

No. 717,431.

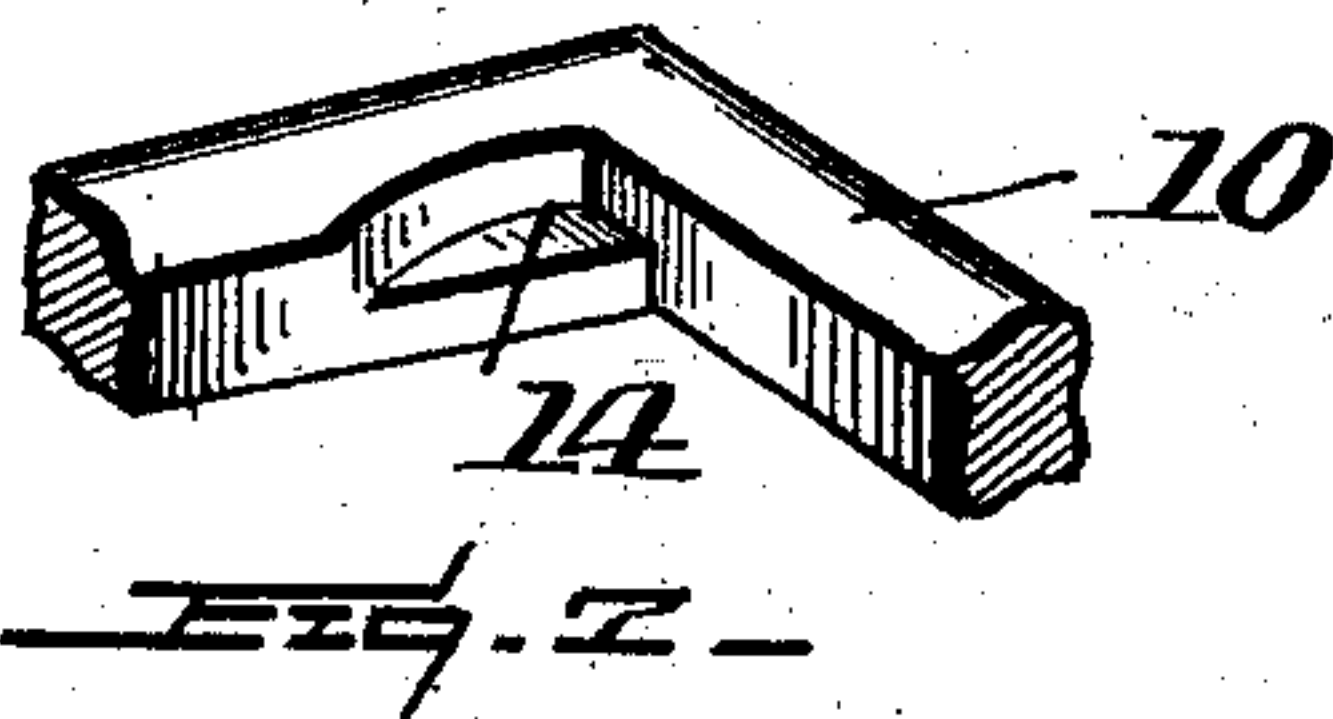
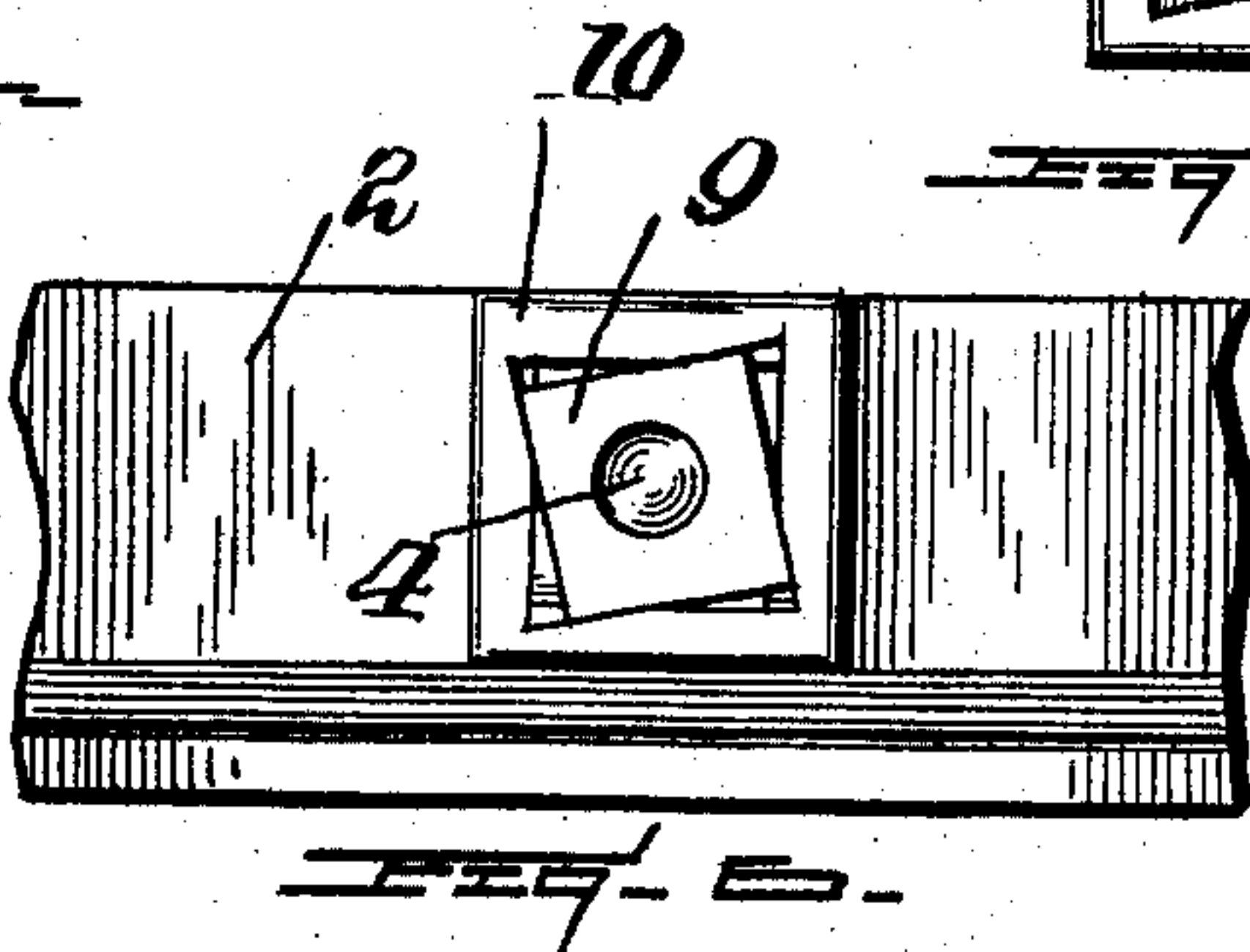
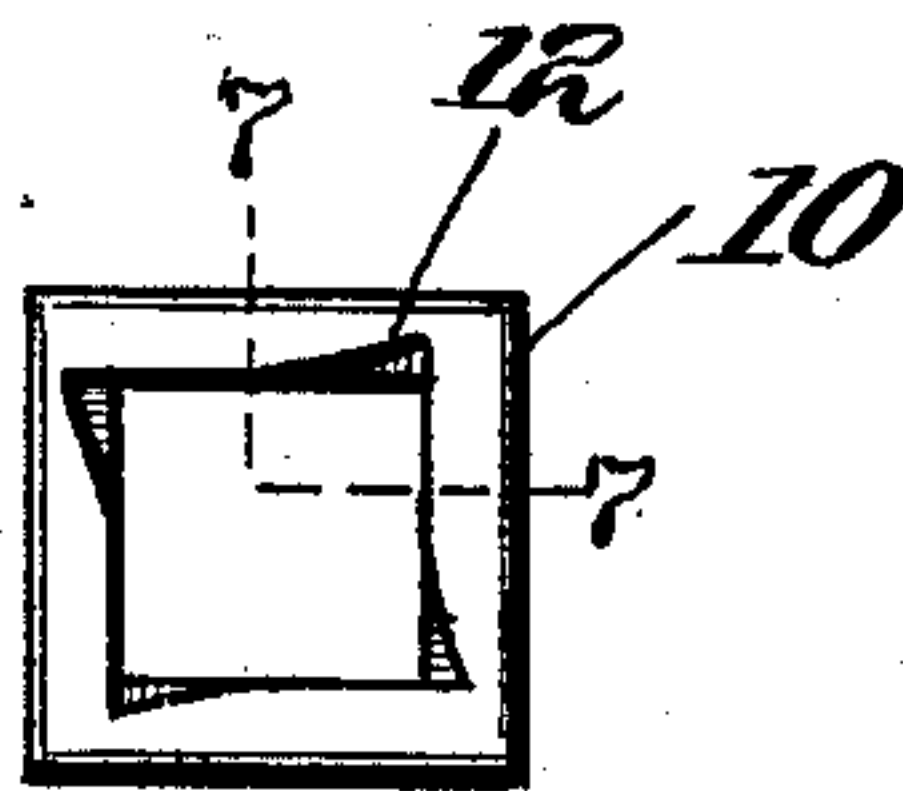
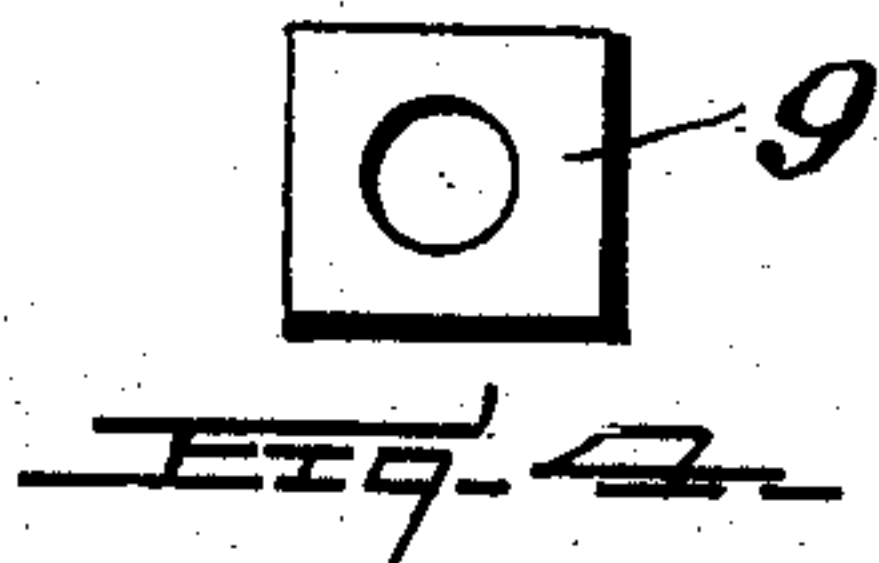
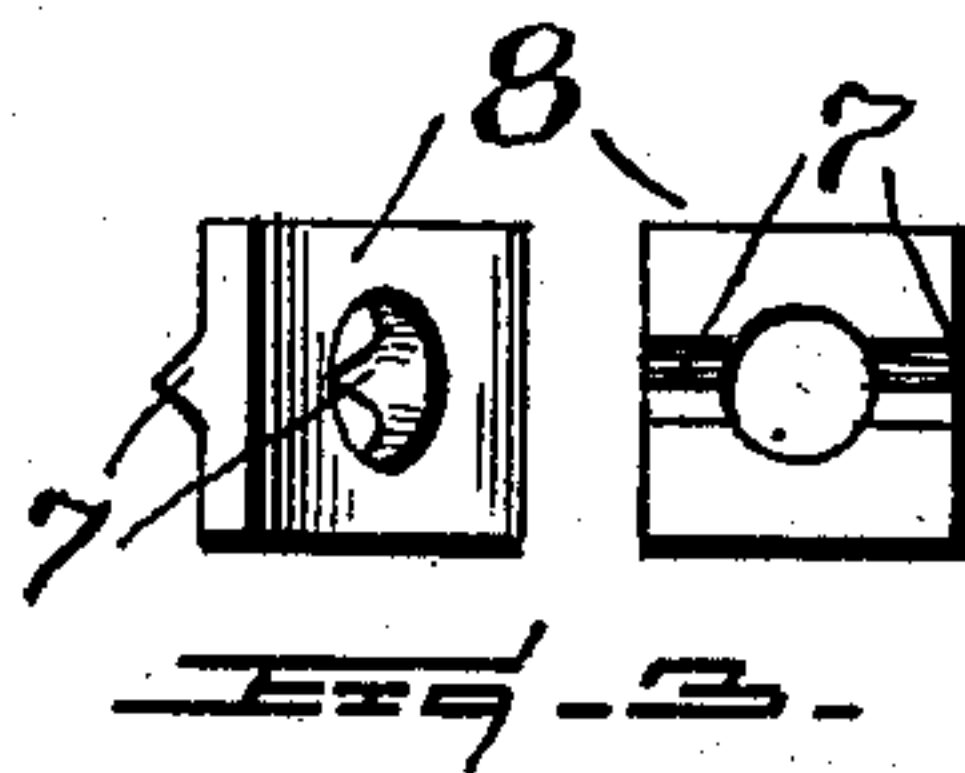
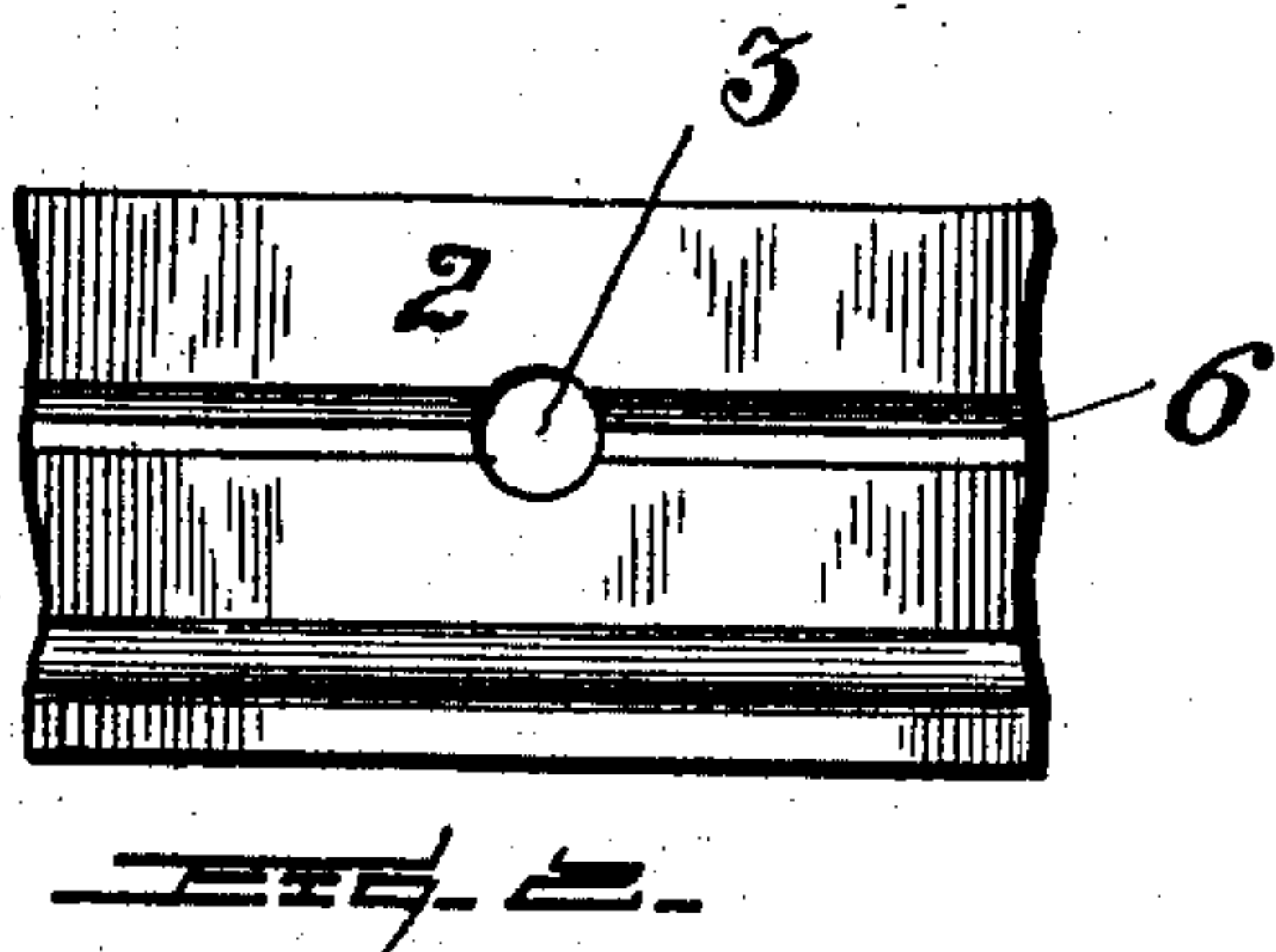
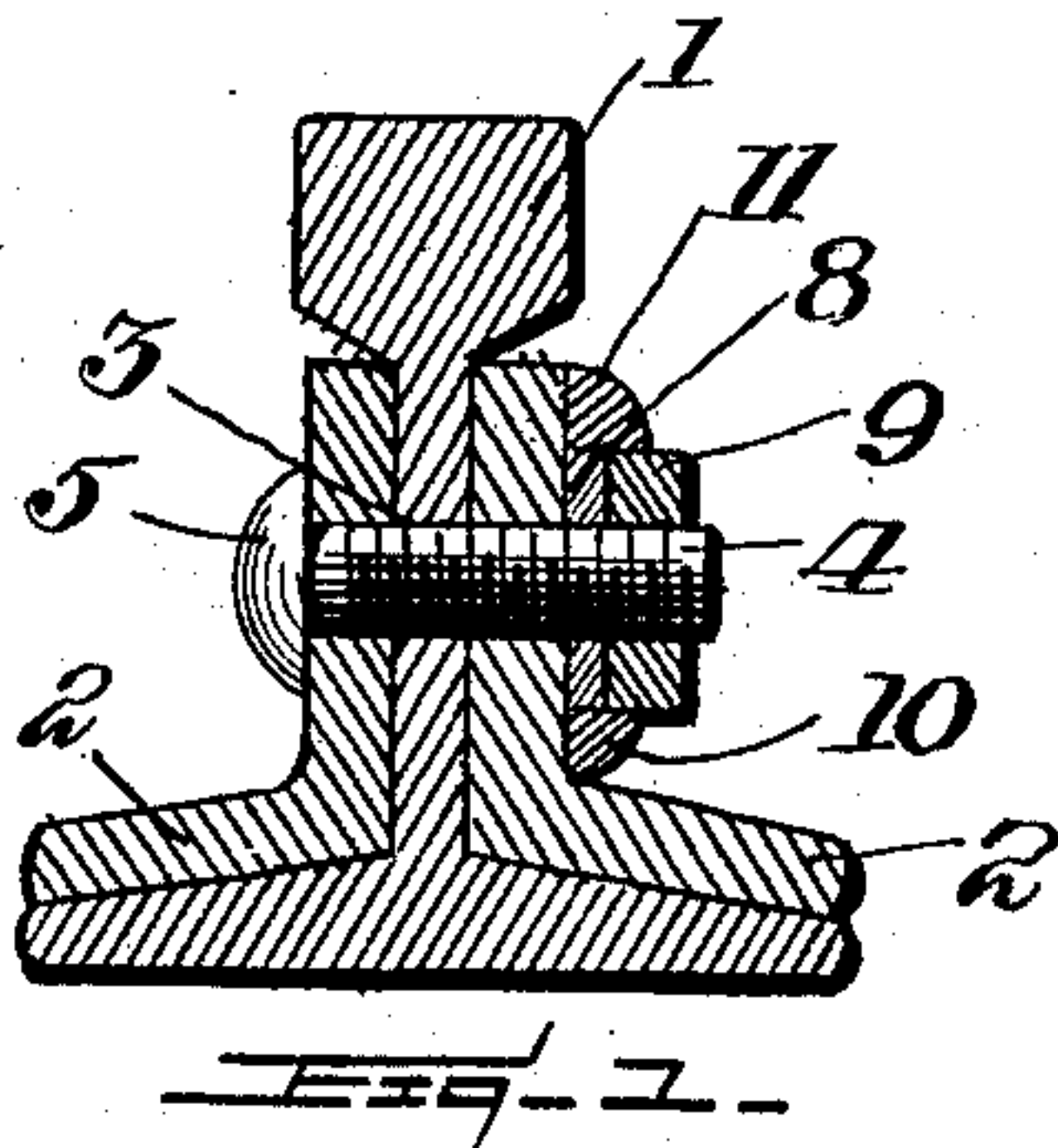
Patented Dec. 30, 1902.

J. E. MONTGOMERY.

NUT LOCK.

(Application filed Apr. 9, 1902.)

(No Model.)



Witnesses:
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UNITED STATES PATENT OFFICE.

JAMES E. MONTGOMERY, OF SALTSBURG, PENNSYLVANIA.

NUT-LOCK.

SPECIFICATION forming part of Letters Patent No. 717,431, dated December 30, 1902.

Application filed April 9, 1902. Serial No. 102,032. (No model.)

To all whom it may concern:

Be it known that I, JAMES E. MONTGOMERY, a citizen of the United States of America, residing at Saltsburg, in the county of Indiana and State of Pennsylvania, have invented certain new and useful Improvements in Nut-Locks, of which the following is a specification, reference being had therein to the accompanying drawings.

10 This invention relates to certain new and useful improvements in nut-locks, and has for its object the provision of novel means whereby a nut is securely locked to a bolt and prevented from turning thereon.

15 Another object of the invention is to provide a device of the above-described character that is particularly adapted to be used for railway constructions or may also be advantageously used for steel constructions of all kinds.

20 A still further object of the present invention is to provide a device that will be extremely simple in construction, strong, durable, comparatively inexpensive to manufacture, and highly efficient in its use.

25 With the above and other objects in view the invention consists in the novel construction, combination, and arrangement of parts, to be hereinafter more fully described, and specifically pointed out in the claim.

30 In describing the invention in detail reference is had to the accompanying drawings, forming a part of this specification, and wherein like numerals of reference indicate like parts throughout the several views, in which—

35 Figure 1 is a vertical sectional view of my improved nut-lock applied to a rail. Fig. 2 is a side elevation of the fish-plate. Fig. 3 is a perspective and rear view of one of the washers. Fig. 4 is a side elevation of the nut. Fig. 5 is a side elevation of the locking-washer. Fig. 6 is a side elevation of my improved nut-lock applied to the fish-plate, 40 showing the same in a locked position. Fig. 7 is a detail perspective view taken on the line 7 7 of Fig. 5.

45 In the drawings I have illustrated my improved nut-lock applied to a rail, and the reference-numeral 1 indicates the rail, and 2 the fish-plate, said rails and fish-plates carrying aperture 3, through which passes a bolt 4, carrying a head 5. The fish-plate 2 carries a groove 6 upon its outer face to receive the 55 lugs 7, carried by a washer 8.

The reference-numeral 9 indicates a nut which secures the washer 8 in position upon the bolt 4.

The reference-numeral 10 represents a securing-washer which has beveled edges 11, 60 its inner edges having the corners cut away, as indicated at 12, said cut-away portion forming a seat 14.

The operation of locking my improved nut-lock is as follows: The bolt having been inserted through the rail and fish-plates, the washer 8 is placed upon the bolt, the lugs 7 engaging the groove 6, and then the nut 9 is screwed upon the bolt. The securing-washer 10 is then placed over the bolt and nut, said washer fitting the washer and nut 8 and 9 snugly, and then the nut 9 is turned slightly back until the edges or corners of said nut engage in the seat 14 of the securing-washer 10, thereby preventing the same from working its way off the bolt or from becoming more tightly secured upon the same. It will be noted that my improved nut-lock may be applied to structural steel and the like, wherein a groove has been made for the reception 80 of a washer carrying lugs.

The many advantages obtained by the use of my improved device will be readily apparent from the foregoing description, taken in connection with the accompanying drawings. 85

It will be noted that various changes may be made in the details of construction without departing from the general spirit of my invention.

Having fully described my invention, what 90 I claim as new, and desire to secure by Letters Patent, is—

In a nut-lock, the combination with the rail and fish-plates one of said fish-plates having a groove formed in its face, of a square washer 95 carrying lugs engaging said groove, a nut securing said washer in position, a securing-washer having a square opening the edges of which engage the straight sides of the first-named washer, seats formed in the upper corners of said securing-washer, and having horizontally-disposed bases flush with the upper face of said first-named washer when in a locked position, substantially as described. 100

In testimony whereof I affix my signature 105 in the presence of two witnesses.

JAMES E. MONTGOMERY.

Witnesses:

PETER A. WAUGAMAN,
B. S. KELLY.