

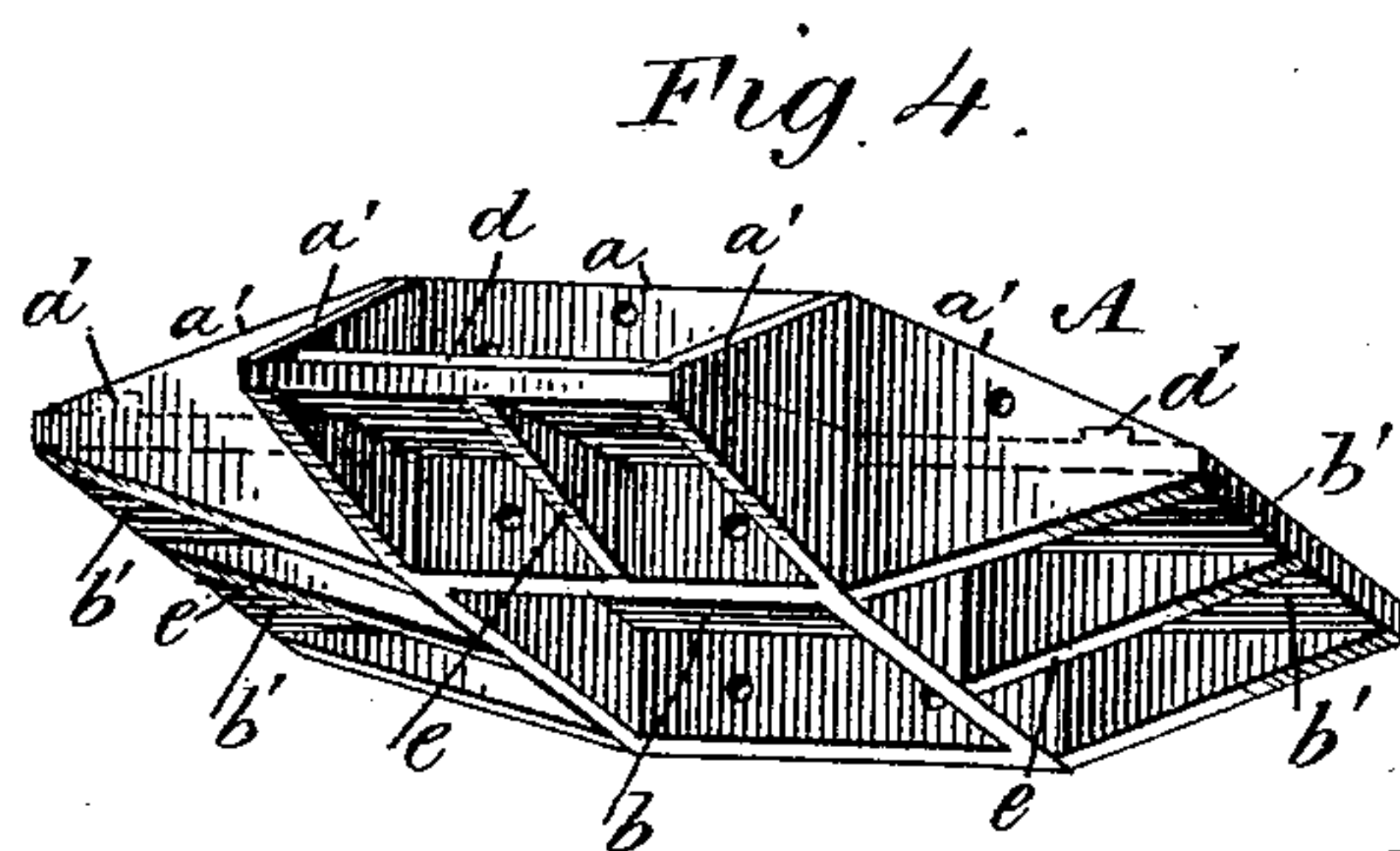
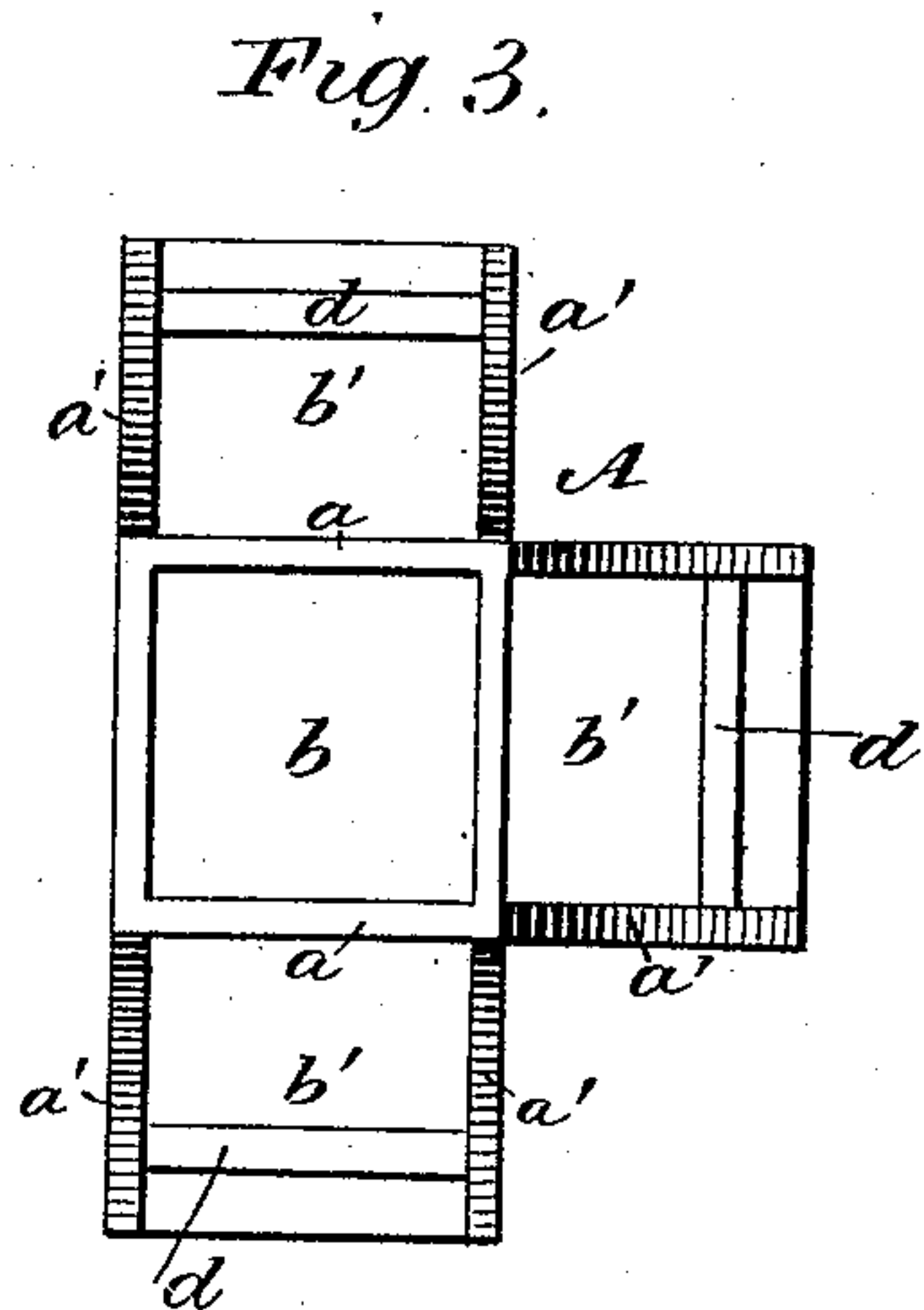
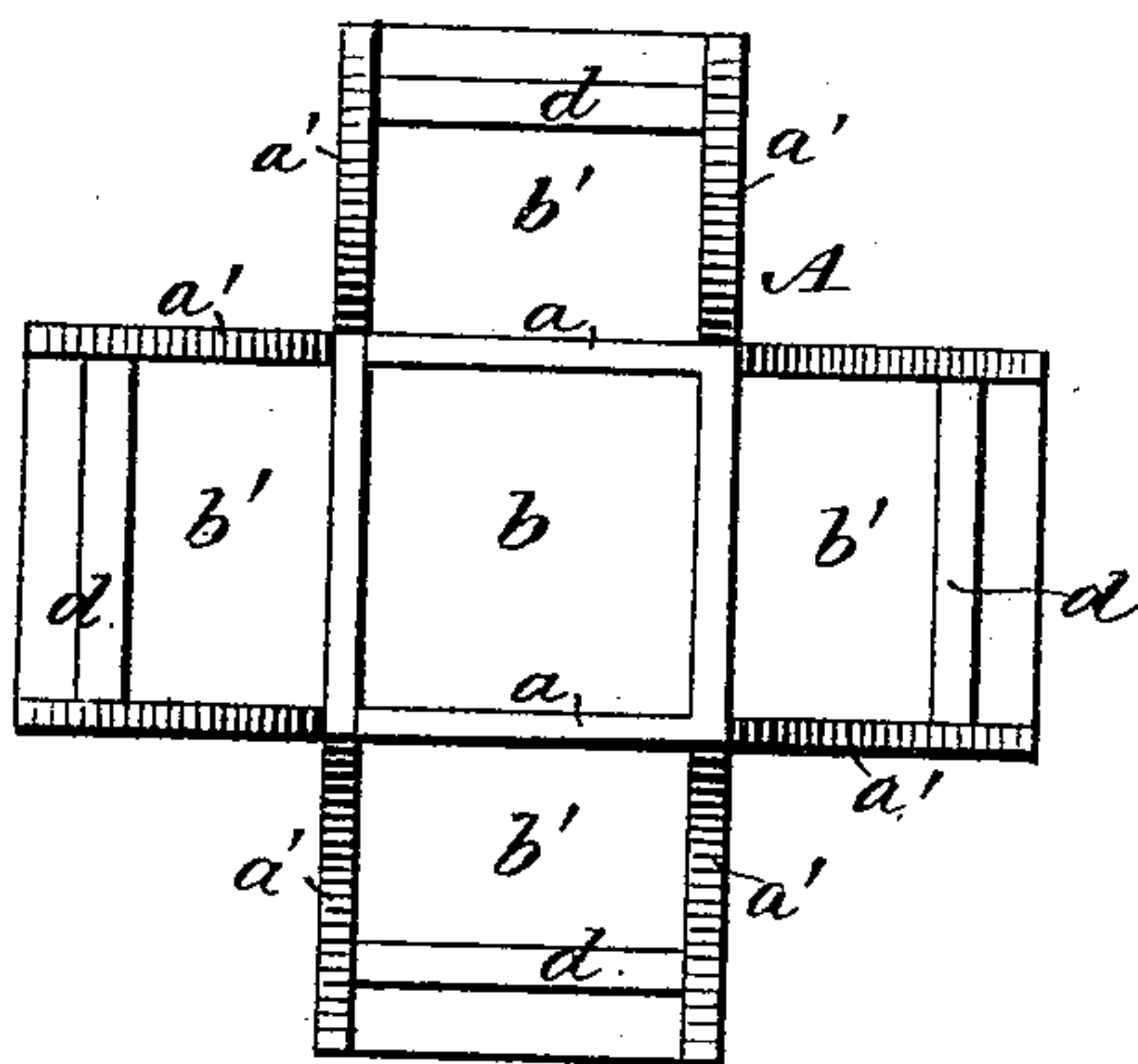
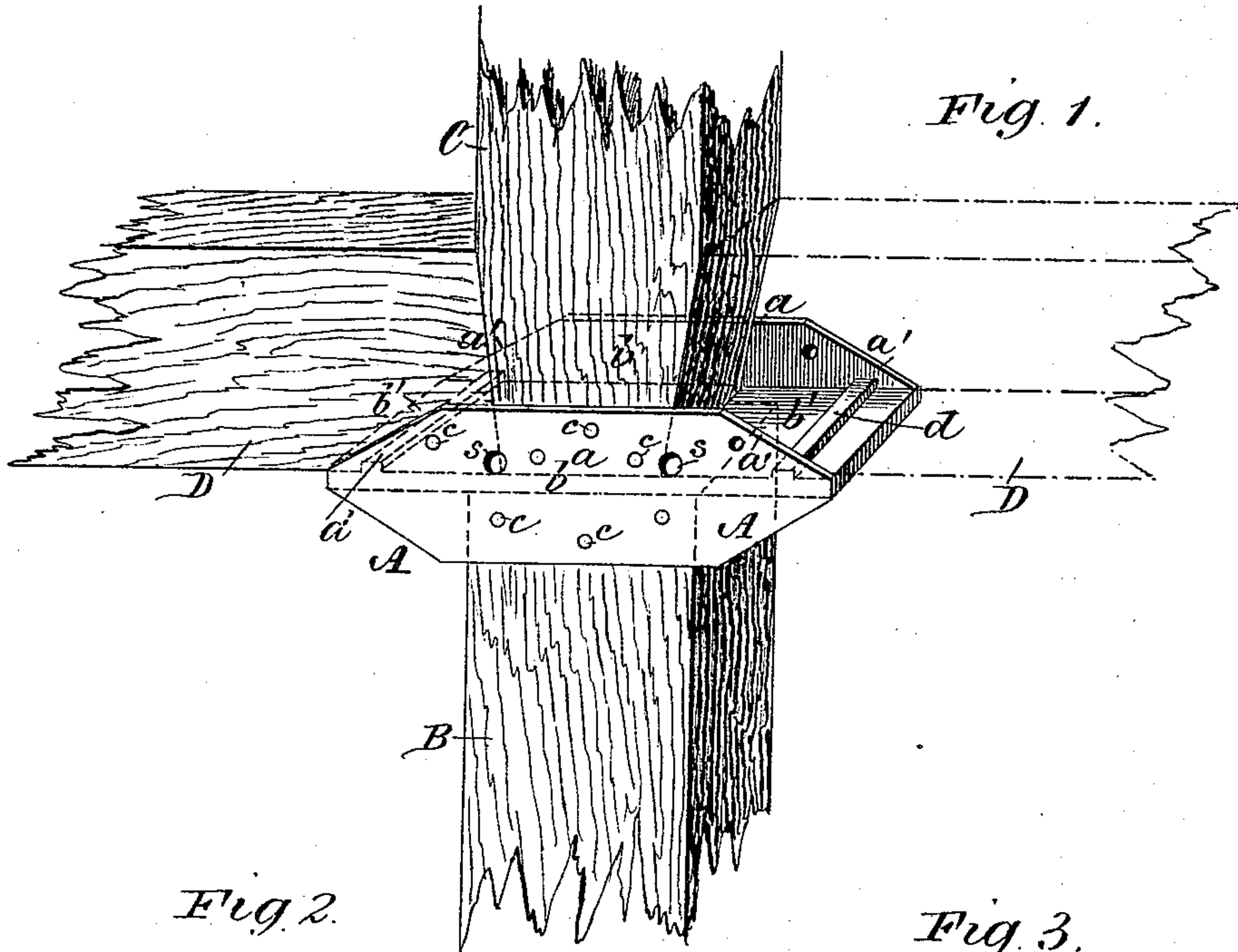
(No Model.)

H. A. GOETZ.

TIMBER SEAT AND TIE FOR BUILDING PURPOSES.

No. 437,592.

Patented Sept. 30, 1890.



WITNESSES:

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TIMBER SEAT AND TIE FOR BUILDING PURPOSES.

SPECIFICATION forming part of Letters Patent No. 437,592, dated September 30, 1890.

Application filed November 16, 1889. Serial No. 330,557. (No model.)

To all whom it may concern:

Be it known that I, HENRY AUGUST GOETZ, of New Albany, in the county of Floyd and State of Indiana, have invented a new and useful Improvement in Timber Seats and Ties for Building Purposes, of which the following is a full, clear, and exact description.

This invention has for its object the production of a cap, base-plate, and timber support and tie combined for building purposes; and it consists in a novel construction and adaptation of the same, substantially as hereinafter described, and pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 represents a view in perspective of my improved combined timber seat and tie in one of its forms applied and as adapted to unite an upper and a lower post and two horizontal beams or timbers, the one of which latter is only shown by dotted lines. Figs. 2 and 3 are upper plan views of two modified constructions of the combined timber seat and tie, adapted to unite upper and lower posts and four and three horizontal beams or timbers, respectively. Fig. 4 is a perspective view, as seen from beneath, of the combined timber seat and tie shown in Fig. 2.

A is a metallic casting, which is constructed to form a cap, base-plate, and timber support and tie combined. Thus, as shown in Fig. 1, said casting is constructed to form a cap which not only serves to unite a lower upright post B and upper like post C, so as to make a continuous column to the roof of a building, said casting being repeated for each pair of posts, one above the other, where more than one pair in the same vertical plane are used, but which also serves to carry and unite horizontal or other beams or timbers D D on opposite sides of the vertical posts. To these ends said casting, as shown in Fig. 1, is constructed with opposite upright sides *a a*, united immediately of their depth by a diaphragm or base-plate *b*. These several portions or plates virtually form sockets, pockets, or rests for the reception of the lower end of the upper post C, and the base-plate forms a cap for the upper end of the lower post B, and said posts thus arranged end to end are bolted together,

as it were, so as to form a continuous column by means of bolts *c*, passing through the sides *a a* of the casting or cap A and through the base portion of the upper post C; also, preferably, through the sides *a a* and upper end portion of the lower post B. The side plates *a a* of said cap are extended beyond the posts, as at *a' a'*, and the base-plate *b* similarly extended, as at *b' b'*, to form sockets or pockets and rests within the cap for the inner ends of the horizontal beams or timbers D D.

The extended portions of the base-plate *b* are constructed with transverse lugs or projections *d*, which enter corresponding grooves made in the lower surfaces of the horizontal timbers D D to hold the latter in place and to more firmly unite the whole.

The constructions shown in Figs. 2, 3, and 4 of the drawings are substantially the same, and similar letters of reference indicate like parts, only in Figs. 2 and 4 the cap A is made with additional side and base-plate extensions having lugs *d* on them, arranged at right angles to the other side and base-plate extensions to adapt the cap to carry four horizontal members or timbers in addition to connecting the upper and lower posts, and said cap on the under side of its base-plate is represented as strengthened by webs *e*. Fig. 3 shows a like construction of cap adapted to carry three horizontal members or timbers.

By the construction, as described, of my improved timber seat and tie cap, bolting the upper and lower posts together and engaging with and supporting the ends of the horizontal beams or timbers crushing of the posts or timbers, producing settling of the structure is avoided, and should any of the horizontal timbers fall from either side there will be no danger of upsetting or throwing off the cap from its position uniting the upper and lower posts, and in case of fire any part may burn through and fall without disturbing the balance of the structure, also the greater the weight that is thrown upon the vertical columns the firmer will be the bondage that holds the parts together.

To prevent the accumulation of dampness in the cap A and consequent rotting of the timbers, apertures *s* are made in its sides.

A conspicuous feature of this timber seat or cap as compared with others is, that it

serves to firmly unite or bolt together, end to end, the upper and lower posts; also, another conspicuous feature of difference is, that if the lower upright or sustaining post is burned away the whole structure, instead of falling, will be sustained by reason of the uniting cap or casting being bolted to the base of the upper post, and the horizontal timbers which rest upon this casting, combined with the upper post to which said casting is held, act as a key to hold the parts together.

By reason of the bolting of the vertical posts together through the intervention of the cap or casting and bolts, as described, there is no risk, as hereinbefore remarked, of a falling horizontal beam displacing or throwing the structure down during a fire, the falling horizontal timbers freeing their anchorage by the lugs *d* and not disturbing the remainder of the parts. This invention, too, will be found of great advantage to the builder, inasmuch as he can complete the erection of the vertical posts to the roof of the building before putting in the horizontal beams, or he can finish an entire floor without the posts, and so can proceed with the erection of the building without losing time by waiting for timber. The timbers are held together so securely that they are not liable to warp out of position or line.

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

1. In combined seats and ties for posts and beams of buildings, a combined seat and tie cap constructed to provide for its connection by bolts to the base portion of an upper post and provided with a base-plate arranged to extend, as also the sides of the cap, laterally beyond the post, and provided with anchoring lugs or projections on its upper surface

for the beams of the structure designed to be sustained by the cap, substantially as specified.

2. In combined seats and ties for posts and beams of buildings, a combined seat and tie cap having an intermediate diaphragm or base-plate and upwardly and downwardly projecting sides constructed to provide for connection of said cap by bolts to the sides of the top of a lower post and sides of the base portion of an upper post to form a continuous column of said posts, and having lateral base-plate extensions provided on their upper surfaces with upwardly-projecting anchoring-lugs for the beams of the structure, essentially as described.

3. A combined seat and tie cap for posts and beams of buildings, constructed to interlock an upper and lower post together by upwardly and downwardly extending side plates fastened onto the sides of the posts, and to engage or lock with the beams of the structure by outwardly-extending side plates provided with lugs, whereby any part may fall away without disturbing the remainder, substantially as shown and described.

4. A post or column cap for buildings, bolted to the base of an upper post and provided with outwardly-projecting base-plate portions adapted to form a rest for the beams, substantially as shown and described.

5. The combination, with an upper and a lower post, of a combined seat and tie cap having upwardly-extending sides, fastenings securing said seat and tie to the base of the upper post, and lateral base-plate extensions provided with upwardly-projecting anchoring-lugs, essentially as set forth.

HENRY AUGUST GOETZ.

Witnesses:

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