

(No Model.)

J. L. NICHOLS.  
PRINTER'S QUOIN.

No. 567,497.

Patented Sept. 8, 1896.

Fig. 1.

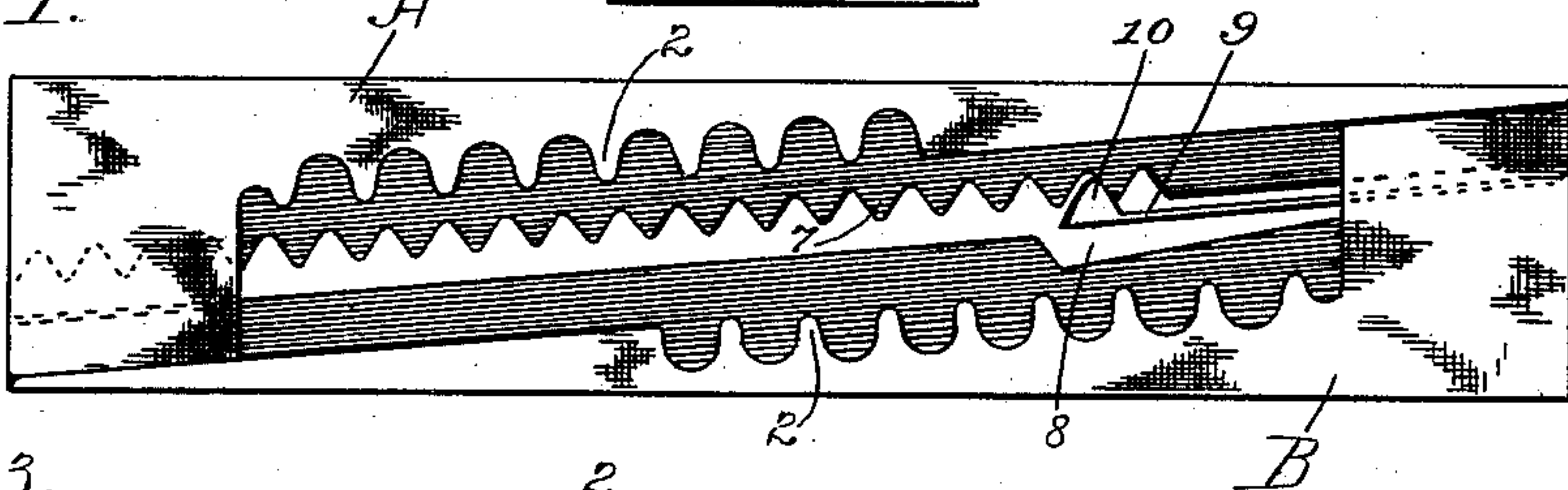


Fig. 3.

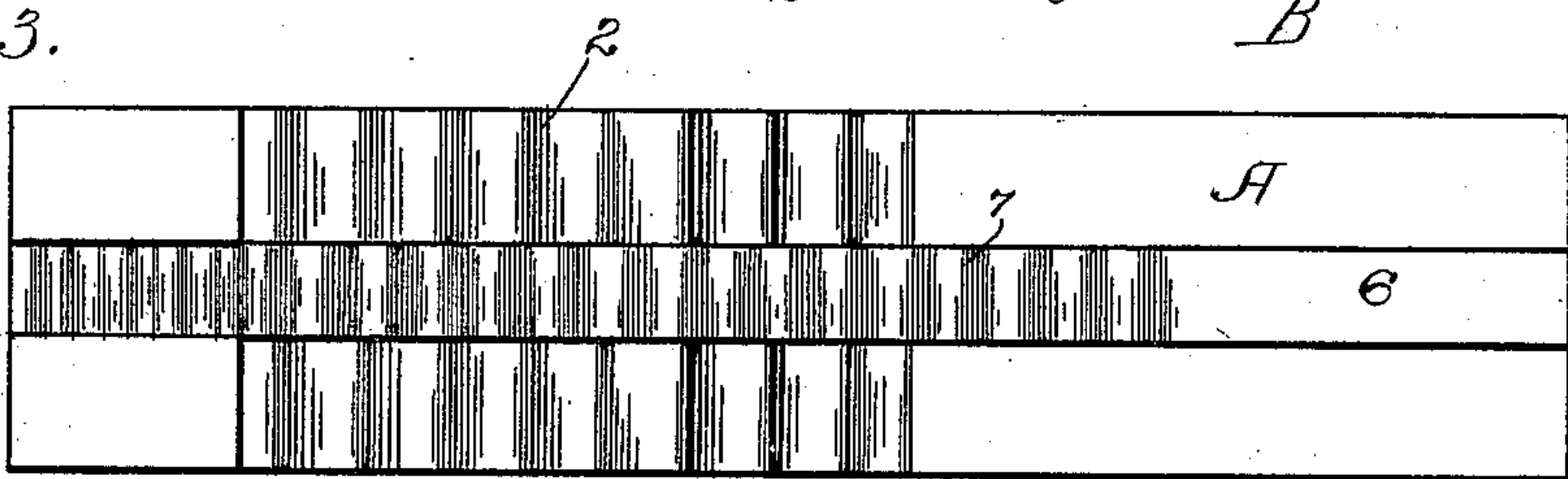


Fig. 4.

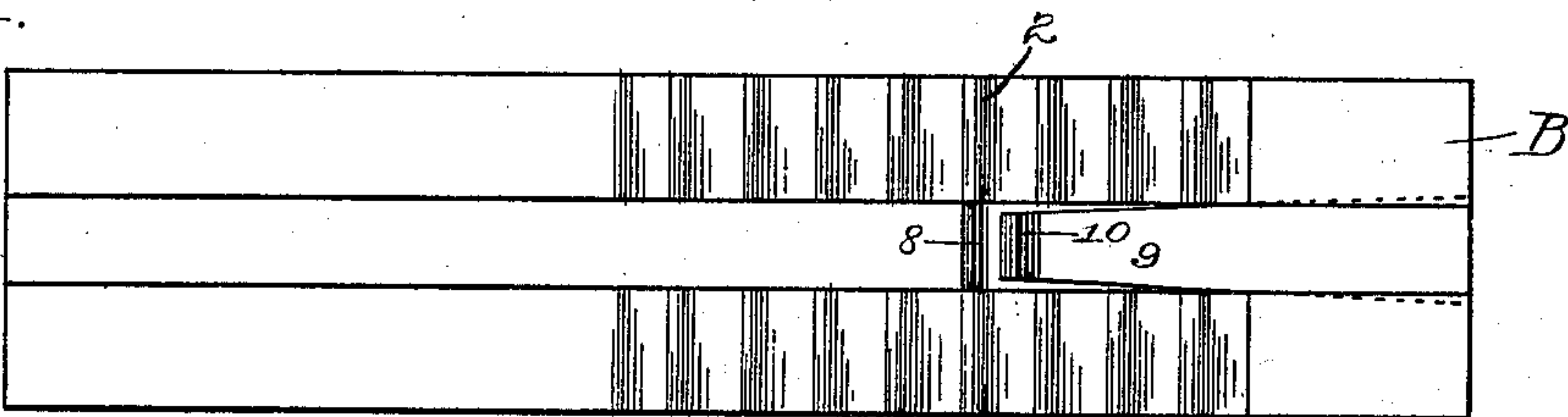


Fig. 2.

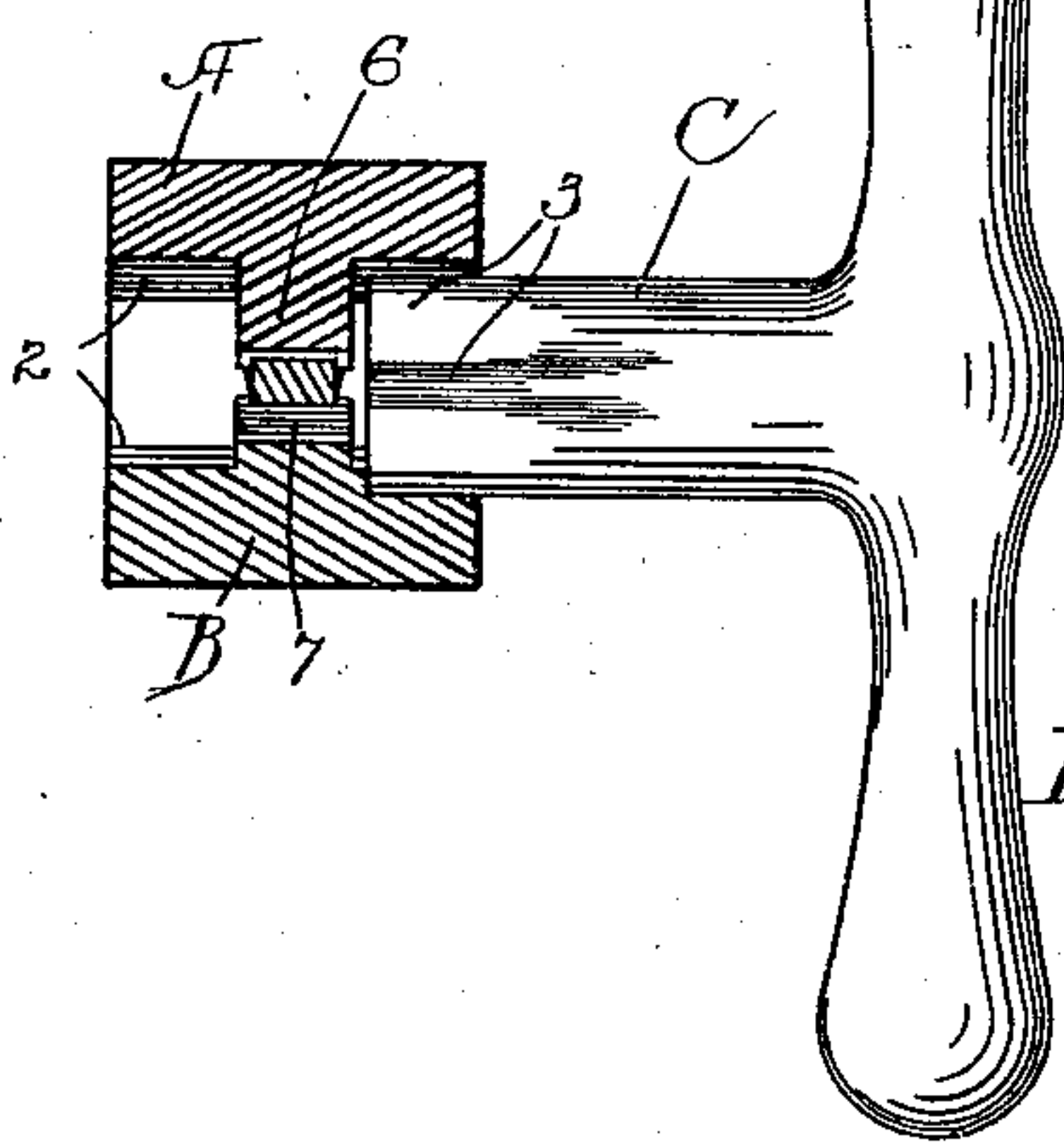
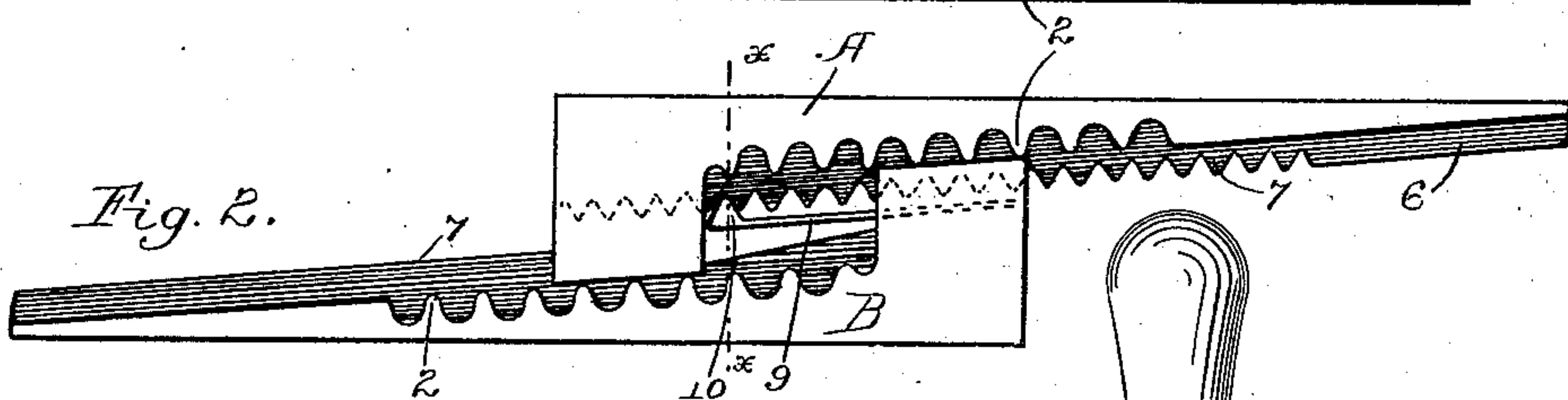


Fig. 6.

Witnesses:

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# UNITED STATES PATENT OFFICE.

JOHN L. NICHOLS, OF ST. PAUL, MINNESOTA.

## PRINTER'S QUOIN.

SPECIFICATION forming part of Letters Patent No. 567,497, dated September 8, 1896.

Application filed November 9, 1895. Serial No. 568,403. (No model.)

*To all whom it may concern:*

Be it known that I, JOHN L. NICHOLS, of St. Paul, Ramsey county, Minnesota, have invented certain Improvements in Printers' Quoins, of which the following is a specification.

My invention relates to improvements in printers' quoins, its object being to provide a simple inexpensive self-locking device, the parts of which will not slip upon each other when set in a chase, but which can be readily moved upon each other by means of a key.

To this end my invention consists in dividing a pair of similar wedges, one of which has a central interior longitudinal rack with beveled teeth, and the other is provided with a spring carrying a similarly shaped dog, which when the wedges are placed upon each other, engages the teeth of the rack of the other wedge, thereby preventing slip of the wedges upon each other, while the dog is caused to slip over the teeth of the rack in either direction when the wedges are actuated by a wrench.

My invention further consists of the specific features of construction hereinafter particularly described and claimed.

In the accompanying drawings, forming part of this specification, Figure 1 is a side elevation of my improved quoin, shown in unexpanded position. Fig. 2 is a similar view showing the same in expanded position. Figs. 3 and 4 are details of the wedges. Fig. 5 is an end view of one of the wedges, showing the dog-carrying spring. Fig. 6 is a cross-section on line  $x x$  of Fig. 2, showing the key in position.

As shown in the drawings, the quoin-wedges A and B are similar in form and proportions, each being provided on its interior face with teeth 2 to be engaged by the ribs 3 of the key C, and having the head 4, provided with a notch or channel 5, in which works the medial longitudinal rib 6 of the opposite wedge. This rib is provided in the wedge A with saw-teeth serrations 7, forming a rack, while in the wedges B the rib is cut away adjacent the head, leaving a notch or depression 8, in which is secured the spring 9, car-

rying the V-shaped dog 10, which is adapted to engage the serrations of the rack 7 upon the other wedge, and to hold the wedges from slipping upon each other. When the key is applied, however, the wedges are caused to move upon each other, and the spring yields to allow the dog to slip in either direction over the teeth of the rack.

I claim—

1. In a printer's quoin, the combination with the similar wedges, of the bevel-toothed rack upon one, and the spring-actuated V-shaped dog upon the contiguous inclined face of the other adapted to engage said rack.

2. In a printer's quoin, the combination with the similar wedges having inclined contiguous faces, one face being provided with a longitudinal rack and the other with a spring-dog set in a notch therein, adapted to engage said rack and normally prevent slipping of the wedges upon each other, while allowing them to be moved in either direction as actuated by the key or other operating-tool.

3. In a printer's quoin, the combination with the similar wedges, the medial longitudinal rib upon the contiguous face of each engaging a notch in the head of the other, and the bevel-toothed rack along one of said ribs, of the spring-dog set in a notch in the face of the other rib and normally projecting beyond it so as to engage said rack, said dog springing back into said notch in the operation of said wedges to allow the same to be moved in either direction.

4. In a printer's quoin, the combination of the similar wedges, the rack upon the inner face of one wedge, and the spring-dog upon the inner face of the other adapted to engage said rack and normally prevent slipping of the wedges upon each other, while permitting them to be moved upon each other in either direction as actuated by a key or other operating means.

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

JOHN L. NICHOLS.

Witnesses:

T. D. MERWIN,

MINNIE L. THAUWALD.