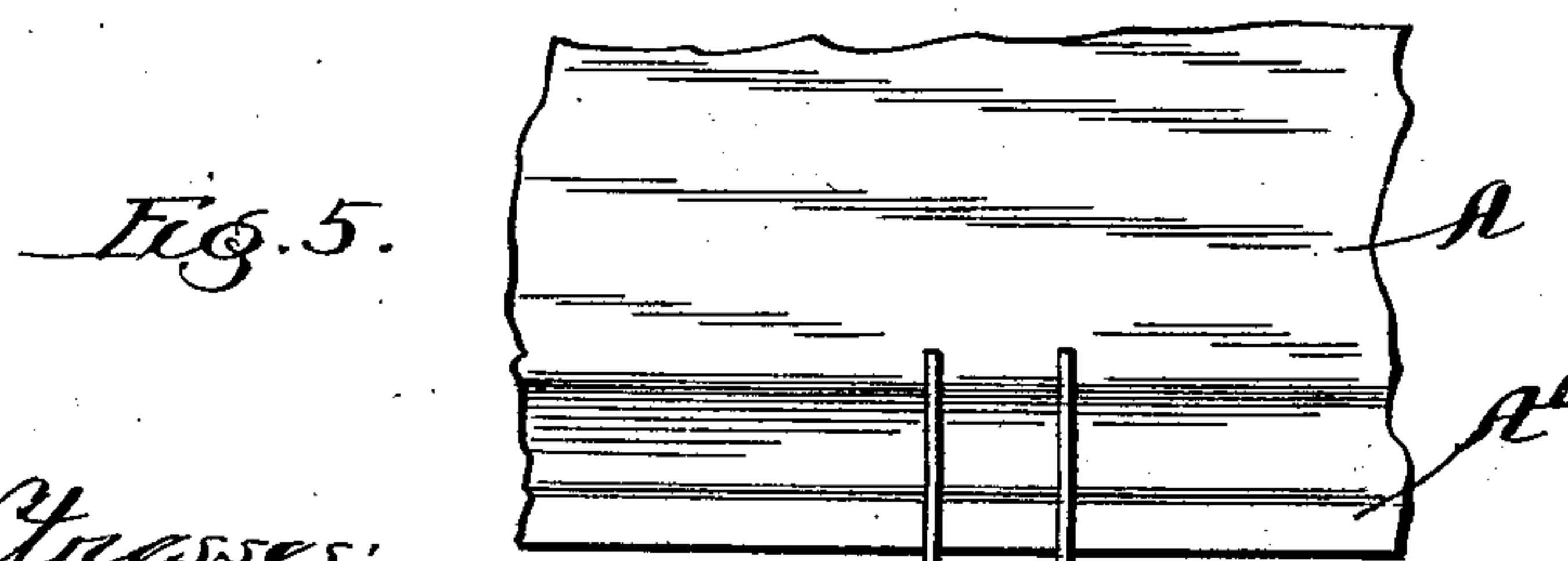
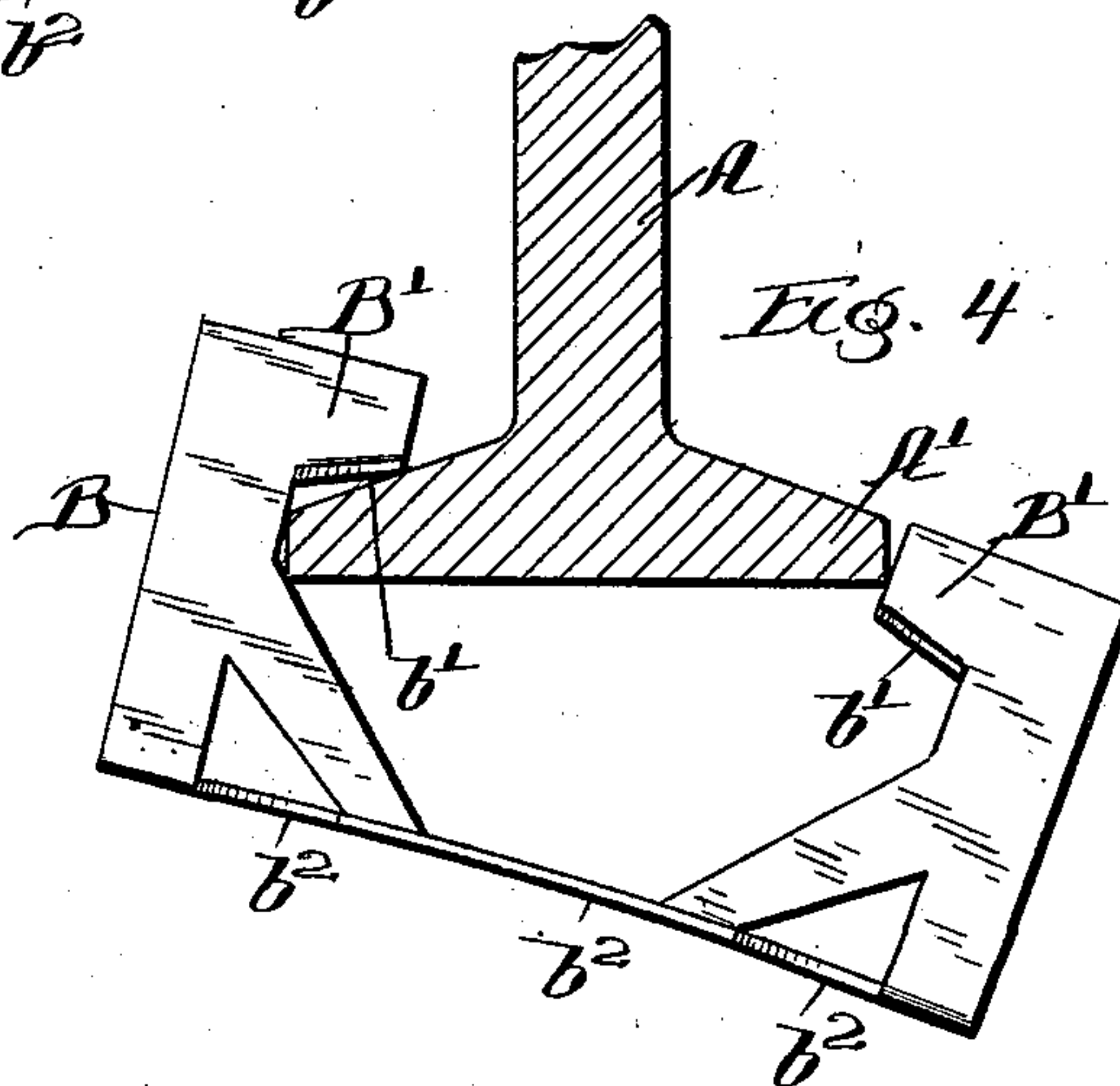
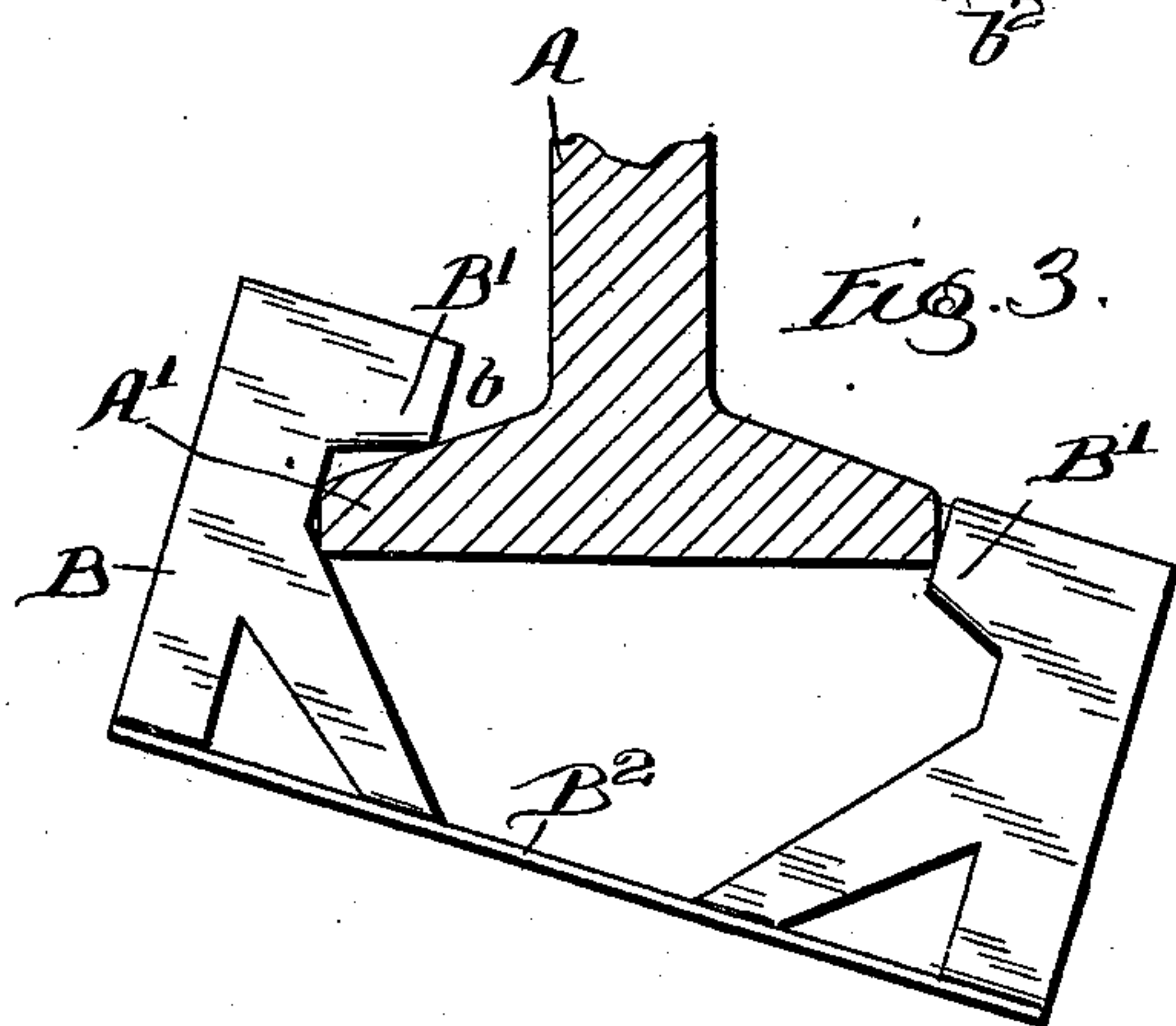
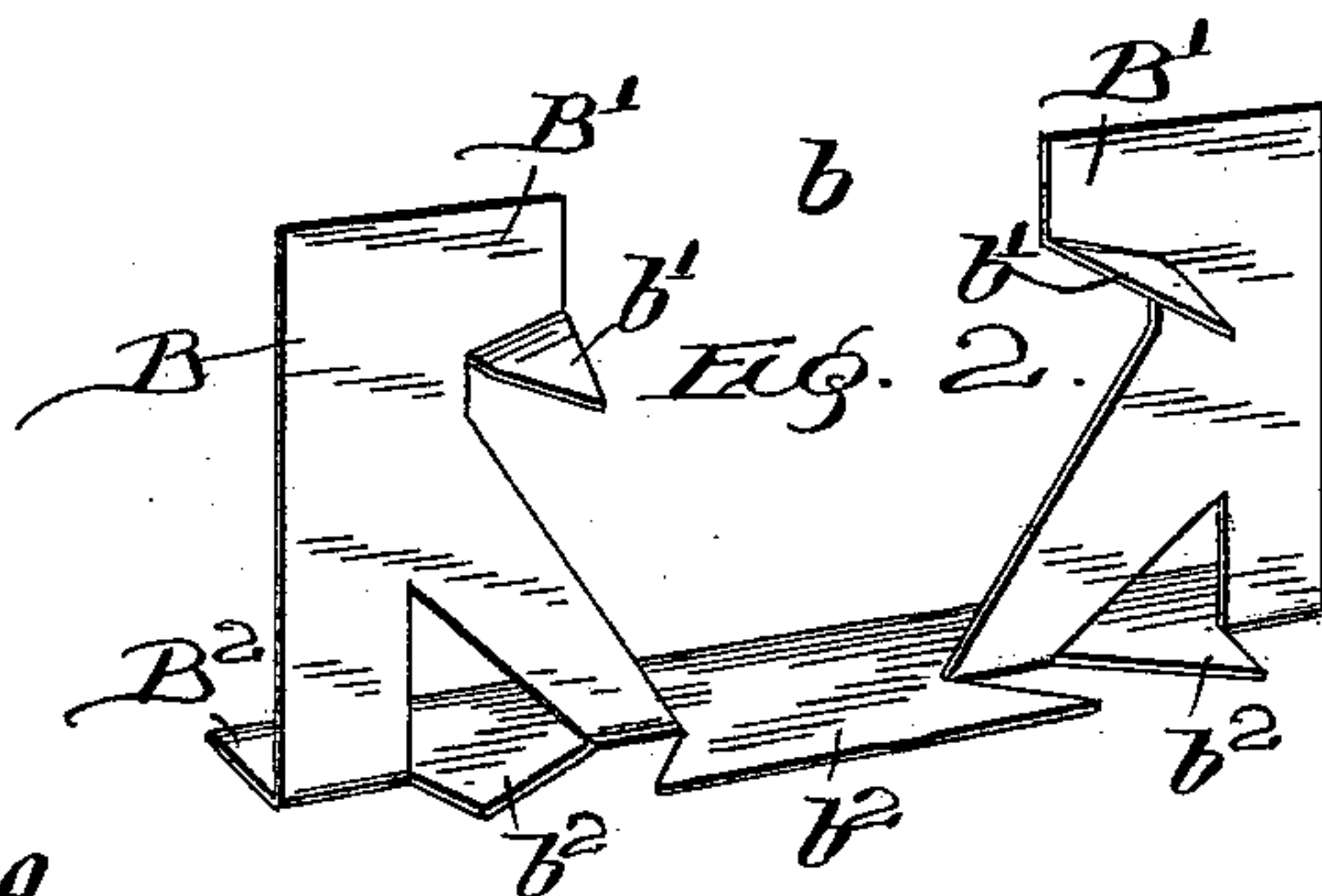
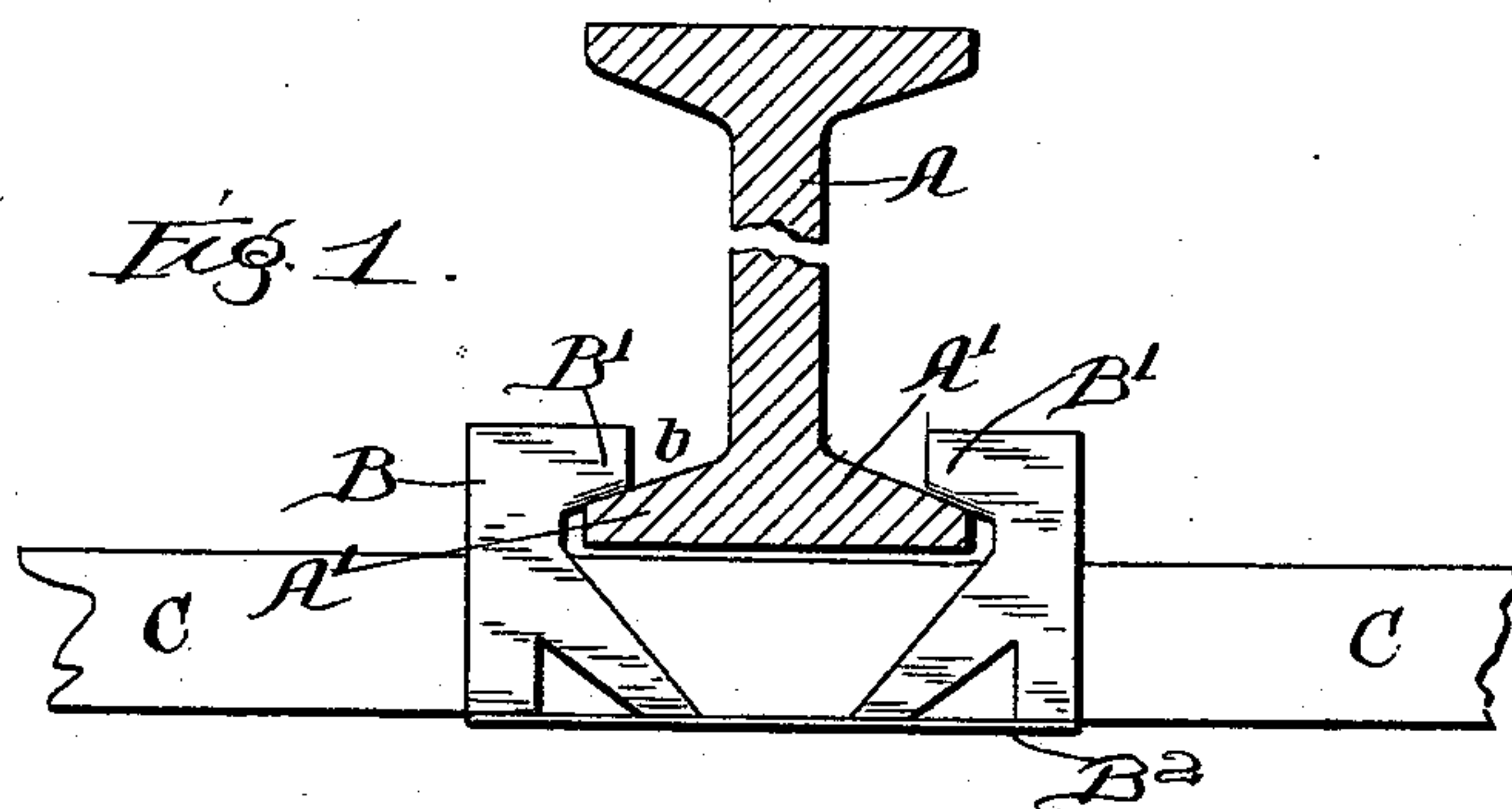


(No Model.)

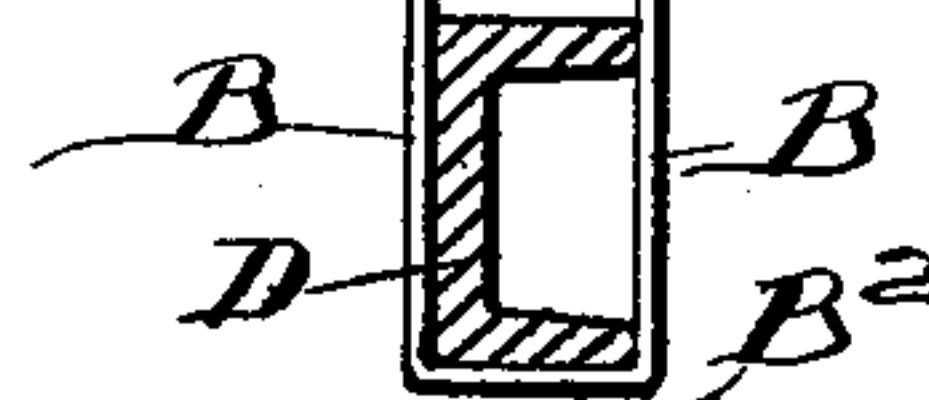
H. B. SEELY.  
SUSPENDING BRACKET FOR CEILINGS.

No. 540,693.

Patented June 11, 1895.



Witnesses:  
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Inventor:  
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Attys



# UNITED STATES PATENT OFFICE.

HERMAN B. SEELY, OF CHICAGO, ILLINOIS.

## SUSPENDING-BRACKET FOR CEILINGS.

SPECIFICATION forming part of Letters Patent No. 540,693, dated June 11, 1895.

Application filed October 18, 1894. Serial No. 526,256. (No model.)

*To all whom it may concern:*

Be it known that I, HERMAN B. SEELY, 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 Suspending-Brackets for Ceilings, of which the following is a specification.

My invention relates to improvements in suspending brackets for ceilings, its object being to provide a light, cheap, simple and effective means for suspending ceilings from metal beams in the construction of fire proof buildings.

The invention is fully described and explained in this specification and shown in the accompanying drawings, in which—

Figure 1 is a transverse vertical section of a beam, showing in elevation a suspending-bracket involving my invention, the bracket being supported by the lower flange of the beam. Fig. 3 is a perspective view of the bracket. Figs. 2 and 4 are transverse vertical sections of beams, showing the manner of bringing the bracket into working relation to the beam. Fig. 5 is a side elevation of a portion of a beam, showing in end elevation a modified form of the bracket.

In Figs. 1 and 2 A is the web, and A', is a lower flange of an I-beam of ordinary form; and B is a plate preferably of sheet metal, formed with a central opening having at its upper margin two overhanging jaws, B', B', separated by a space, b, less than the width of the flange, A'. The jaws, B', B', which are in the same plane as the plate, B are adapted to rest upon the marginal parts of the flange, A', and are preferably reinforced by lugs, b', struck up from the body of the plate and adapted to conform to the upper surfaces of the flange, A', and give the jaws a greater bearing surface and greater stability thereon. The lower edge of the plate, B, is bent at right angles to the plane of the plate to form a shelf, B<sup>2</sup>, and a series of lugs, b<sup>2</sup>, b<sup>2</sup>, b<sup>2</sup>, struck up from the metal of the plate, are bent into the plane of the shelf, B<sup>2</sup>, but on the opposite side of the plate therefrom. The shelf, B<sup>2</sup>, and lugs, b<sup>2</sup>, b<sup>2</sup>, are adapted to form supports for fire proof ceiling plates, C, C, as shown in

Fig. 1, the bracket being arranged upon the beams at intervals corresponding to the width of the ceiling plates.

The bracket thus described, may be brought into its working relation to the beam in the manner shown in Fig. 3, one margin of the flange of the beam being brought into the recess beneath one of the jaws, B', of the bracket and the other jaw being then moved upward until it passes the opposite margin of the flange when the bracket may be brought into the position shown in Fig. 1. As shown in Fig. 3, the space between the two jaws, B', B', is sufficient to permit the second jaw, B', to pass the margin of the flange, A', without springing the plate; but I prefer to make the space between the jaws somewhat less in comparison with the width of the flange, this construction rendering it necessary to spring the shelf, B<sup>2</sup>, somewhat in bringing the bracket to its working position. In either form the space immediately below the jaws is considerably wider than the flange of the beam, and this form is a material convenience in applying the bracket to the beam.

Fig. 5 shows a modification in which the shelf, B<sup>2</sup>, at the bottom of the bracket lies between two plates, B, B, each formed substantially like the plate, B. Shown in Figs. 1 to 4. When this form is used, the lugs, b', b', are dispensed with, since the parallel jaws formed on the two plates afford all the bearing necessary upon the flange of the beam, and the shelf, B<sup>2</sup>, between the two plates furnishes a stable support for a ceiling strip, D, lying between the two plates and resting on the shelf. The ceiling strip, D, is preferably of channel iron as shown, but may be of any form adapted to support metallic lathing, or other suitable ceiling material. It is evident from an inspection of the drawings, that when the brackets are in position and weight is applied to the shelf, B<sup>2</sup>, and lugs, b<sup>2</sup>, b<sup>2</sup>, on opposite sides of the plate, B, the vertical strain tends to hold the jaws together, since they cannot be separated without bending upward the center of the supporting shelf. The bracket forms, therefore, a secure ceiling support, very strong in proportion to its weight and extremely light and simple be-



cause of its material and the ease with which it may be formed.

The jaws, B', B', of each bracket being in the same plane as the plate from which they are formed are extremely rigid in proportion to their weight, and since the plate and jaws are vertical when in use and must support the weight of the ceiling plates, this rigidity is of the greatest importance, both as a matter of security and a matter of economy. In fact, brackets formed as shown in the drawings, with the jaws and their connecting plate in the same vertical plane are very much more effective, weight for weight, than any possible construction in which jaws of sheet metal are simply wrapped or bent about the flanges of a beam.

The form of my invention shown in the drawings may be either absolutely rigid, or flexible at the center of its base, the flexible construction being, however, preferred. It is evident that this flexibility may be secured either by forming the bracket of a single piece of sheet metal as shown and described, or by making the jaws on separate pieces flexibly connected at the center of the base of the bracket. The one-part form shown in the drawings is evidently simpler than the two-part form suggested and is preferable for that reason.

Having now described and explained my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. A ceiling-supporting bracket comprising a plate formed with lateral projections adapted to support ceiling material and having at its upper margin opposite undercut jaws in the same plane as the plate and adapted to rest upon the flange of a beam.

2. A ceiling-supporting bracket comprising a plate of sheet metal having at its lower edge approximately horizontal projections formed from the metal of the plate and adapted to support ceiling material and having at its upper margin opposite undercut jaws in the

same plane as the plate and adapted to rest upon the flange of a beam.

3. The combination with a beam formed with a flange at its lower margin, of a ceiling-supporting bracket comprising a plate formed with lateral projections adapted to support ceiling material and having at its upper edge opposite undercut jaws in the same plane as the plate and separated by a space less than the width of the flange of the beam.

4. The combination with a beam having a flange at its lower margin, of a ceiling-supporting bracket comprising a plate formed with lateral projections adapted to support ceiling material and having at its upper edge oppositely placed undercut jaws, the inner faces of the jaws being separated by a space less than the width of the flange, and the width of the space beneath the jaws being greater than the width of the flange.

5. The plate, B, having at its upper margin the opposite undercut jaws, B', B', and at its lower margin the shelf, B<sup>2</sup>.

6. The plate, B, having at its upper margin the opposite undercut jaws, B', B', formed with reinforcing lugs, b', b', and having at its lower margin oppositely extending lateral projections integral with it.

7. The plate, B, having at its upper margin the jaws, B', B', and reinforcing lugs, b', b', and at its lower margin the shelf, B<sup>2</sup>, and lugs, b<sup>2</sup>, b<sup>2</sup>, all the parts enumerated being formed in a single piece stamped from a sheet of metal.

8. A ceiling-supporting bracket comprising two opposite undercut jaws adapted to rest upon the margin of the flange of a beam and connected by a flexible base adapted to lie beneath the flange of the beam and having shelves adapted to support ceiling material.

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Witnesses:

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