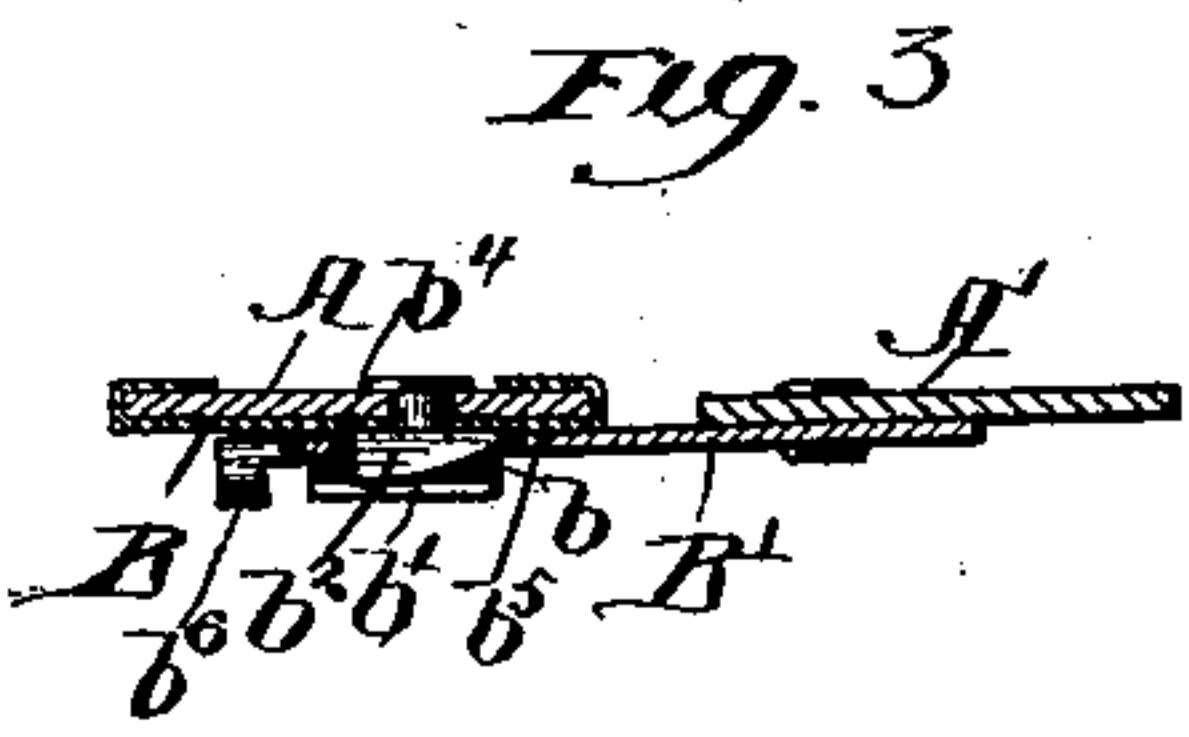
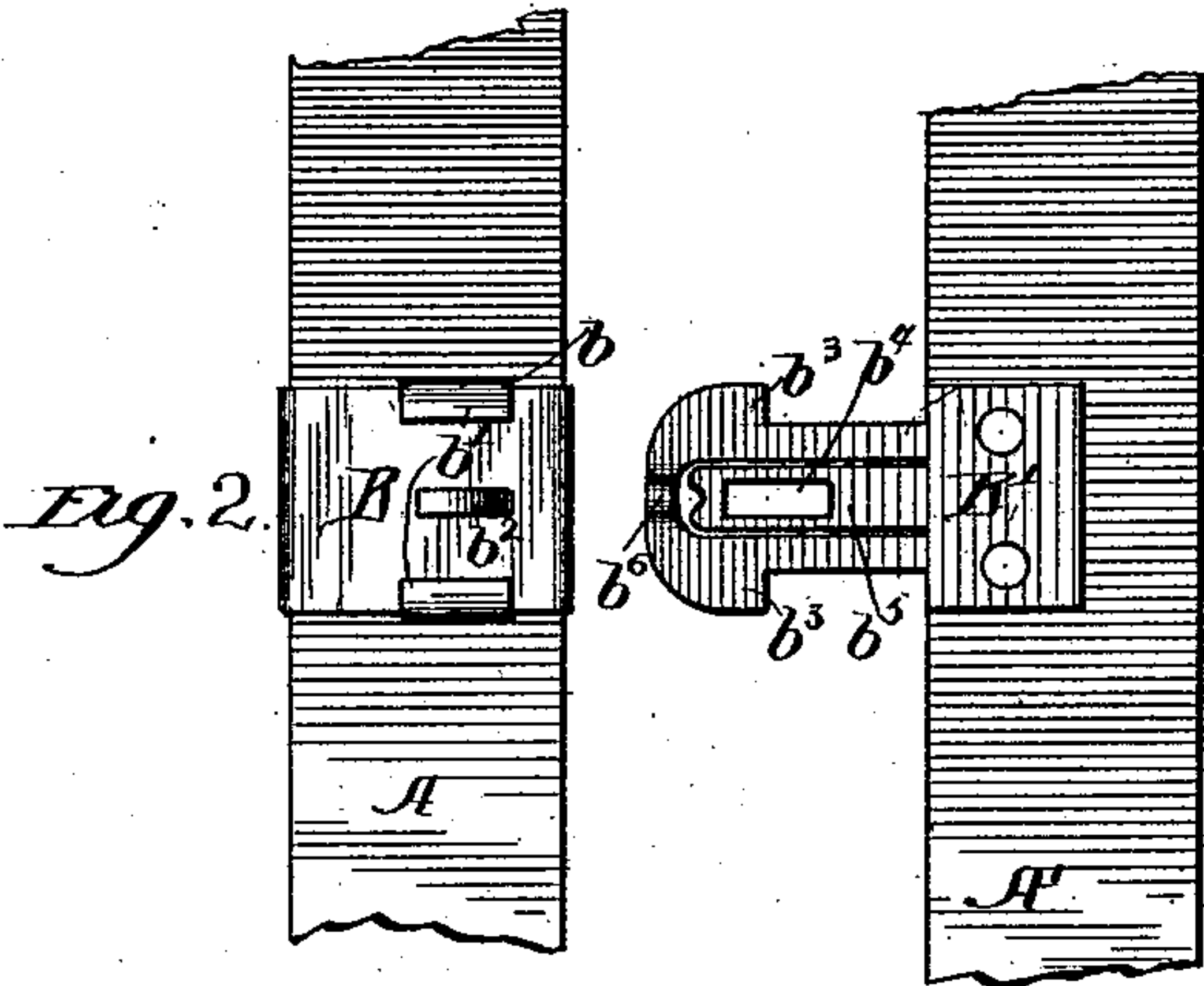
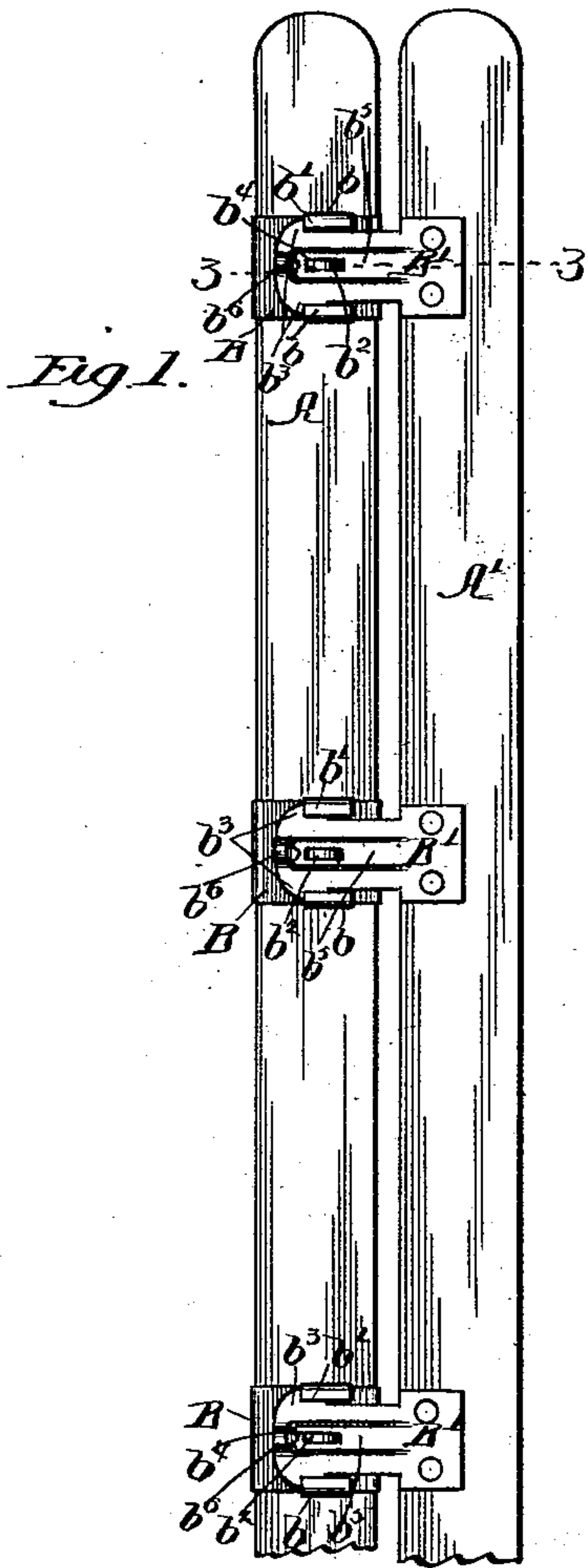


(No Model.)

G. J. PFORR.  
CORSET CLASP.

No. 477,819.

Patented June 28, 1892.



Witnesses.

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# UNITED STATES PATENT OFFICE.

GEORGE J. PFORR, OF CHICAGO, ILLINOIS.

## CORSET-CLASP.

SPECIFICATION forming part of Letters Patent No. 477,819, dated June 28, 1892.

Application filed May 18, 1891. Serial No. 393,124. (No model.)

*To all whom it may concern:*

Be it known that I, GEORGE J. PFORR, a citizen of the United States of America, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Corset-Clasps, of which the following is a specification.

My invention relates to certain improvements in clasps designed for use upon corsets and similar articles which have to be fastened under considerable strain. In the use of clasps of this sort as heretofore made considerable difficulty has been encountered in fastening the parts together, for the reason that the different movements necessary to effect the fastening and to loosen the same are made with great difficulty under the great strain which necessarily exists. It is my purpose to produce a much more convenient and effective fastening by devising one which shall require but a single movement in but one direction to both fasten and unfasten it. This movement will of course be opposite to the direction of the strain caused by the corset, and hence all that will be necessary to fasten or unfasten the clasp will be to press the edges or steels together a sufficient distance.

In perfecting the construction of my improved clasp I have made a number of minor and incidental improvements, which will be fully described; but I do not intend thereby to limit myself to any of said minor improvements or to any combinations of the same, except as definitely pointed out in the claims appended hereto.

Referring to the drawings presented herewith for a clearer illustration of said preferred construction, the same will be found in Figures 1, 2, 3, and 4, of which Fig. 1 is a broken view of two corset-steels with the different members of three clasps attached thereto. Fig. 2 is an enlarged face view of the single clasp with the members thereof separated. Fig. 3 is an enlarged cross-section in line 3 3 of Fig. 1, and Fig. 4 is a similar cross-section with the clasp just in the act of engaging. A face-view modification is shown in Fig. 5.

In the figures the corset-steels are lettered A and A' and the different members of the clasps B and B', respectively. The member B in each case consists of a flat plate secured to the corset-steel, having its edges turned up

at  $b$  and inward to form overhanging flanges  $b'$ . In the middle of the plate is a projecting stud or catch  $b^2$ , sloping down to the plate in the direction of the edge of the corset. The other member consists of a tongue-shaped piece of metal B', fastened to the other steel of the corset and having a projecting portion provided upon opposite sides with heads or hooks  $b^3$ , adapted to slide beneath the overhanging flanges  $b'$ , said hooks being deep enough so that the shank upon which they are formed can be lifted upward between the flanges of the other member. The middle portion of this tongue contains a perforation  $b^4$ , fitted to receive the stud  $b^2$ , and said middle portion is enabled to yield to pass over the stud  $b^2$  by cutting loose on three sides a narrow strip  $b^5$  around the hole and extending back therefrom, so that it can yield independently thereof against the spring of the metal itself. The front portion of the body of the tongue is bent upward at the middle, as seen at  $b^6$ , so that it can pass over the stud without bending.

In fastening the clasp the projecting tongue is inserted between the flanges  $b'$  and pressed inward until the strip  $b^5$  rides up over the stud  $b^2$  and the latter enters the hole  $b^4$ . Fig. 4 shows the clasp just before the latter act takes place and illustrates the manner in which the different portions of the tongue yield to clear the stud. The middle strip itself, which contains the hole, bends in one direction and the strips of metal on each side thereof, which carry the heads, bend in the opposite direction.

To unclasp the fastening, the two members are crowded still farther together. The strip  $b^5$  again rides up the incline upon the stud  $b^2$  until the heads  $b^3$  clear the overhanging flanges  $b'$ , when the spring of the parts forces the heads outward and disengages the clasp.

It is immaterial, as will readily be seen, just where the spring is located in the clasp. It might be applied to the stud  $b^2$ , so that the latter would yield instead of the part with which it engages. Again, the stud itself might be placed upon the spring-strip  $b^5$  and the hole  $b^4$  be formed in the member B. I should consider neither of these modifications a departure from my invention.

Fig. 5 illustrates another modification, in



which the heads  $b^7$  are themselves mounted upon spring-arms and holes  $b^8$  provided in the upturned flanges of the member B, with which said heads may engage. The operation in  
 5 this case is the same as in the other, excepting, of course, the unimportant difference in the direction of engagement. In this modification the two members are thrown apart when the hooks are disengaged by means of  
 10 flaring side flanges  $b^9$ , which tend to throw the heads  $b^7$  away from them as soon as they escape from the overhanging flanges  $b'$ , and this form of the device I hold to be a full mechanical equivalent of that represented by the  
 15 other figures.

The modifications here shown are sufficient, it is believed, to illustrate the general principle of my invention, and for that reason it is not thought necessary to show any more of  
 20 the many different arrangements of parts or various forms in which said invention might be embodied.

I claim as new and desire to secure by Letters Patent—

25 1. In a clasp, the combination of two members B B', one of which has side flanges  $b'$  turned upward and inward and the other has a projecting tongue having a neck as narrow as the distance between the overhanging portions  
 30 of the said flanges, terminating in heads  $b^3$ , adapted to slide beneath the overhanging portions of the said flanges, a stud upon one of said members, means for engagement therewith upon the other, and a spring adapted to

engage the two, whereby the two members 35 may be engaged by pressing them together and afterward disengaged by pressing them still farther in the same direction, substantially as described.

2. In a clasp, the combination of two mem- 40 bers, one of which has side flanges turned upward and inward to form overhanging portions  $b'$  and the other member has a projecting tongue with a neck as narrow as the distance between the overhanging portions  $b'$  45 and a head of greater width adapted to slide beneath the overhanging portions, a stud upon one of the members, having a beveled edge in the direction from which the other member approaches in fastening the clasp, means 50 upon the other member for engagement with said stud, and a spring adapted to effect such engagement, whereby the two members may be engaged by pressing them together and afterward disengaged by pressing them still farther 55 in the same direction, substantially as described.

3. In a clasp, the combination of a plate B, having the side flanges  $b'$  turned upward and inward, and the stud or hook  $b^3$ , with the 60 member B', having the projecting tongue terminating in the heads  $b^3$ , and the strip  $b^5$ , secured to the plate at one end and containing the hole  $b^4$ , substantially as described.

GEORGE J. PFORR.

Witnesses:

C. P. SMITH,

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