

(No Model.)

W. H. GOLDING.

QUOIN.

No. 359,017.

Patented Mar. 8, 1887.

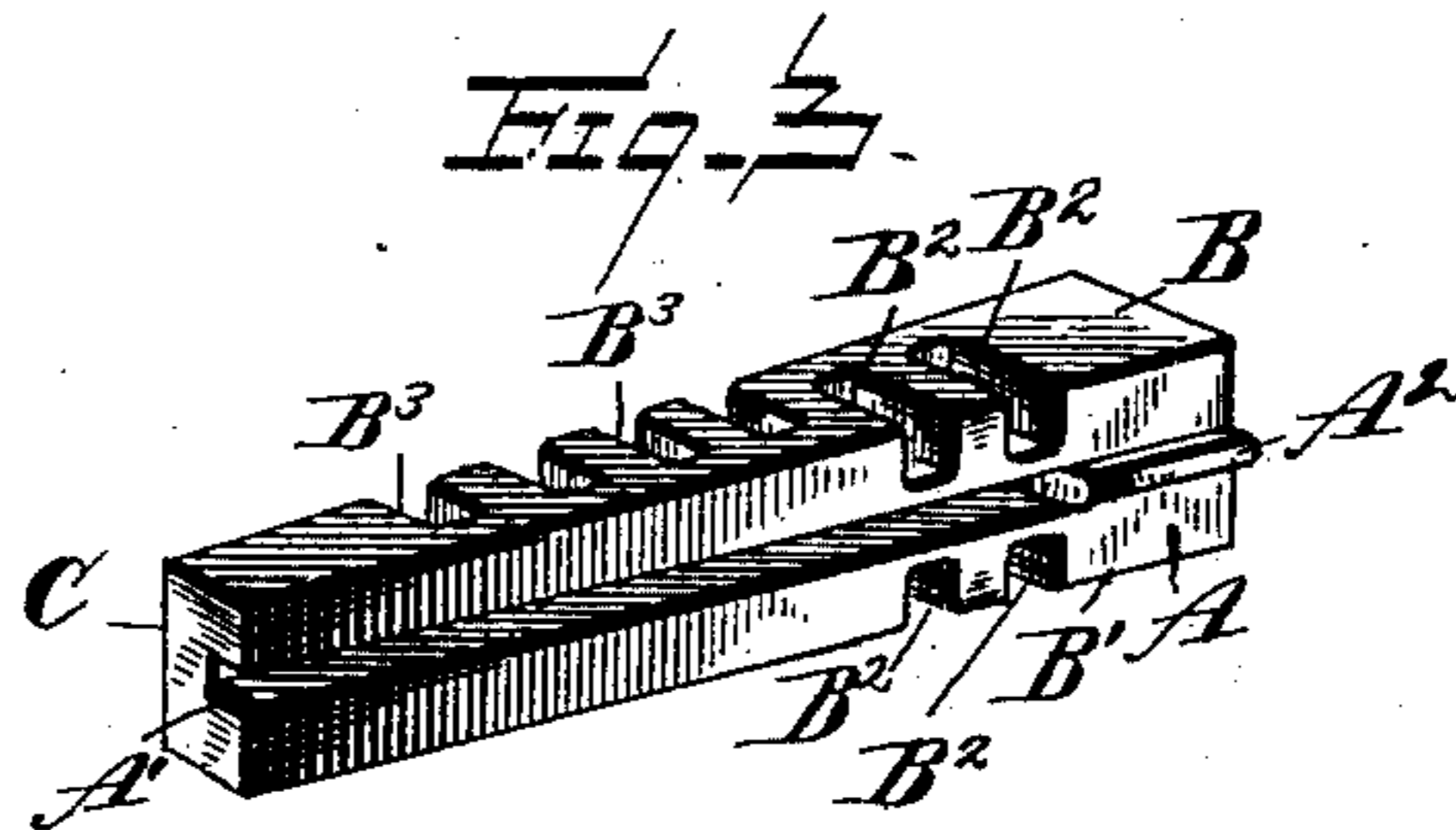
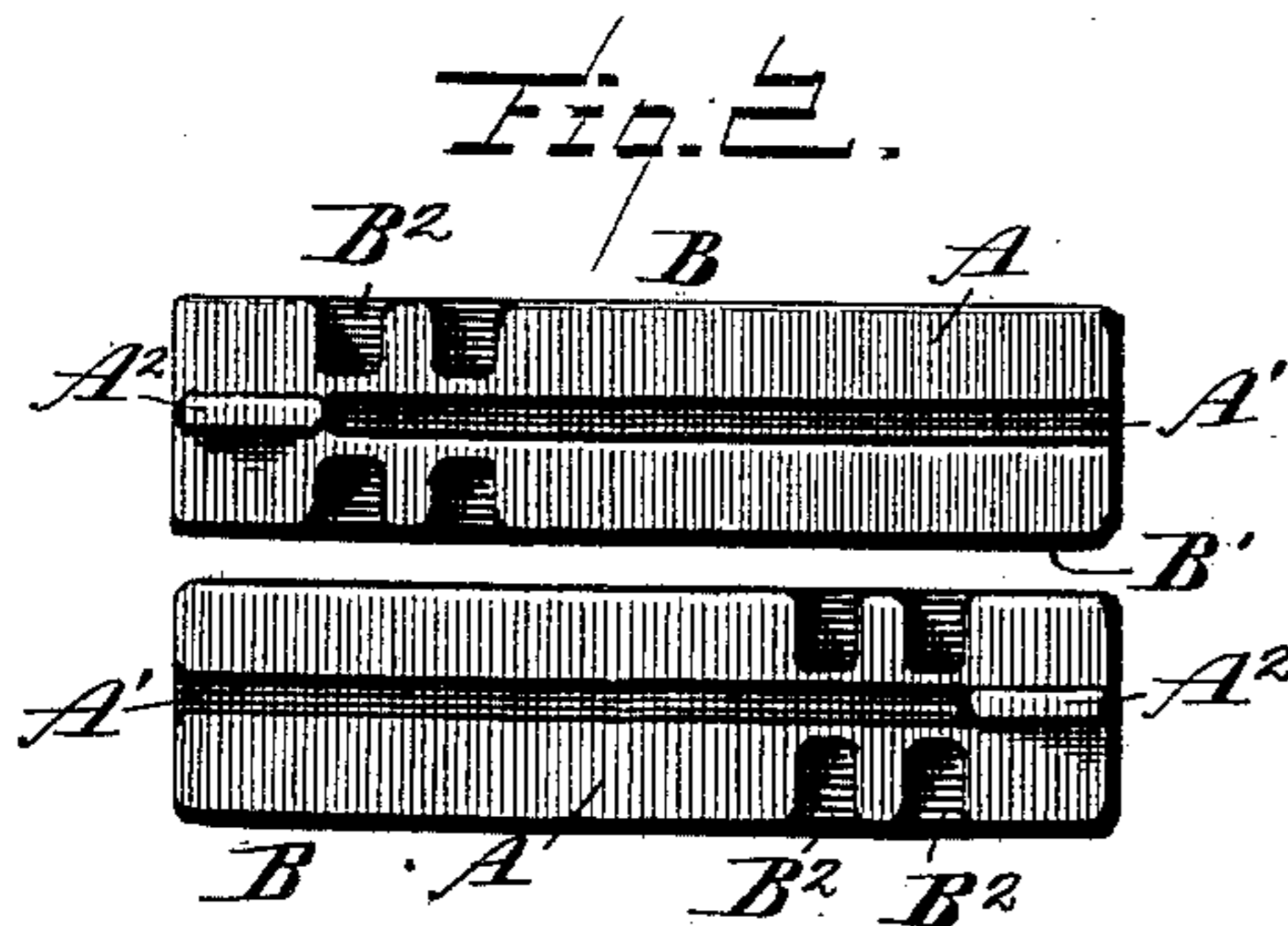
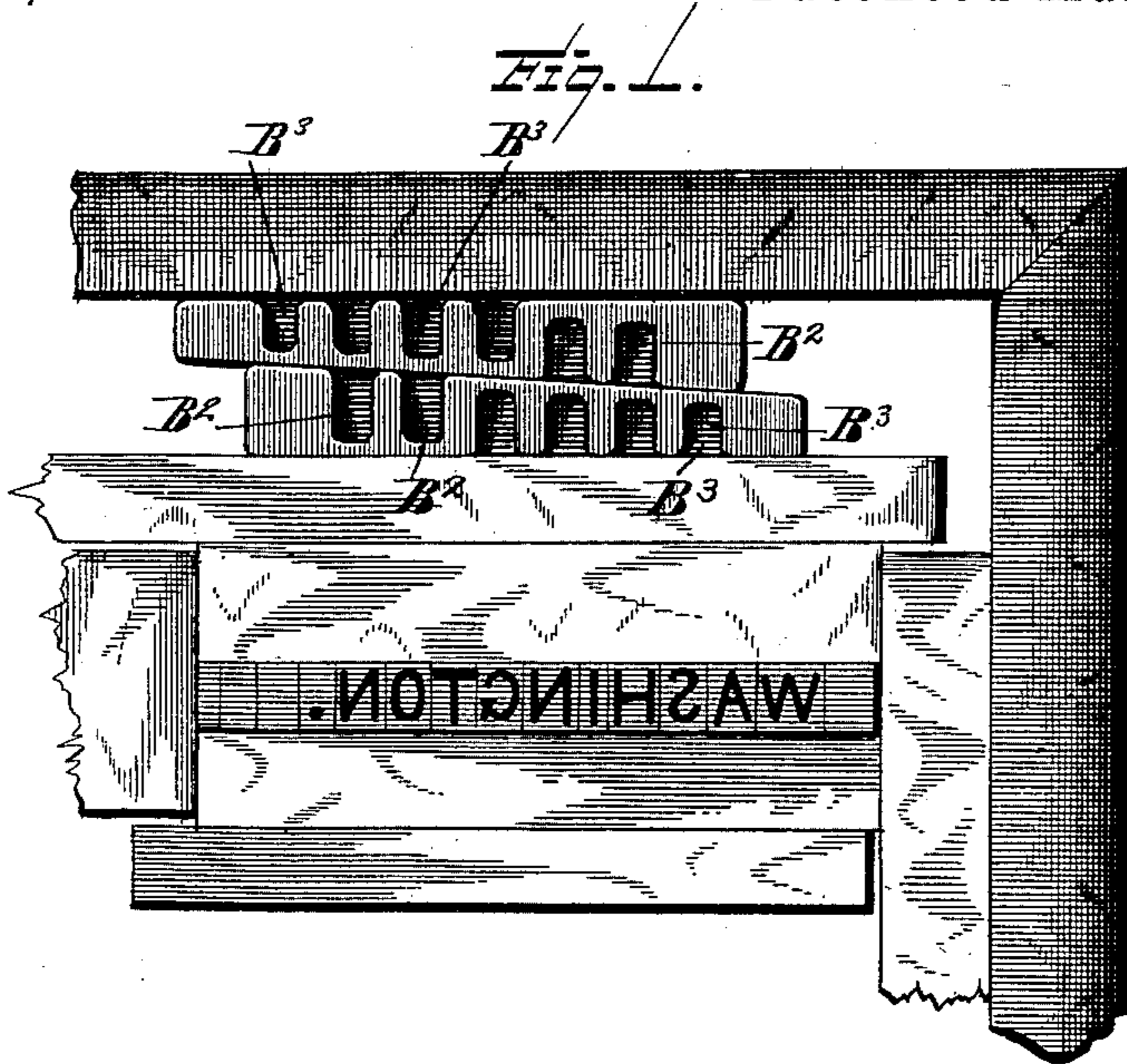
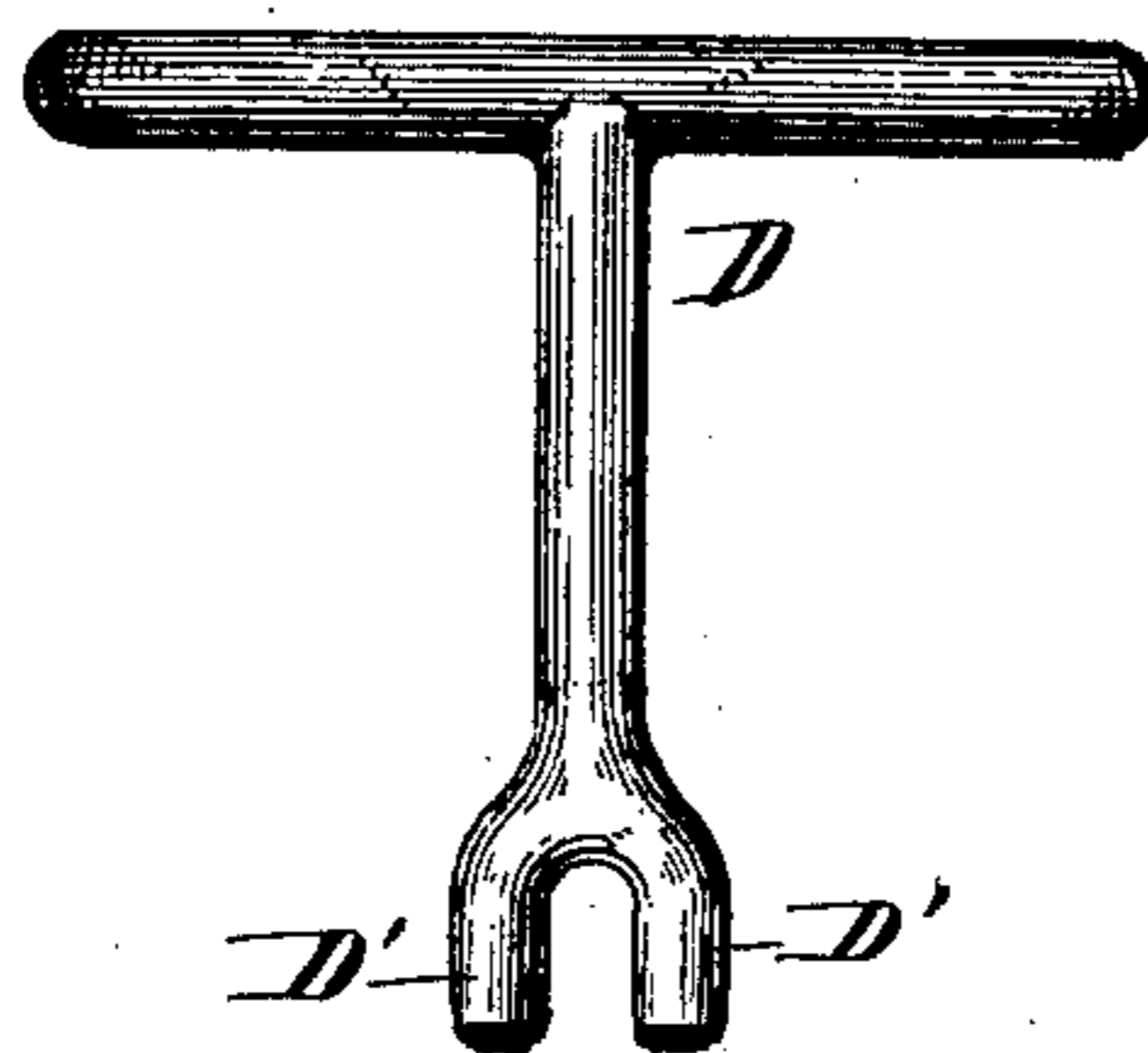
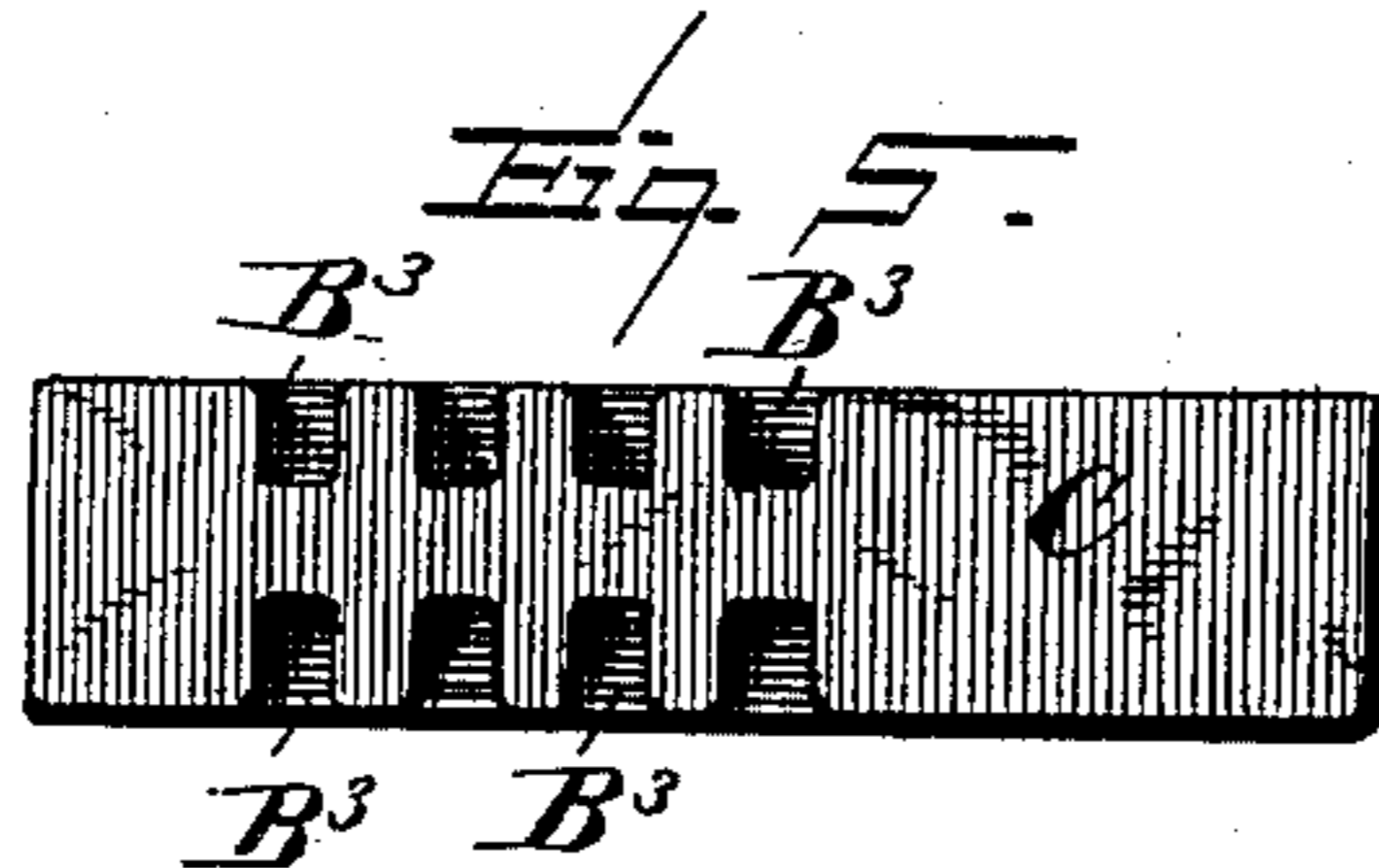


Fig. 4.



WITNESSES:

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QUOIN.

SPECIFICATION forming part of Letters Patent No. 359,017, dated March 8, 1887.

Application filed June 10, 1886. Serial No. 204,750. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM H. GOLDING, a citizen of the United States, residing at Chelsea, in the county of Suffolk, State of Massachusetts, have invented certain new and useful Improvements in Quoins, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention has relation to quoins for locking furniture and forms in chases; and the object of the invention is to produce a quoin by casting the same, and without the necessity of subjecting it to the operation of hand or machine tools for the purpose of finishing the same, whereby the cost of manufacture is materially reduced. In order to obtain this object certain novel features of conformation are requisite, and the same will be hereinafter described, and particularly pointed out in the claims.

Referring to the drawings, Figure 1 is a plan of a portion of a chase, form, and furniture, with a pair of quoins constructed in accordance with my invention arranged in a locked position. Fig. 2 is a plan of the beveled faces of a pair of quoins. Fig. 3 is a perspective of my quoin. Fig. 4 is an elevation of a straddle-wrench adapted for use with my quoins, and Fig. 5 is a plan of the back of the quoin.

Like letters indicate like parts in all the figures of the drawings.

Heretofore quoins have been constructed on the principle of a rack-bar and pinion, the teeth of the bar being formed on one or both of the quoins and the pinion being formed on a hand-tool, so that it could be inserted between the quoins, or between a quoin and chase, and rotated to cause one of the quoins to ride upon the other, their inclined faces abutting against each other, in order to cause them to act as a wedge to force the furniture against the form.

In my invention each quoin is an exact duplicate of its mate, and each is constructed with a beveled face, A, longitudinally grooved, as at A', and provided with a projecting rib, A², at the thicker end of the quoin and in line with the groove, so that when the inclined faces of two of such quoins are placed against each other the rib A² of one will fit into and ride along the groove A' of the other. The object

of this construction is to retain the quoins within a common plane when one is moved along the other.

The top B and bottom B' of each quoin are similar to each other—that is to say, each is near the head of the quoin—that is, its thicker end—provided with two or more recesses, B², extending inwardly from its beveled face, and with a series of recesses, B³, extending inwardly from the back C of the quoin and arranged between the recesses B² and the foot of the quoin. The bevel of the face of each quoin is such that when two quoins are arranged against each other, their faces coming in contact, the backs C are parallel. The recesses B² of each quoin open toward its beveled face, while the recesses B³ open from such face—that is to say, the open ends of the recesses mentioned are at opposite edges, whereby a straddle-wrench, as D, Fig. 4, having the prongs D', is adapted to force one quoin along the other to secure their wedging action by inserting its prongs into any of the recesses which are opposite, or nearly so, to each other, and when so inserted by twisting the wrench the desired result is produced.

Now, it will be noticed that by the arrangement of the recesses above described a continuous unbroken face of one quoin comes in contact with a similar face of the adjacent quoin in all of the adjustments of the same until the recesses B² of each quoin come opposite each other, at which time the lugs A² of the quoin strike each other and stop further longitudinal movement thereof. When in this position said recesses B² are in proper relative location to admit of the insertion of the wrench for causing the retrograde movement of the quoins.

All of the recesses, the grooves, and the rib, together with the exterior contour of the several faces of my quoin, are so relatively arranged that the same may be molded and the pattern withdrawn from the sand by parting the mold vertically and transversely, the latter line occurring between the recesses B² B³, so that the quoin as a whole is produced as a single casting, requiring no hand or machine tool finishing, except the mere grinding off of the sprue, which preferably would occur at the foot of the quoin.

By making the top and bottom similar to each

other, the quoins may be used either side up, and if the bottom of the quoins were plain any two might be used in connection with each other just as conveniently, except the necessity of placing them with their recessed tops upwardly; and I therefore do not limit my invention to such quoins having similar recesses upon opposite faces.

Having thus described my invention and its operation, what I claim is—

1. A quoin having a groove and rib in and upon its beveled face, and having recesses at its head opening toward said beveled face, and recesses between the head and foot opening away from its beveled face, substantially as specified.

2. A quoin having a groove and rib in and upon its beveled face, a series of recesses in its top and bottom, a portion of which, at the head

of the quoin, open toward the beveled face, and the remainder, between the head and foot, open away from its beveled face, substantially as specified.

3. The combination of two quoins, each having a grooved beveled face provided with a rib, and each having recesses near the head opening toward the beveled face, and recesses near the foot opening away from the beveled face, with a straddle-wrench, the prongs of which are adapted to operate in the recesses of opposite quoins of a pair, substantially as specified.

In testimony whereof I affix my signature in presence of two witnesses.

WILLIAM H. GOLDING.

Witnesses:

JOHN S. MOORE,

WILLIAM G. EVERT.