

C. P. COTTRELL.  
CLAMP FOR STEREOTYPE PLATES.  
APPLICATION FILED DEC. 7, 1903.

NO MODEL.

Fig. 1.

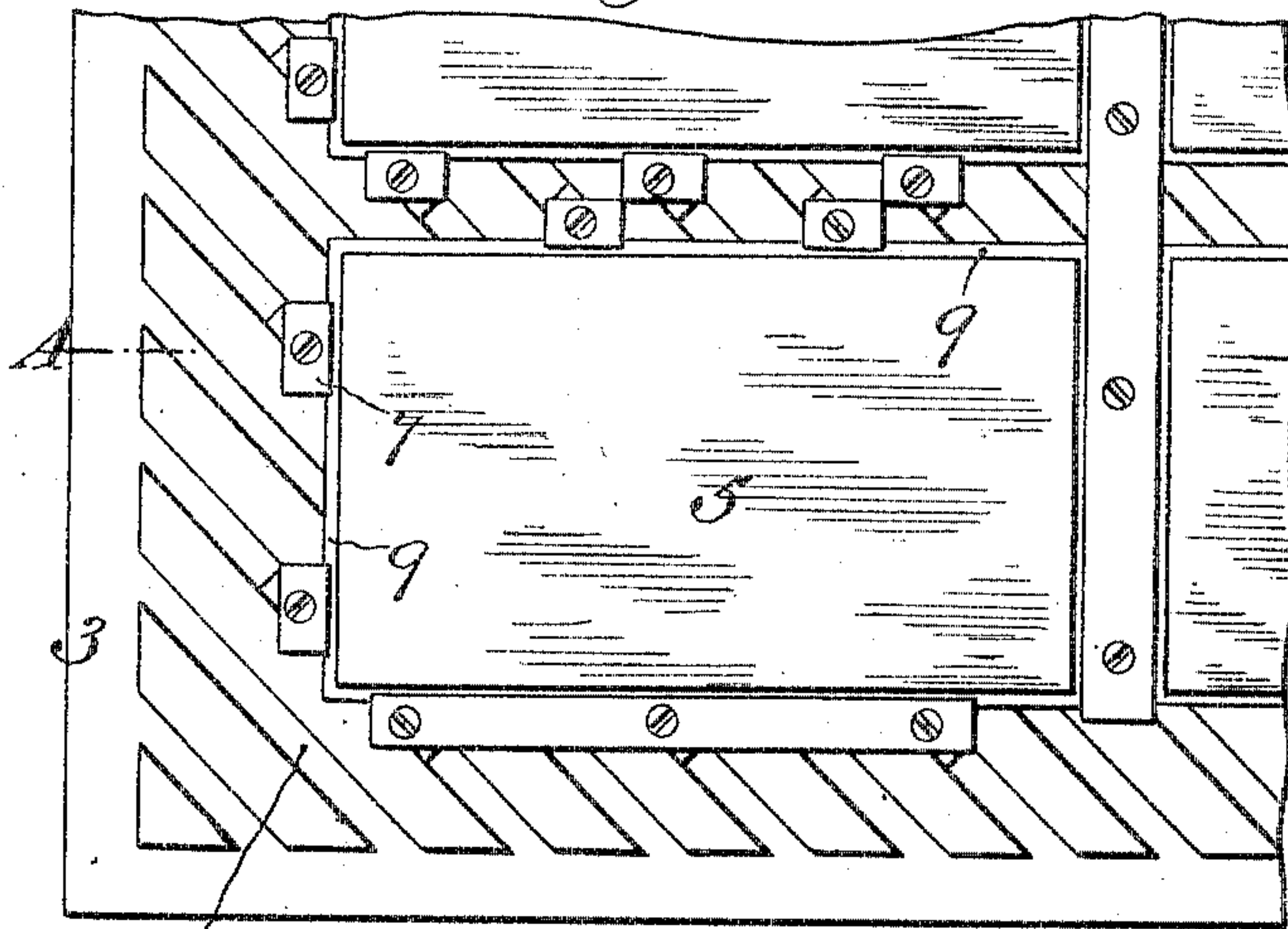


Fig. 2.

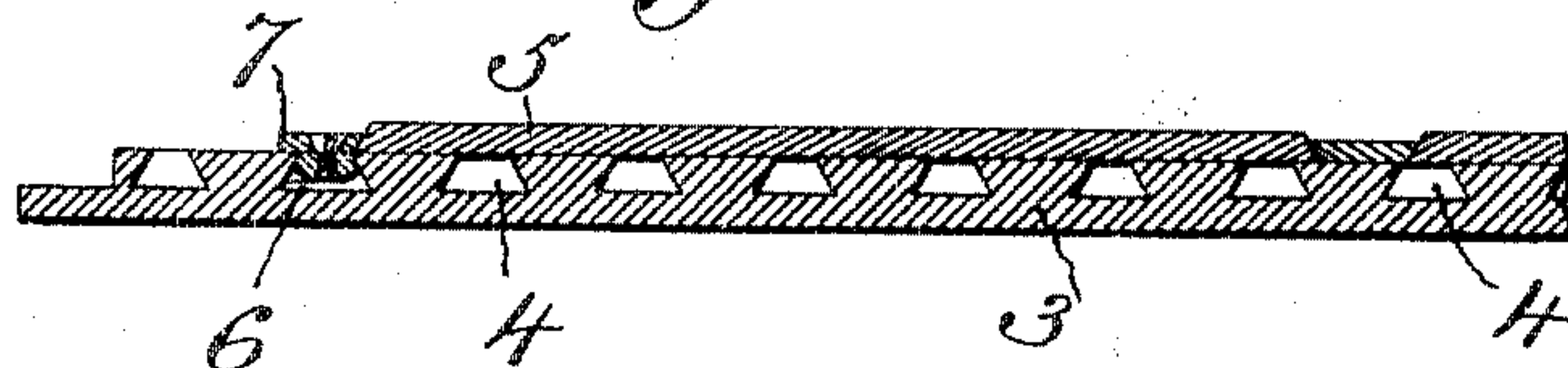


Fig. 3.

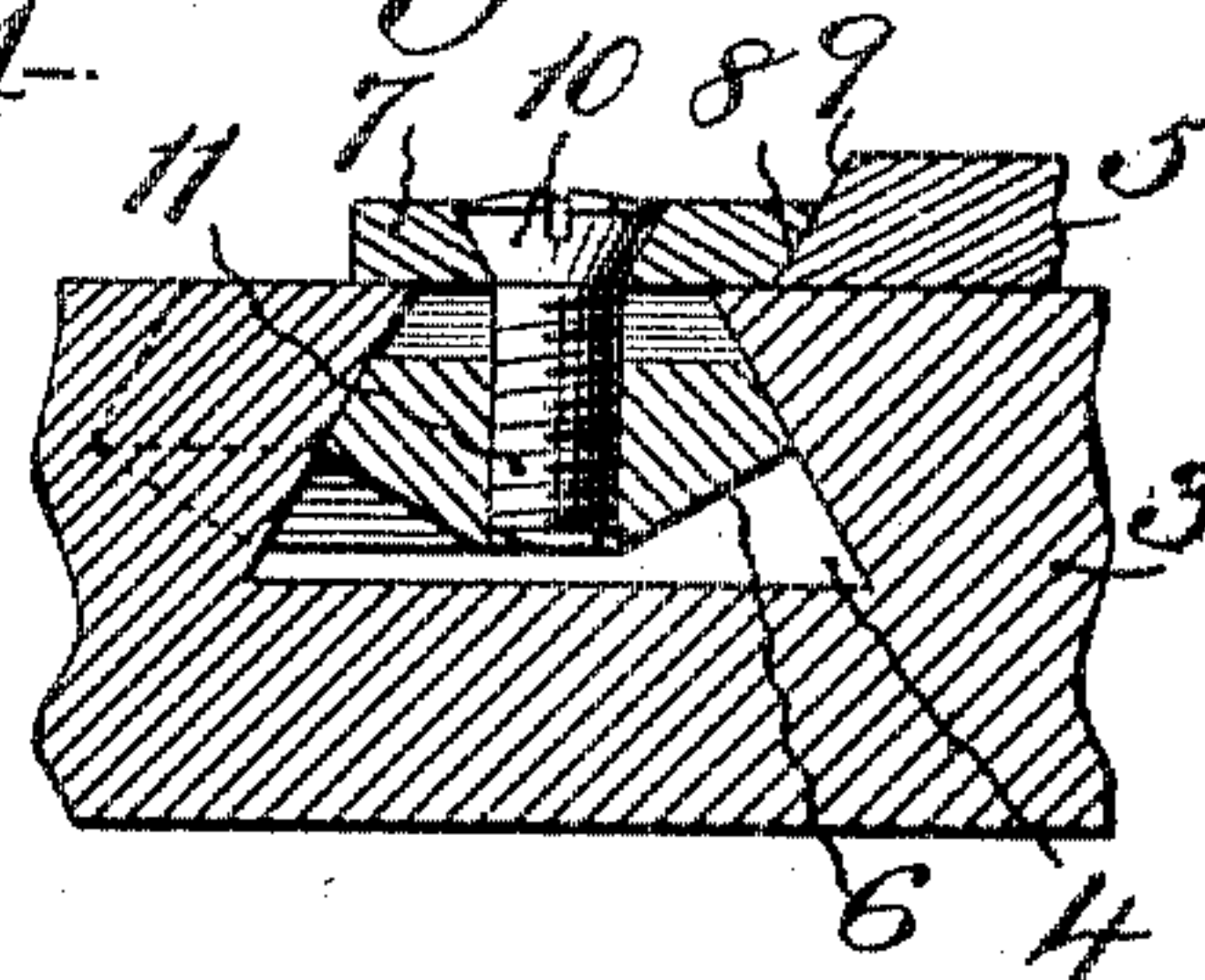


Fig. 4.

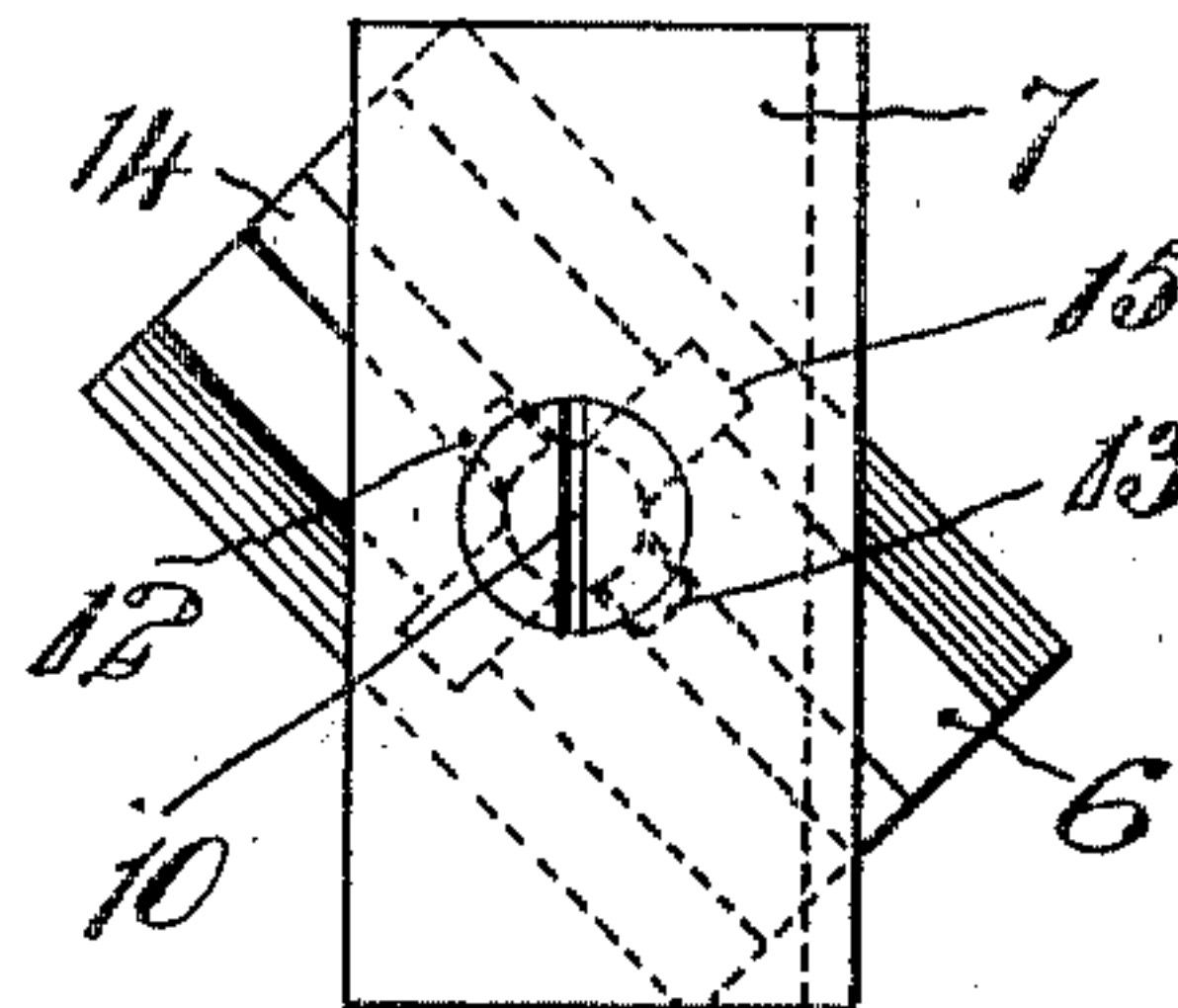


Fig. 5.

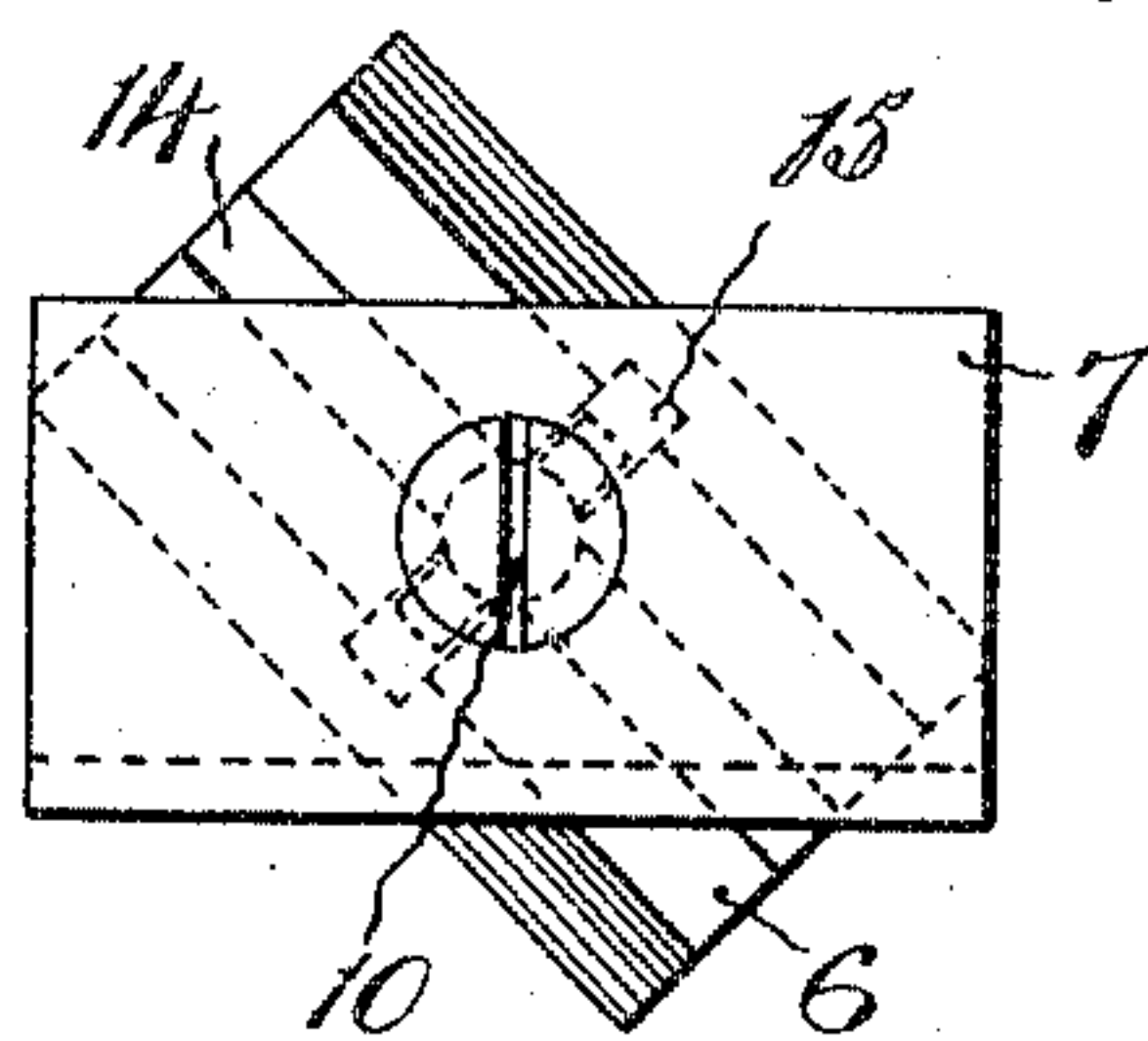


Fig. 7.

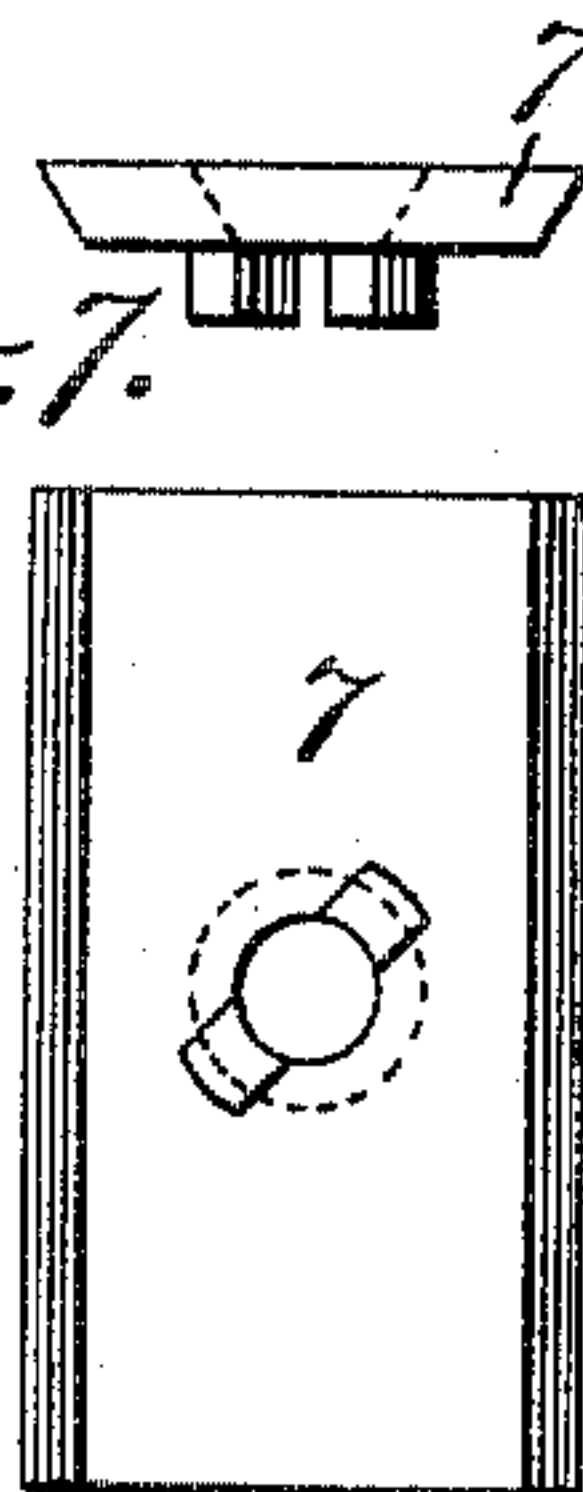


Fig. 6.

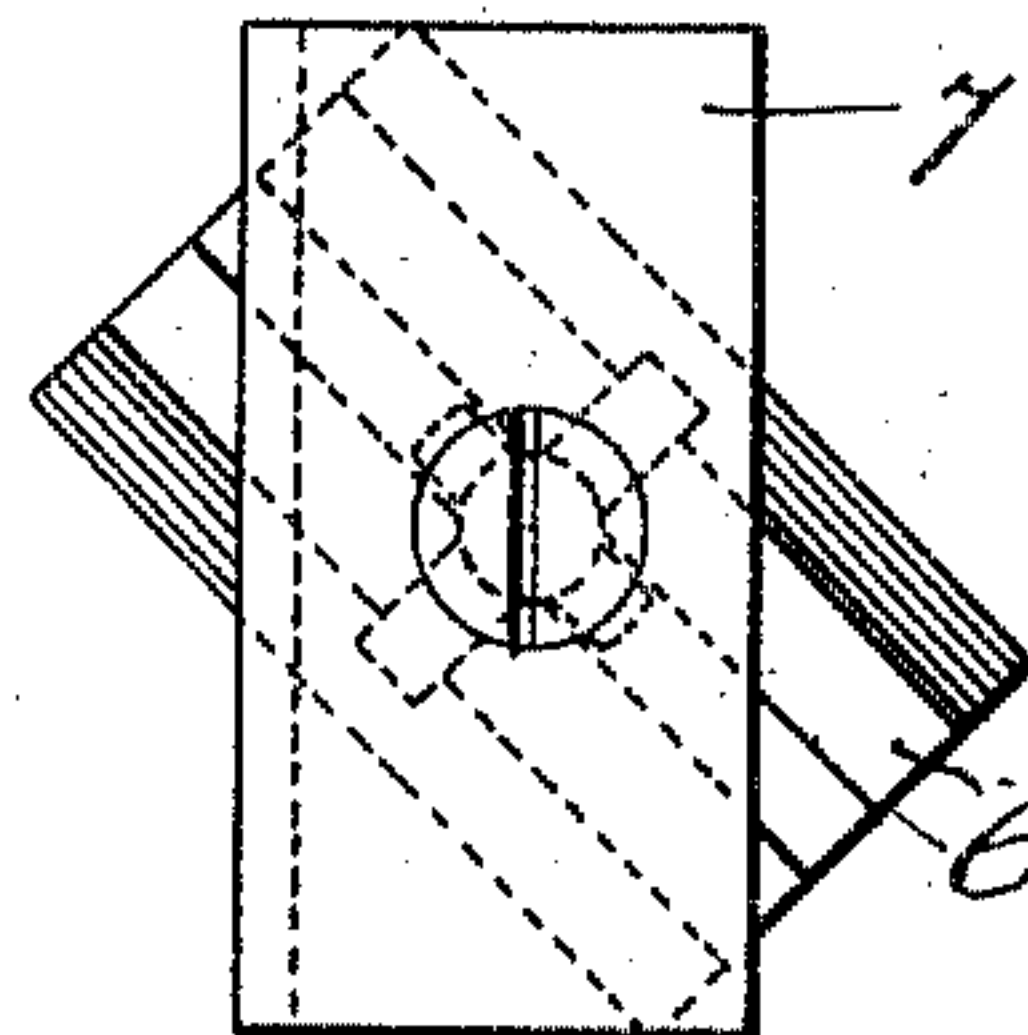


Fig. 10.

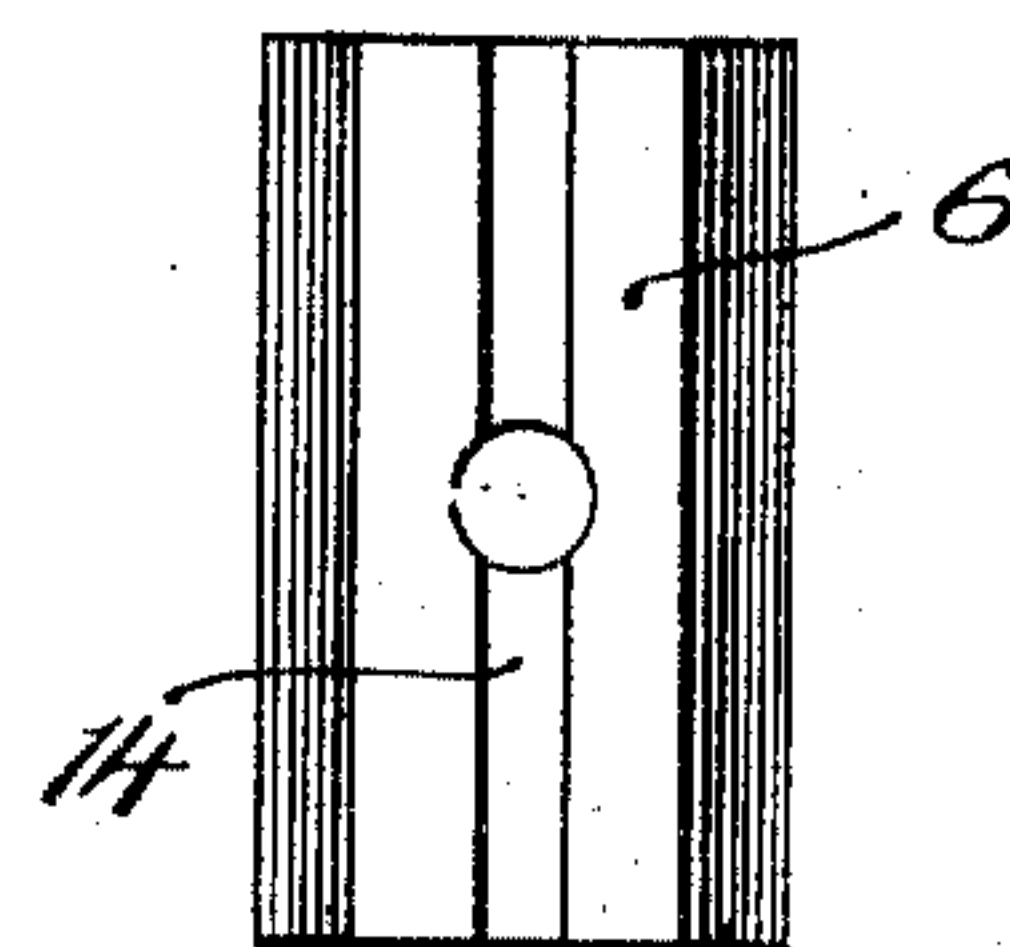


Fig. 8.

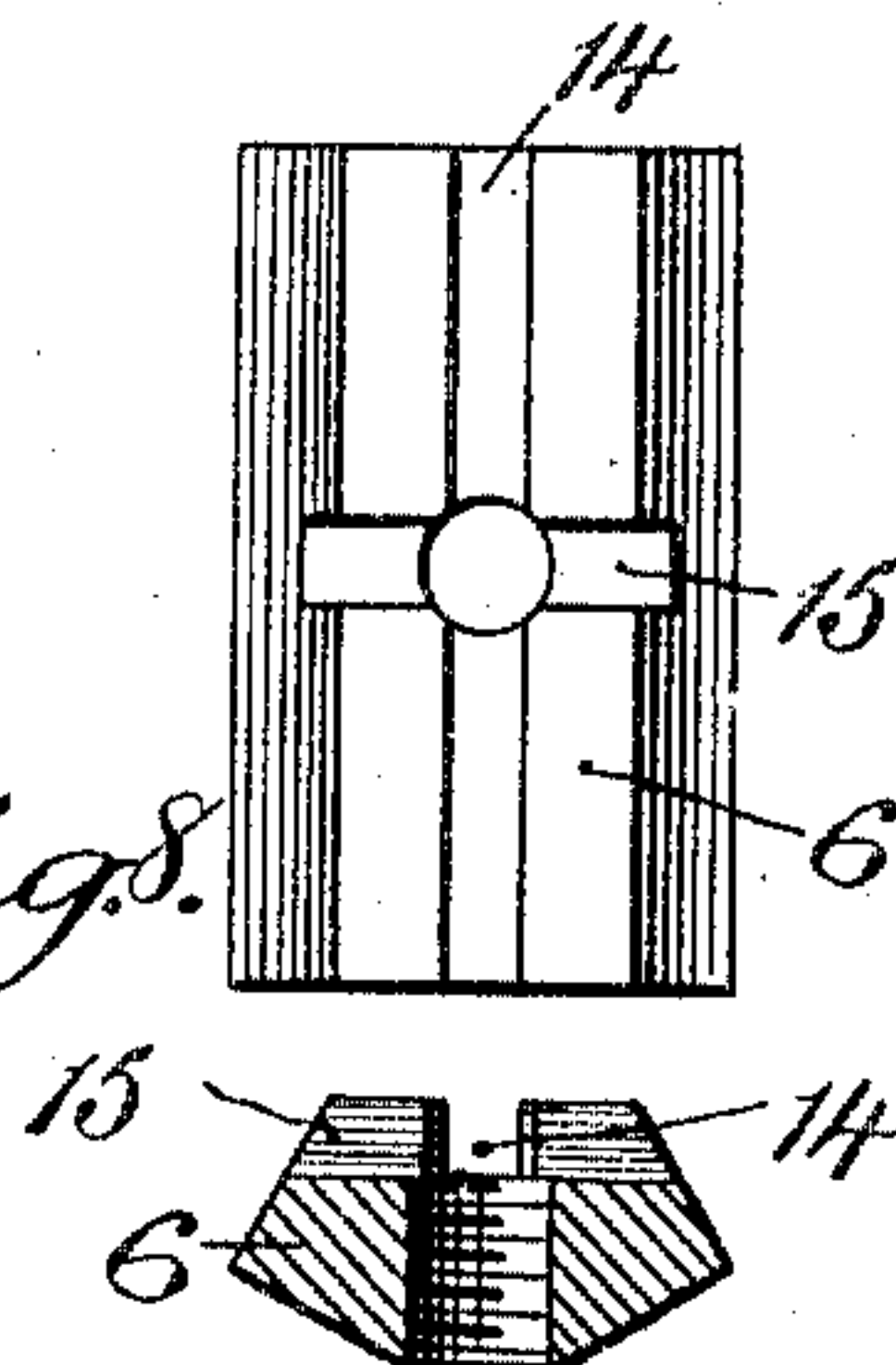
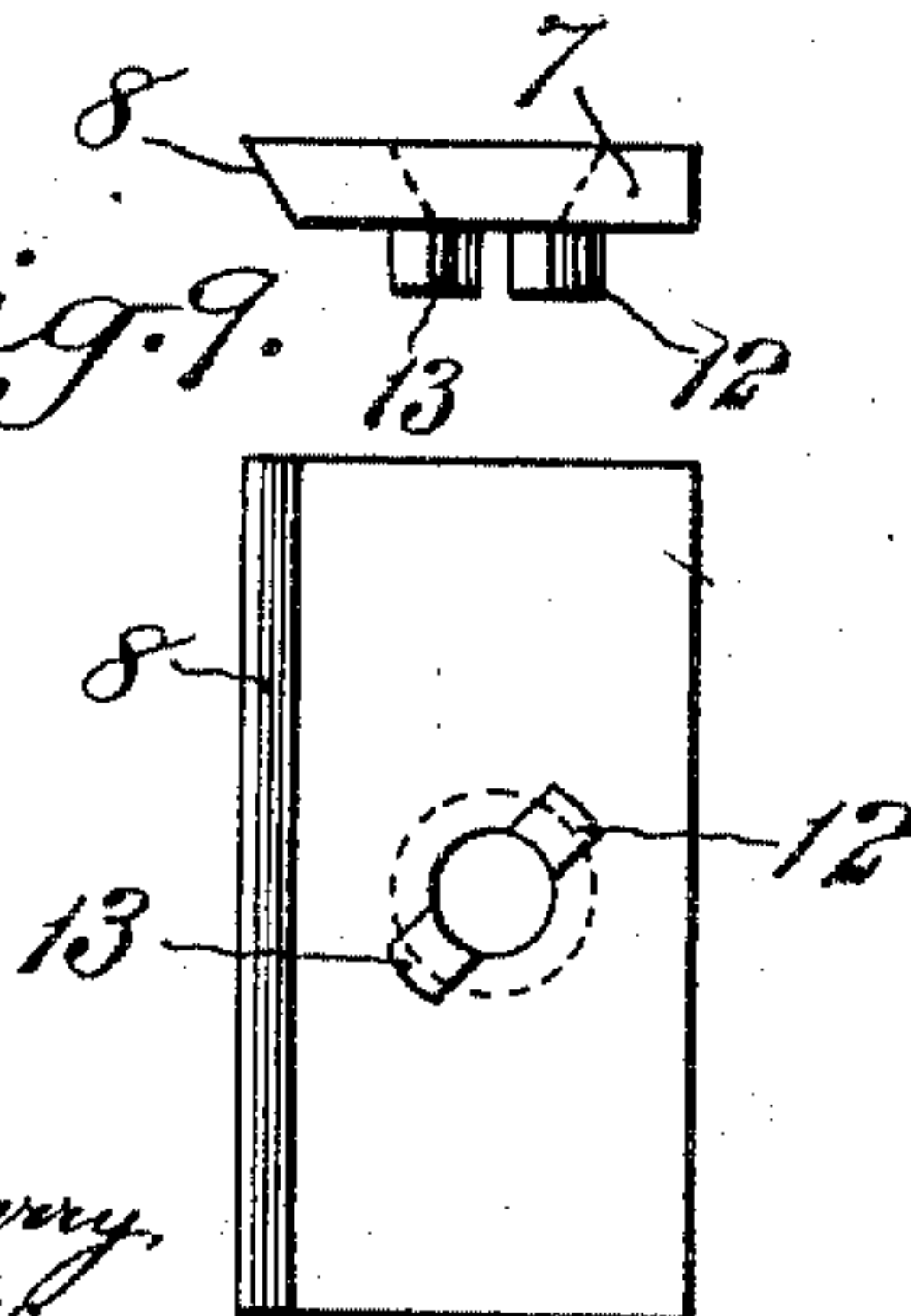


Fig. 9.



Witnesses: J. George Barry,  
J. D. Hachinger.

Inventor:  
Charles P. Cottrell  
by attorney  
Thornhill and



# UNITED STATES PATENT OFFICE.

CHARLES P. COTTRELL, OF WESTERLY, RHODE ISLAND, ASSIGNOR TO  
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## CLAMP FOR STEREOTYPE-PLATES.

SPECIFICATION forming part of Letters Patent No. 776,890, dated December 6, 1904.

Application filed December 7, 1903. Serial No. 184,043. (No model.)

*To all whom it may concern:*

Be it known that I, CHARLES P. COTTRELL, a citizen of the United States, and a resident of Westerly, in the county of Washington and State of Rhode Island, have invented a new and useful Improvement in Clamps for Stereotype-Plates, of which the following is a specification.

My invention relates to an improvement in clamps for stereotype-plates; and it consists in providing a clamp in which the outer member may be interlocked with the inner member at the desired angle with respect thereto for engaging one edge of the plate.

My invention further consists in providing a clamp in which the outer member may be interlocked with the inner member in position to engage any one of the four edges of the plate without removing the inner member from the groove in the block.

A practical embodiment of my invention is represented in the accompanying drawings, in which—

Figure 1 is a top plan view of a block, showing stereotype or printing plates secured thereon by my improved clamps. Fig. 2 is a section taken in the plane of the line A A of Fig. 1. Fig. 3 is an enlarged detail section of the clamp and its adjacent parts in the plane of the line A A of Fig. 1. Fig. 4 is a top plan view of the clamp, showing the outer member interlocked with the inner member in one angular position. Fig. 5 is a top plan view of the clamp, showing the outer member interlocked with the inner member in another angular position. Fig. 6 is a top plan view of the clamp, showing the outer member interlocked with the inner member in the reverse position to that shown in Fig. 4. Fig. 7 represents a modified form of outer member in end elevation and inverted plan. Fig. 8 represents the inner member in top plan and cross-section. Fig. 9 represents the outer member in inverted plan and end elevation, and Fig. 10 is a top plan view of a modified form of inner member.

The block shown in Fig. 1 is denoted by 3

and its diagonal grooves by 4. The stereotype or other printing plates are denoted by 5.

My improved clamp for securing the stereotype or printing plates to the block is constructed as follows: The inner member of the clamp is denoted by 6, and its sides are so shaped as to fit the sides of one of the diagonal grooves 4, within which the inner member is fitted to slide. The shape of this inner member permits it to be inserted into or taken out of the groove at any point. The engagement of the inner member 6 with the walls of the groove is such that the member is prevented from moving in other than a longitudinal direction within the groove. The outer member of the clamp is denoted by 7, and it is provided with the usual beveled edge 8 along one side thereof, which is fitted to overlap one of the beveled edges 9 of the stereotype or printing plate 5. The head 10 of the clamp-screw is countersunk in the outer member 7 of the clamp, and its shank 11 has a screw-threaded engagement with the inner member 6 of the clamp. These two members 6 and 7 are interlocked independently of the clamp-screw, so that the outer member is held at the desired angle with respect to the inner member to cause the beveled edge of the outer member to engage one of the beveled edges of the stereotype or other printing plate 5. In the present instance I have shown this interlocking connection as follows: The outer member is provided with two pins or lugs 12 13, which project inwardly from its inner face. The inner member is provided with a longitudinal groove 14 and a transverse groove 15 in its outer face, which serve as sockets for receiving the pins or lugs 12 13 of the outer member 7. These pins or lugs 12 13 are so arranged that when they are caused to enter the longitudinal groove 14 the outer member will be locked in one angular position with respect to the inner member—as, for instance, in position to engage either one of two opposite sides on the stereotype or other printing plate. When the lugs 12 13 are caused to enter the transverse groove 15, the outer



member will be interlocked with the inner member at the desired angle to engage one or the other of the opposite edges of the stereotype or other printing plate, which could not be engaged by the outer member when the lugs 12 13 are within the longitudinal groove 14.

In Fig. 7 I have shown a form of outer member in which both edges of the member are beveled, so that it could be used where a narrow margin was required between the plates, for the reason that the clamp could be pushed up into position to hold the edge of one plate and could then be used as a stationary clamp for the adjacent edge of the next plate.

In Fig. 10 I have shown an inner member in which the longitudinal groove 14 only is provided and in this form the outer member can only be interlocked with the inner member in position to engage one of two opposite edges of the stereotype-plate, but not the remaining two opposite edges, as to accomplish this the inner member has to have the sockets formed by the transverse groove 15 for receiving the pins or lugs 12 13.

It will be seen that by the use of the clamps herein described I am enabled to use clamps of a single type for engaging the opposite edges of the stereotype or other printing plate or all of the edges of the plate, the outer members of the clamps at the same time being locked in lines parallel with the edges with which they are to be engaged.

This construction obviates the necessity of providing a right-handed clamp, a left-hand clamp, and clamps for engaging the edges of the plate at right angles to the right and left hand clamps.

It is evident that changes might be resorted to in the arrangement of the several parts and that various forms of interlocking devices may be used between the outer and inner members without departing from the spirit and scope of my invention. Hence I do not wish to limit myself strictly to the construction herein set forth; but

What I claim is—

1. A clamp for stereotype-plates comprising an outer member, an inner member, a clamp-screw and a pin-and-socket connection between the outer and inner members for locking the outer member to the inner member at the desired angle with respect thereto.

2. A clamp for stereotype-plates comprising an outer member, an inner member, a clamp-screw and a pin-and-socket connection for locking the outer member to the inner member in

either one of two positions at right angles to each other.

3. A clamp for stereotype-plates comprising an inner member having a groove therein, an outer member having pins arranged to enter said groove for locking the outer member at the desired angle with respect to the inner member and a clamp-screw engaging both members.

4. A clamp for stereotype-plates comprising an inner member having two sockets, an outer member having a pin arranged to enter the one or the other of the sockets to lock the outer member to the inner member at one of two different angles with respect thereto and a clamp-screw engaging both members.

5. A clamp for stereotype-plates comprising an inner member having longitudinal and transverse grooves in its outer face, an outer member having pins arranged to enter the longitudinal groove to lock the outer member at one angle with respect to the inner member and fitted to enter the transverse groove to lock the outer member at another angle with respect to the inner member and a clamp-screw engaging both members.

6. A stereotype-block having diagonal grooves therein, a clamp comprising an inner member fitted to enter said grooves, an outer member, a clamp-screw engaging the inner and outer members and the said inner member having sockets and the outer member provided with pins arranged to enter sockets in the inner member for locking the outer member at the desired angle with respect thereto.

7. A clamp for stereotype-plates comprising an inner member having a longitudinal groove therein, an outer member having pins arranged to lock the outer member to the inner member in one of two angular adjustments with respect thereto and a clamp-screw engaging the two members.

8. A clamp for stereotype-plates comprising an inner member, an outer member, a clamp-screw engaging the same, the said outer member having pins upon opposite sides of the screw and the inner member having sockets arranged to receive the pins for locking the outer member to the inner member at the desired angle with respect thereto.

In testimony that I claim the foregoing as my invention I have signed my name, in presence of two witnesses, this 30th day of November, 1903.

CHARLES P. COTTRELL.

Witnesses:

A. R. STILLMAN,  
FREDK. L. HALL.