

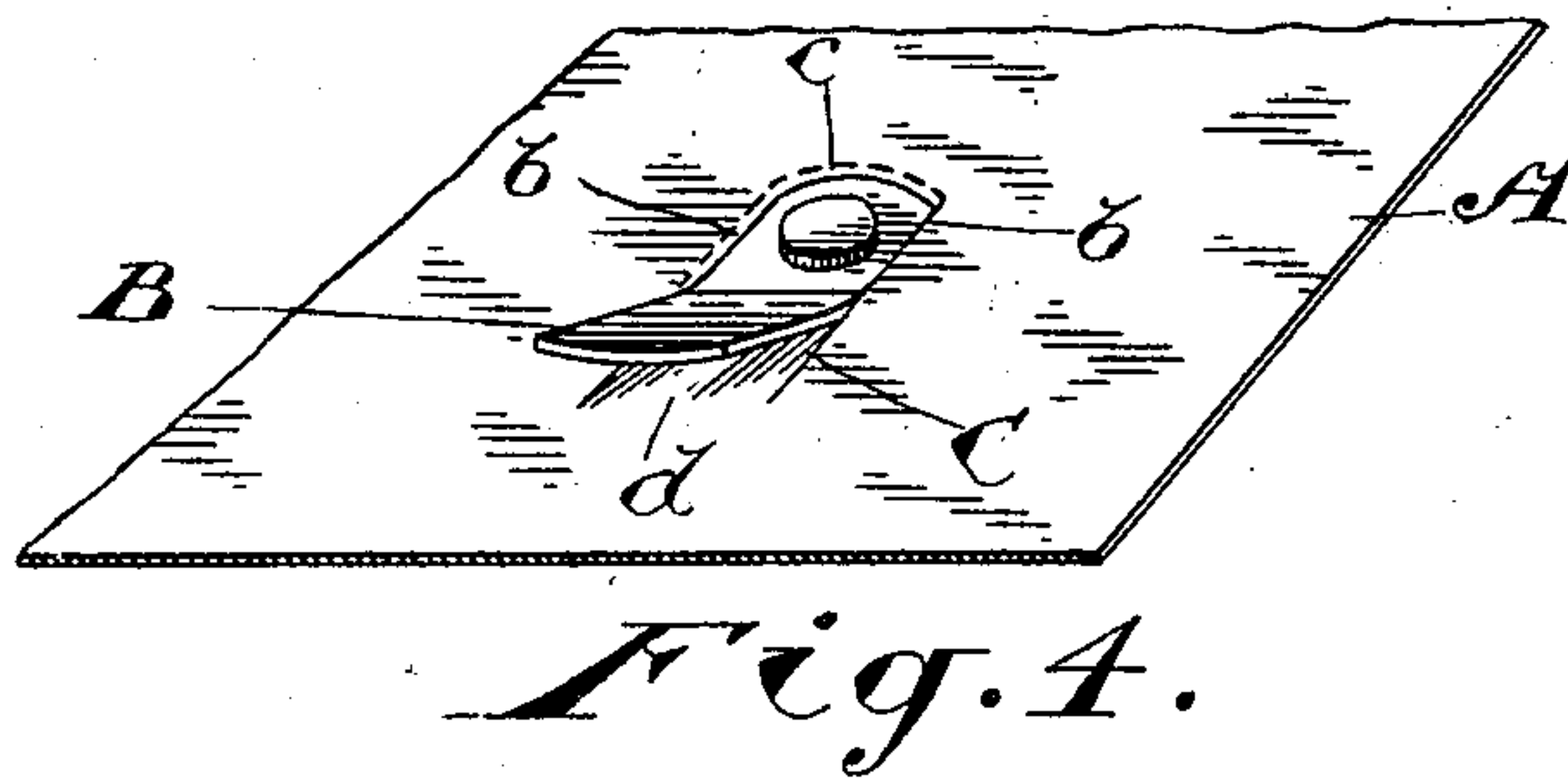
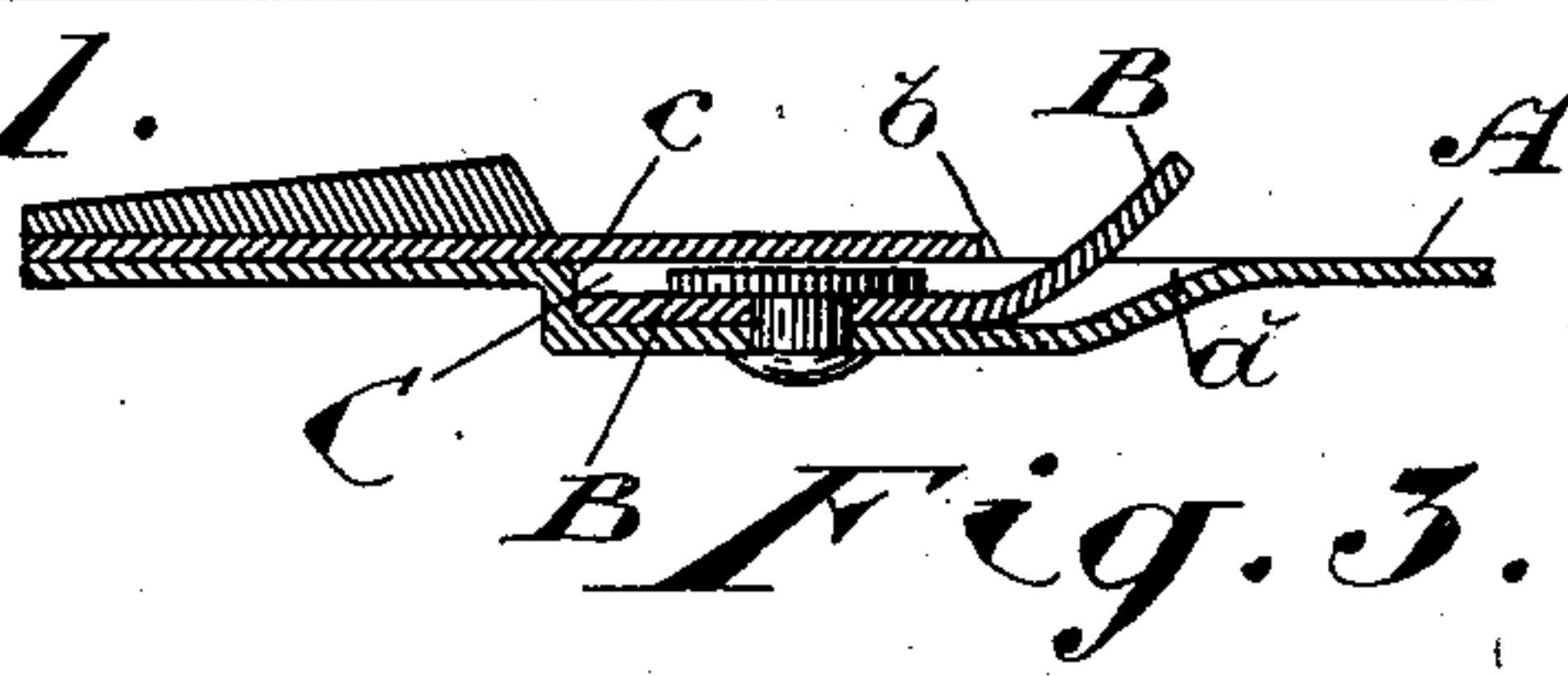
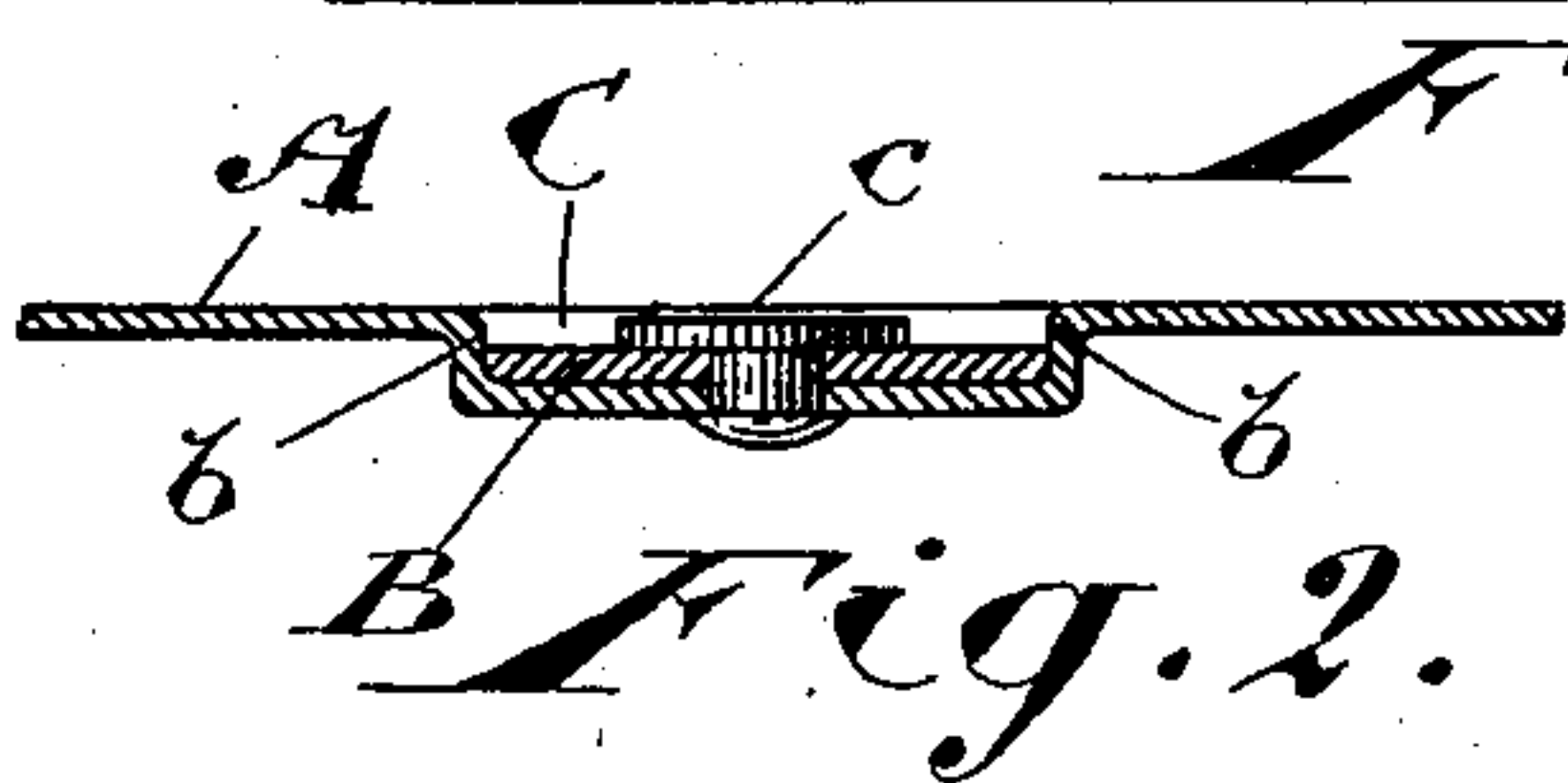
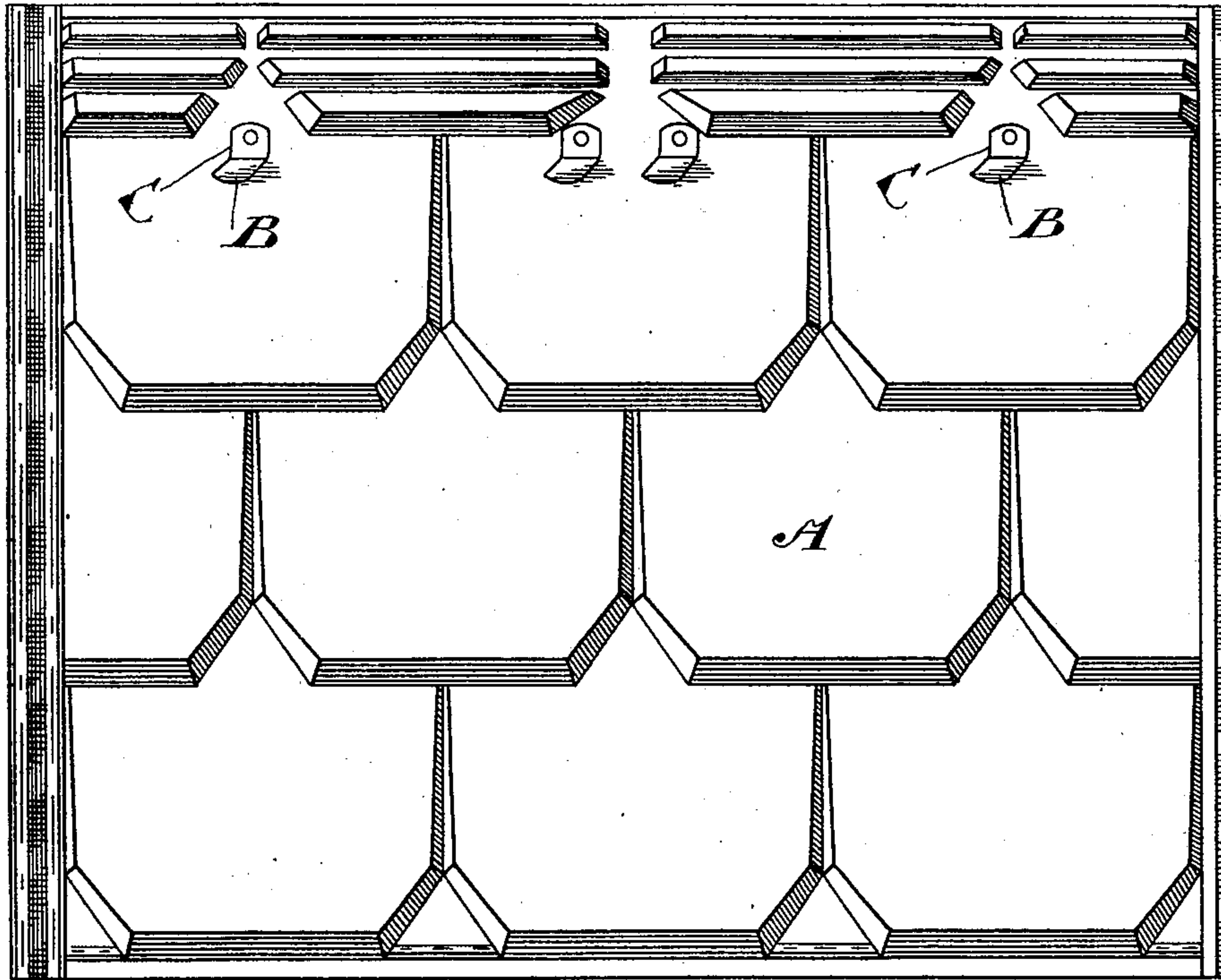
No. 668,625.

Patented Feb. 26, 1901.

C. W. CONNER.
CLEAT FOR METALLIC SHINGLES.

(Application filed Nov. 19, 1900.)

(No Model.)



Witnesses

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UNITED STATES PATENT OFFICE.

CARLTON W. CONNER, OF TORONTO, CANADA, ASSIGNOR OF ONE-HALF TO
GEORGE W. HOWLAND, OF SAME PLACE.

CLEAT FOR METALLIC SHINGLES.

SPECIFICATION forming part of Letters Patent No. 668,625, dated February 26, 1901.

Application filed November 19, 1900. Serial No. 37,027. (No model.)

To all whom it may concern:

Be it known that I, CARLTON WESCOTT CONNER, of the city of Toronto, in the county of York, Province of Ontario, Canada, have invented certain new and useful Improvements in Cleats for Metal Shingles, of which the following is a specification.

The object of my invention is to devise means for securing cleats to metal shingles by which they will be much more securely held than at present, which will prevent twisting of the cleat, and which will permit the upper shingle to fit much more closely to the lower than is now possible; and it consists, essentially, in forming a recess in the shingle so shaped and of such a depth as to receive the upper end of the cleat and enable it to be riveted in position without presenting any projections above the level of the upper surface of the shingle.

Figure 1 is a perspective view of a shingle with cleats secured thereto in accordance with my invention. Fig. 2 is an enlarged cross-section through a cleat and its recess in the shingle. Fig. 3 is an enlarged longitudinal sectional elevation of a cleat and its recess. Fig. 4 is a full-size perspective view of a single cleat secured to a portion of a shingle.

In the drawings like letters of reference indicate corresponding parts in the different figures.

A is a metal shingle of the pattern known as "Eastlake." To this shingle are ordinarily secured four metal cleats B by rivets. When secured on the surface of the shingle, these cleats are liable to twist and break off. Also, owing to their standing above the surface of the shingle, they lift the lower edge of the upper shingle, leaving a space which will admit snow or ice or other undesirable matter. To overcome this difficulty, I form a recess C in the shingle wherever a cleat is to be placed. This recess is formed with substantially perpendicular sides *b* and upper end *c*. As it is very important that no pocket be formed in the shingle to hold water, and thus cause rusting, the lower end *d* of the recess rises in a gradual incline or bevel from the bottom of the recess to the level of the upper surface of the shingle. As the shingle is of

course set at a comparatively sharp incline when in use, this beveled lower edge of the recess effectually runs off the water. Into these recesses are fitted the upper ends of the cleats B, so that they are substantially in contact with the sides and upper ends of the recesses. In this way the cleats are effectually held from twisting. As the recesses are sufficiently deep to retain the upper end of each cleat and also preferably the rivet substantially below the upper surface of the shingle, the overlapping shingle above may be fitted closely down on the lower shingle and its edge secured by bending over it the lower ends of the cleats B in the usual manner.

What I claim as my invention is—

1. A metal shingle having a recess formed therein below the level of its upper surface in combination with a cleat having one end fitted in the said recess and suitably secured therein, substantially as and for the purpose specified.

2. A metal shingle having a recess formed therein below the level of its upper surface with substantially perpendicular sides and upper end and a beveled lower end gradually rising to the level of the upper surface of the shingle in combination with a cleat having one end secured in the said recess in contact with the sides and upper end of the recess, substantially as and for the purpose specified.

3. A metal shingle having a recess formed therein below the level of its upper surface with more or less abruptly-dropping sides and upper end and a beveled lower end gradually rising to the level of the upper surface of the shingle in combination with a cleat having one end secured in the said recess, substantially as and for the purpose specified.

4. A sheet of metal having a recess formed therein below the level of its surface in combination with a cleat having one end fitted in the said recess and suitably secured therein, substantially as and for the purpose specified.

Toronto, Canada, November 12, 1900.

CARLTON W. CONNER.

In presence of—

JOHN G. RIDOUT,
J. EDW. MAYBEE.