

E. F. PRIDDAT.  
TIE FASTENER.

APPLICATION FILED DEC. 22, 1902.

NO MODEL.

2 SHEETS—SHEET 1.

Fig. 1.

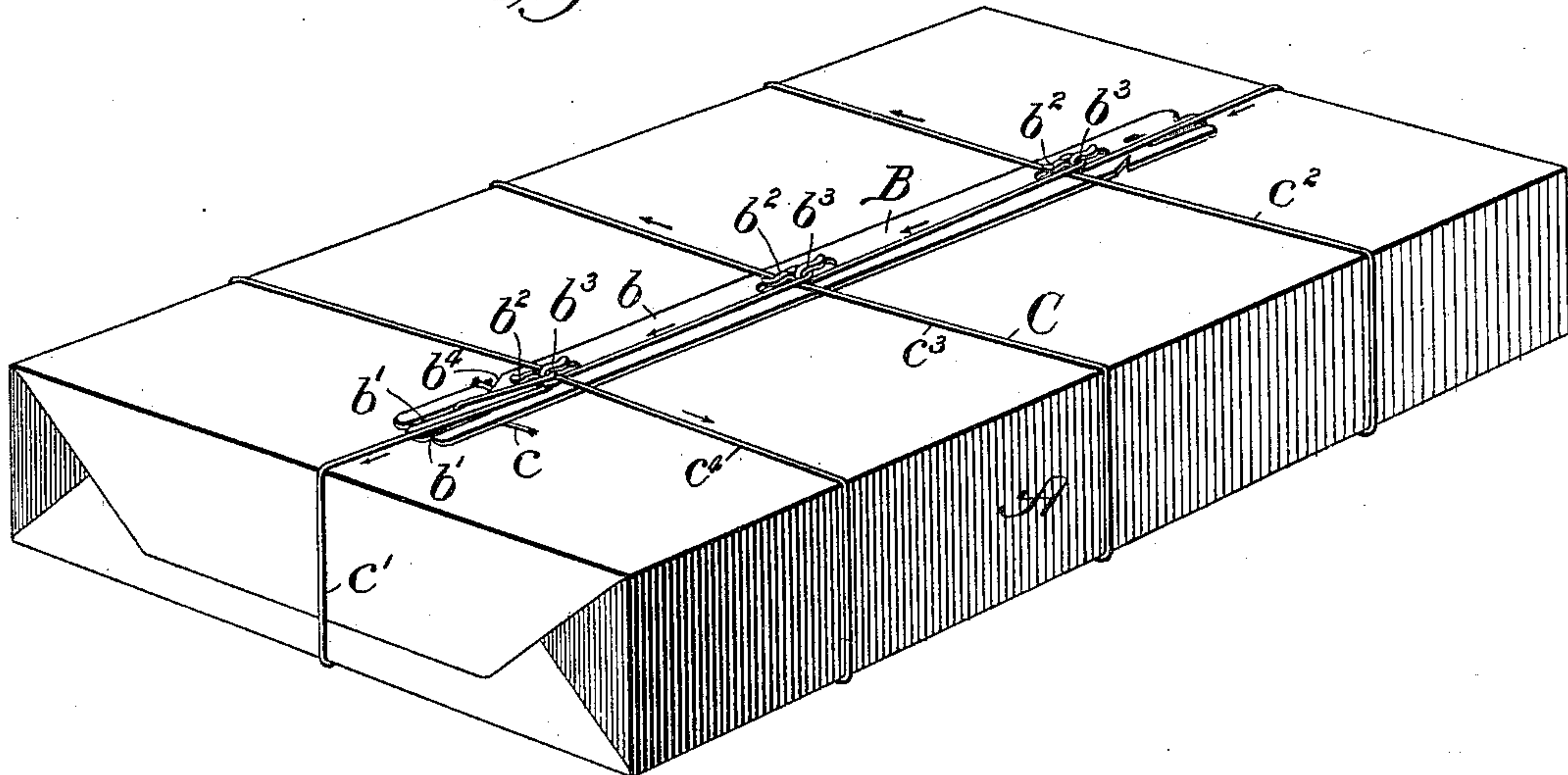


Fig. 2.



Fig. 3.

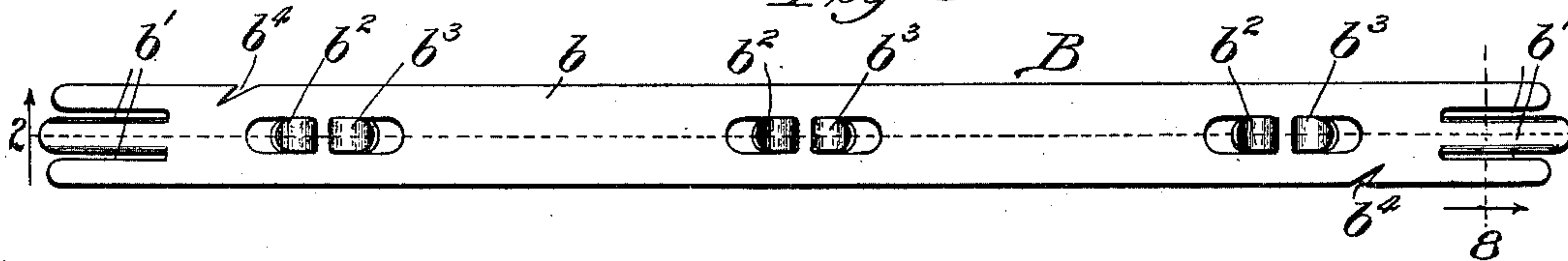


Fig. 4.



Fig. 6.



Fig. 5.

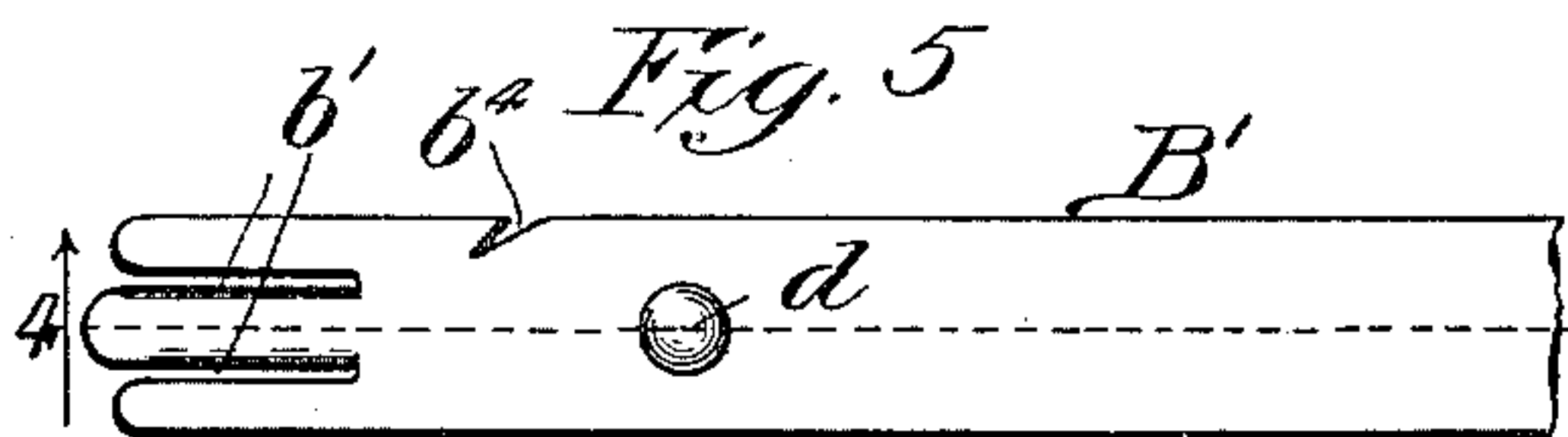


Fig. 7.

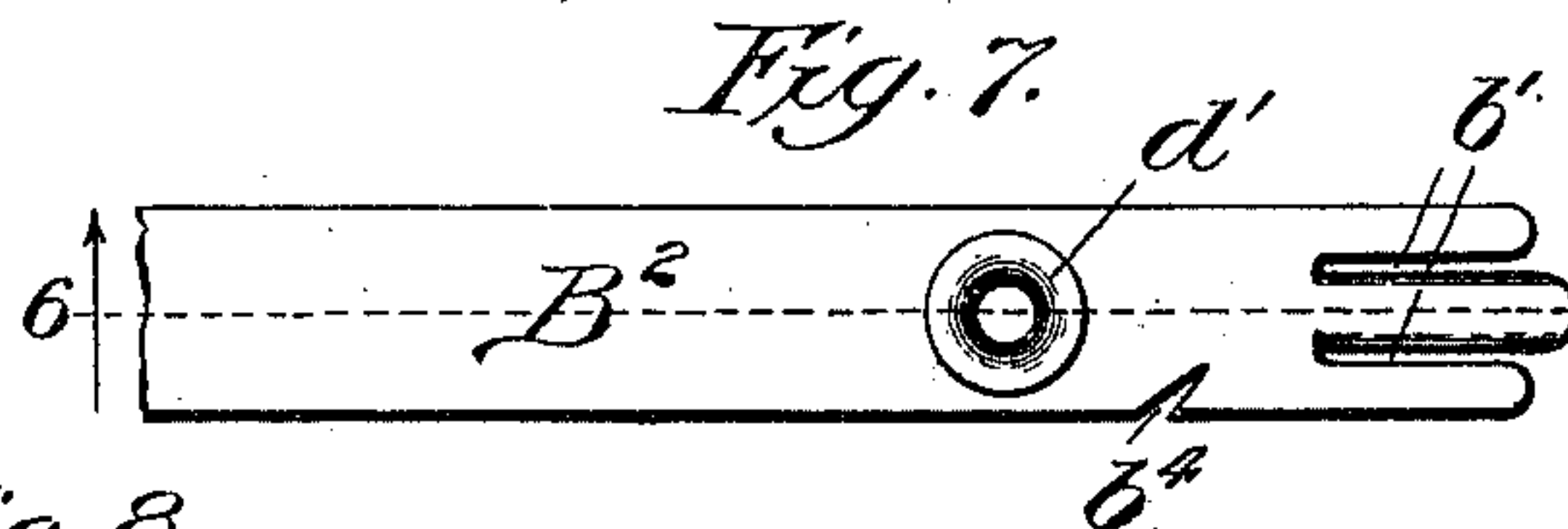
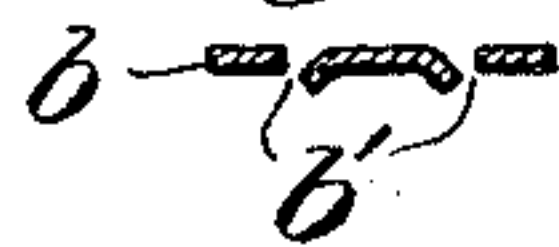


Fig. 8.



Witnesses:  
Edw. C. Clayford.  
John Enders Jr.

Inventor:  
Ernst F. Priddat,  
By Dyrenforth, Dyrenforth and Lee,  
Att'ys in law

No. 736,629.

PATENTED AUG. 18, 1903.

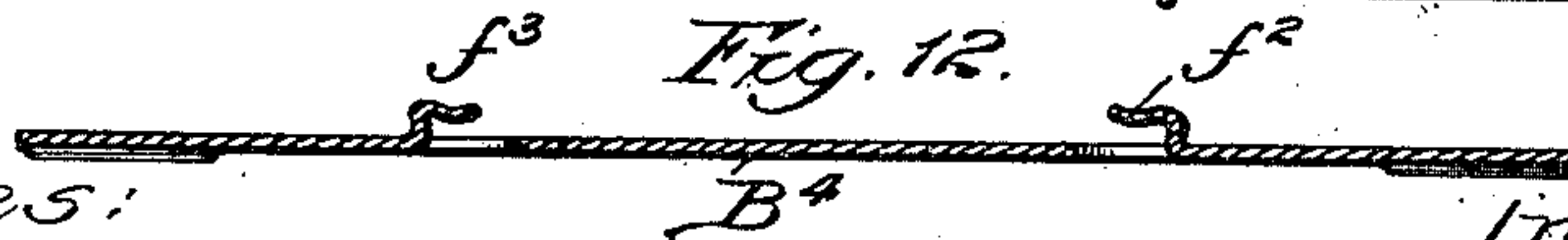
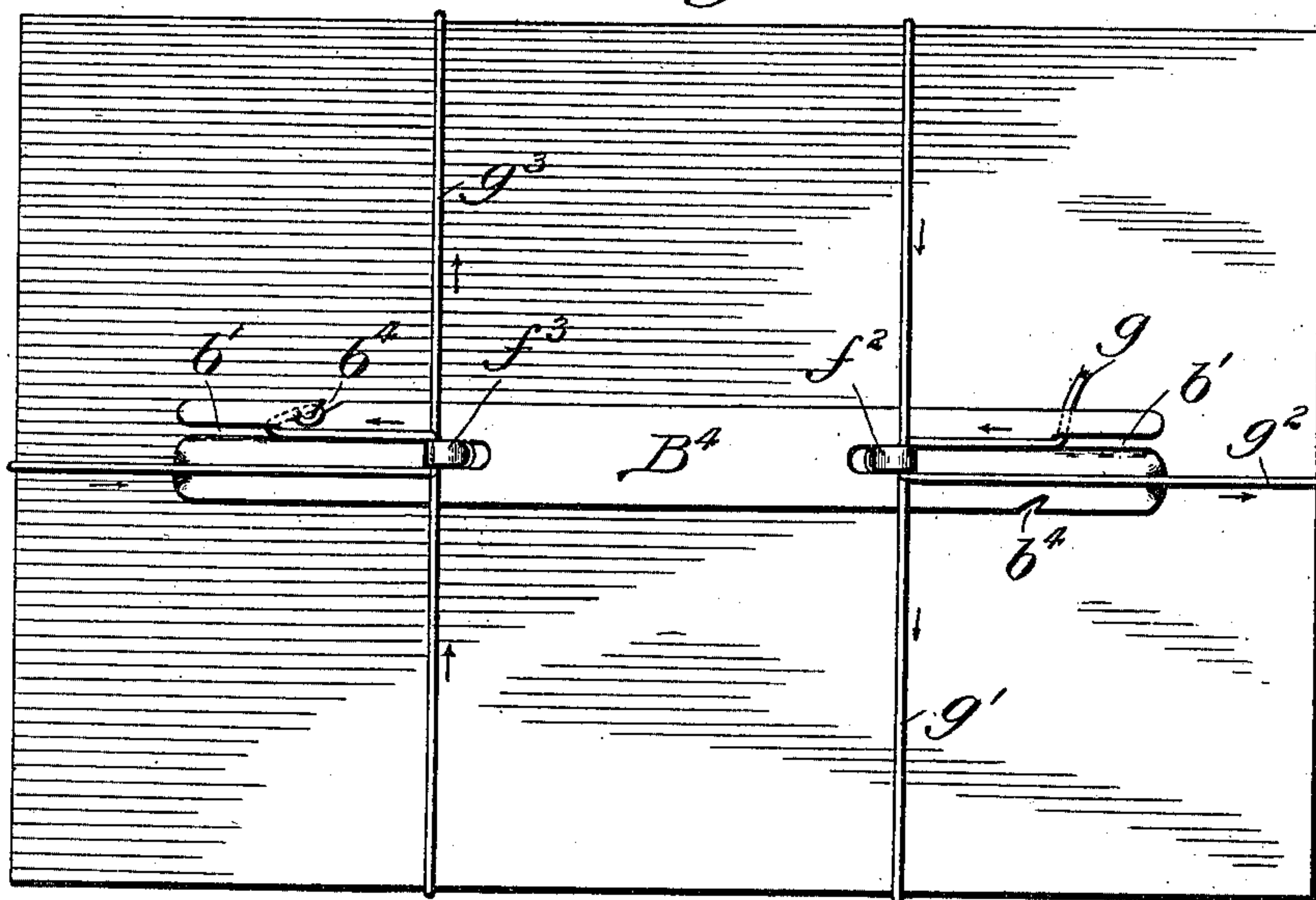
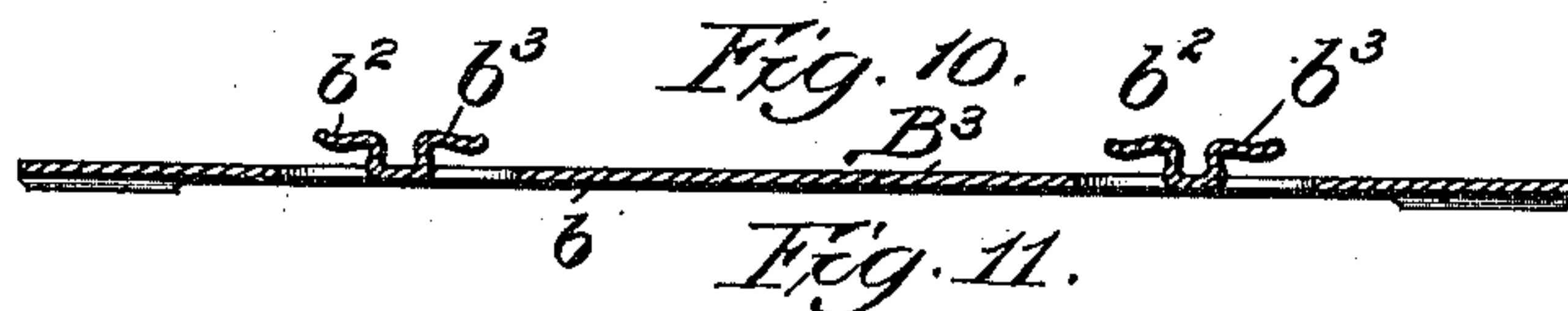
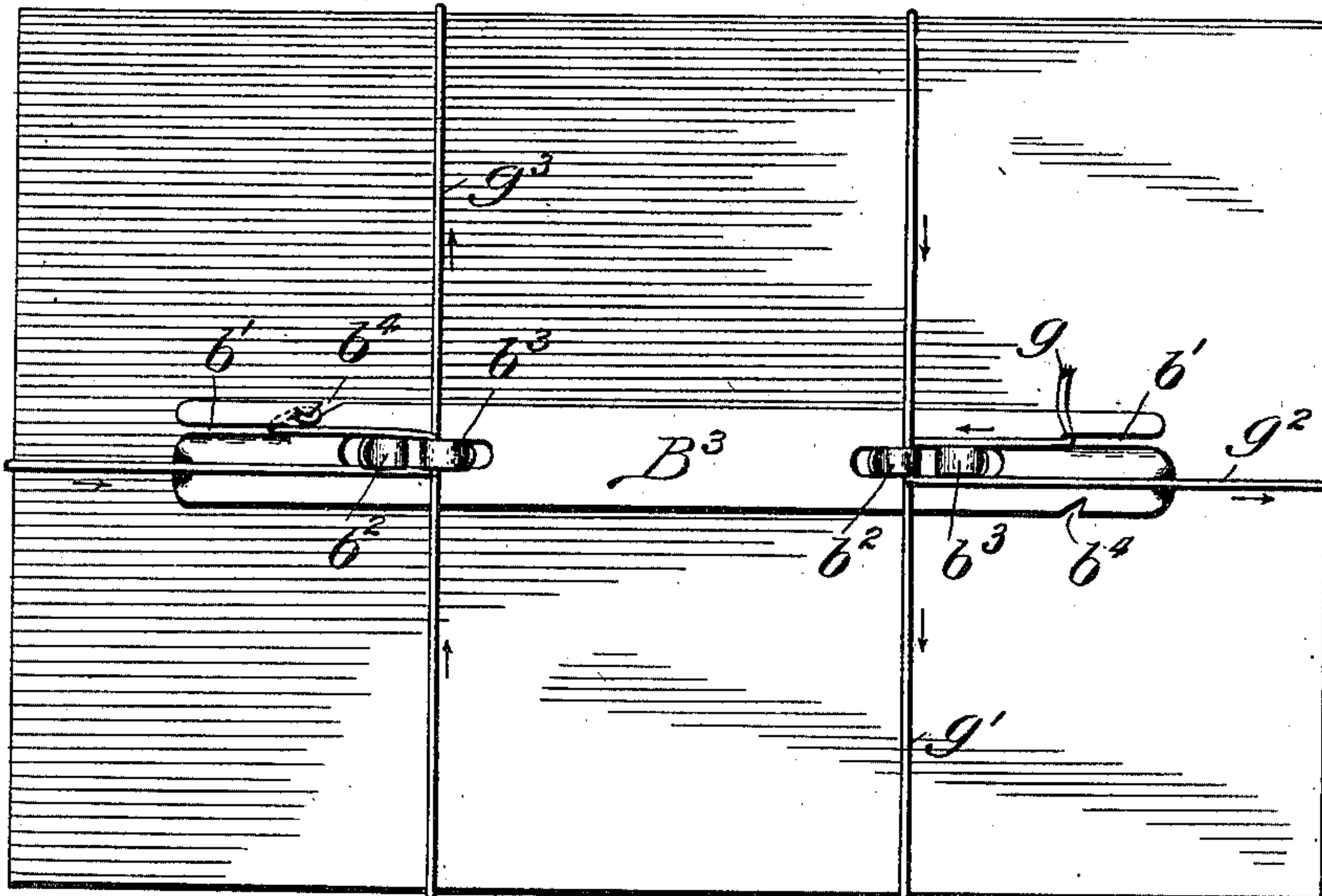
E. F. PRIDDAT.  
TIE FASTENER.

APPLICATION FILED DEC. 22, 1902.

NO MODEL.

2 SHEETS—SHEET 2.

*Fig. 9.*



witnesses:  
*Ed. Gaylord.*  
*John Enders, Jr.*

Inventor:  
*Ernst F. Priddat,*  
By *Dyrenforth, Dyrenforth & Lee*  
*Att'ys.*



# UNITED STATES PATENT OFFICE.

ERNST F. PRIDDAT, OF CHICAGO, ILLINOIS.

## TIE-FASTENER.

SPECIFICATION forming part of Letters Patent No. 736,629, dated August 18, 1903.

Application filed December 22, 1902. Serial No. 136,231. (No model.)

*To all whom it may concern:*

Be it known that I, ERNST F. PRIDDAT, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented a new and useful Improvement in Tie-Fasteners, of which the following is a specification.

My present invention consists of an improved tie-fastener adapted for use in forming and securing the ties of packages where two or more parallel cross-loops or wrappings are employed at suitable distances apart in tying a package.

The principal object of the invention is to provide a simple device of this character having suitably-spaced shoulders or bearings over which the twine may be drawn in changing the direction of the twine and having twine-gripping slots whereat the ends of the twine may be gripped, thereby avoiding the necessity of knotting the twine. Also the device will effect a great saving of twine and time, inasmuch as it is unnecessary to "draw through" the twine in the old way, and therefore the twine need not be severed till the wrapping is complete, so that there need be no loss from failure to judge correctly as to the amount of twine required for a package. Incidentally a better tie can be formed than with the old method, and the fastener may serve as an advertising device.

The invention is illustrated in the accompanying drawings, in which—

Figure 1 is a perspective view of a package secured with my improved fastener; Fig. 2, a longitudinal sectional view of the fastener, taken as indicated at line 2 of Fig. 3; Fig. 3, a plan view of the same; Figs. 4 and 5, broken views showing a modification, the section of Fig. 4 being taken as indicated at line 4 of Fig. 5; Figs. 6 and 7, similar views of another modification, the section of Fig. 6 being taken as indicated at line 6 of Fig. 7; Fig. 8, a section taken at line 8 of Fig. 3; Fig. 9, a plan view of a package secured with my improved fastener in a form quite similar to that of Fig. 1, the tie being arranged differently from the tie shown in Fig. 1; Fig. 10, a longitudinal sectional view of the fastener shown in Fig. 9; Fig. 11, a plan view of a package secured with a fastener of slightly-modified construc-

tion, and Fig. 12 a sectional view of the fastener shown in Fig. 11.

Referring to Figs. 1 to 3, inclusive, the construction is as follows: A represents a package, B the improved fastener, and C a piece of wrapping twine or cord used in connection with the fastener B. The device B comprises a thin narrow member  $b$  of considerable length and provided at opposite ends with twine-gripping slots  $b'$  and equipped between its ends with suitably-spaced tongues, bearings, or hooks  $b^2 b^3$ , arranged in pairs, as shown. The member  $b$  is provided near opposite ends with lateral notches  $b^4$ , which serve as twine gripping and severing notches. Each notch  $b^4$  is opposed in direction to the adjacent twine-gripping slots  $b'$ . The tongues or hooks  $b^2$  are turned toward one extremity of the member  $b$ , and the tongues  $b^3$  are turned toward the opposite extremity of said member. Preferably the tongues are formed by stamping the metal through and shaping the projections suitably, as shown clearly in Fig. 2.

The fastener just described has three pairs of tongues or non-gripping bearings and may be applied to a package in the manner illustrated in Fig. 1. As there shown, the twine starts from a point  $c$ , passes upwardly through the nearest one of the slots  $b'$ , then about the adjacent pair of bearings  $b^2 b^3$ , then longitudinally about the package to form the loop  $c'$ , then about the bearing  $b^2$  at the opposite end of the fastener, then transversely about the package to form the loop  $c^2$ , then about the bearings  $b^2 b^3$ , then about the intermediate bearing  $b^2$  and transversely about the package to form the loop  $c^3$ , then about the intermediate bearings  $b^2 b^3$ , then about the bearings  $b^2 b^3$  at the left-hand end of the fastener, then transversely about the package to form the loop  $c^4$ , then about the bearing  $b^3$  of the left-hand couple, then downwardly through the farthest one of the adjacent twine-gripping slots  $b'$ , then upwardly through the adjacent severing-notch  $b^4$ , where the twine is snapped. The course of the twine may be readily followed by noticing the small arrows in Fig. 1.

The construction shown in Figs. 4 and 5 is similar to the construction already described, except that each set of bearings  $b^2 b^3$  are



blended into a single separately-formed stud  $d$ . In this modification,  $B'$  indicates the fastener.

$B^2$  indicates the modification shown in Figs. 6 and 7, and this construction is similar to the construction just described, except that the stud  $d$  is replaced by concave bearings or lugs  $d'$ , formed by punching the metal upwardly and shaping it suitably.

The construction shown in Fig. 9 is similar to the construction shown in Fig. 1, except that the fastener is provided with only two pairs of bearings and the tie is completed in a somewhat-different manner than is shown in Fig. 1. The fastener in this modification is indicated by  $B^3$ , and it is equipped with bearings  $b^2 b^3$ , arranged in pairs, as in Fig. 1.

$B^4$  represents the fastener shown in Figs. 11 and 12. Here tongues  $f^2 f^3$  are employed, which correspond, respectively, with the tongue  $b^2$  of one pair and the tongue  $b^3$  of another pair in the construction shown in Fig. 10.

In both of the constructions shown in Figs. 9 to 12 the twine-gripping slot  $b'$  and severing-notches  $b^4$  are employed and the tie may be formed as indicated. Thus starting from a point  $g$  the twine passes upwardly through a slot  $b'$ , then about the tongue  $b^2$  (or  $f^2$ ) transversely about the package to form the loop  $g'$ , then about the same bearing, then longitudinally about the package to form the incomplete loop  $g^2$ , then about the tongue  $b^3$  (or tongue  $f^3$ ) at the opposite end of the fastener, then transversely about the package to form the loop  $g^3$ , then about the last-named tongue, then downwardly through the slot  $b'$  and upwardly through the notch  $b^4$ , where the cord is snapped. This manner of effecting the tie saves some cord, as is evident. It is evident that the fastener  $B^3$  can be employed in a manner similar to the fastener  $B$ , if desired, and vice versa.

In each construction it is essential that there be employed a pair of suitably-spaced opposing hooks or concave shoulders over which the cord can be drawn freely, and where the fastener is to be used in the manner shown in Fig. 1 it is necessary that the bearings be arranged in pairs, the members of each pair being opposed to each other. It will be noted that this condition is fulfilled in the constructions shown in Figs. 4 to 7, inclusive, where the members of each pair are blended into a single stud.

It will be evident that many changes in form and details of construction within the spirit of my invention may be made. Hence no undue limitation should be understood from the foregoing detailed description, the same having been given for clearness of understanding only.

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

1. A fastener of the character described, comprising a member equipped with a plural-

ity of suitably-spaced non-gripping bearings over which the twine may be drawn, and provided with twine-securing means, for the purpose set forth.

2. A fastener of the character described, comprising a member adapted to rest flatwise upon a package, and equipped upon its upper surface with a plurality of suitably-spaced bearings over which the twine may be drawn freely, for the purpose set forth.

3. A fastener of the character described, comprising a member adapted to rest flatwise upon a package and provided with a plurality of bearings over which the twine may be drawn freely, and adjacent to one of said bearings with a twine-gripping slot, for the purpose set forth.

4. A fastener of the character described, comprising a member adapted to rest flatwise upon a package and having on its upper surface suitably-spaced oppositely-directed concave bearings, over which the twine may be drawn freely, for the purpose set forth.

5. A fastener of the character described, comprising a member adapted to rest flatwise upon a package, and equipped on its upper surface near its extremities with opposed concave non-gripping bearings and having at one extremity a twine-gripping slot, for the purpose set forth.

6. A fastener of the character described, comprising a member adapted to rest flatwise upon a package, and equipped on its upper surface with a plurality of suitably-spaced bearings over which the twine may be drawn freely, and having at one end a twine-gripping slot and an opposed twine-severing notch, for the purpose set forth.

7. A fastener of the character described, comprising a member adapted to rest upon a package and provided on its upper surface with a plurality of suitably-spaced bearings over which the twine may be drawn freely, and having at opposite ends twine-gripping slots, for the purpose set forth.

8. A fastener of the character described, comprising a member equipped with suitably-spaced pairs of hooks turned in opposite directions and formed integrally with said member, for the purpose set forth.

9. A fastener of the character described, comprising a member adapted to rest flatwise upon a package and equipped on its upper surface with hooks turned directly toward each other, and having adjacent to and independent of said hooks twine-gripping slots, for the purpose set forth.

10. A device of the character described, comprising a member equipped with three or more substantially aligned bearings over which the twine may be drawn freely, said member having twine-securing means, for the purpose set forth.

11. A device of the character described, comprising an elongated sheet-metal member adapted to rest flatwise upon a package and

equipped on its upper surface with three or more suitably-spaced integrally-formed non-gripping hooks and having at opposite extremities twine-gripping slots, for the purpose set forth. 10

5 12. A device of the character described, comprising a sheet-metal member having at one extremity two substantially parallel

twine-gripping slots, and equipped on its upper surface with a plurality of suitably-spaced bearings, over which the twine may be drawn freely, for the purpose set forth.

ERNST F. PRIDDAT.

In presence of—

L. HEISLAR,

ALBERT D. BACCI.