

(No Model.)

W. H. WRIGHT.
PRINTER'S QUOIN.

No. 360,501.

Patented Apr. 5, 1887.

Fig. 1.

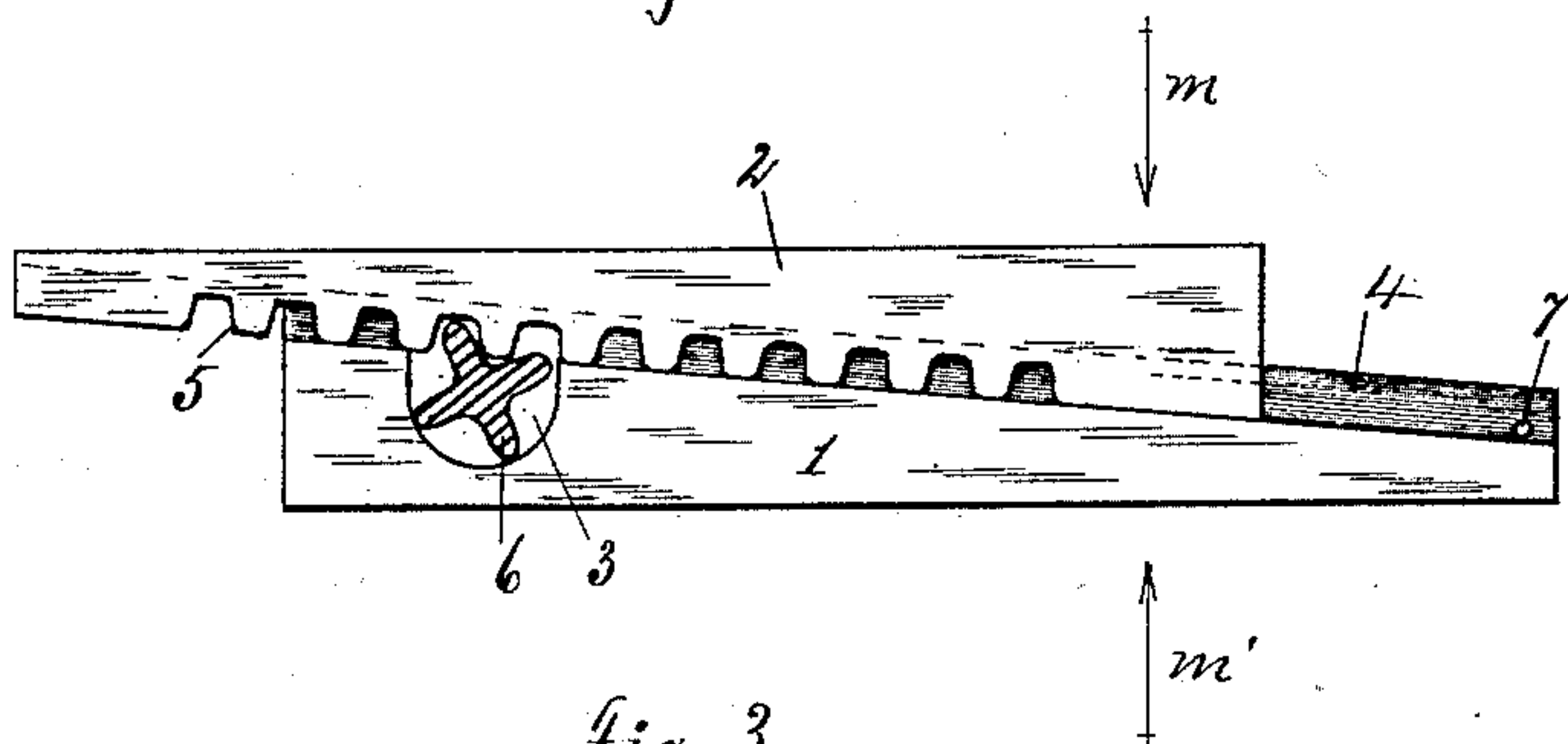


Fig. 2.

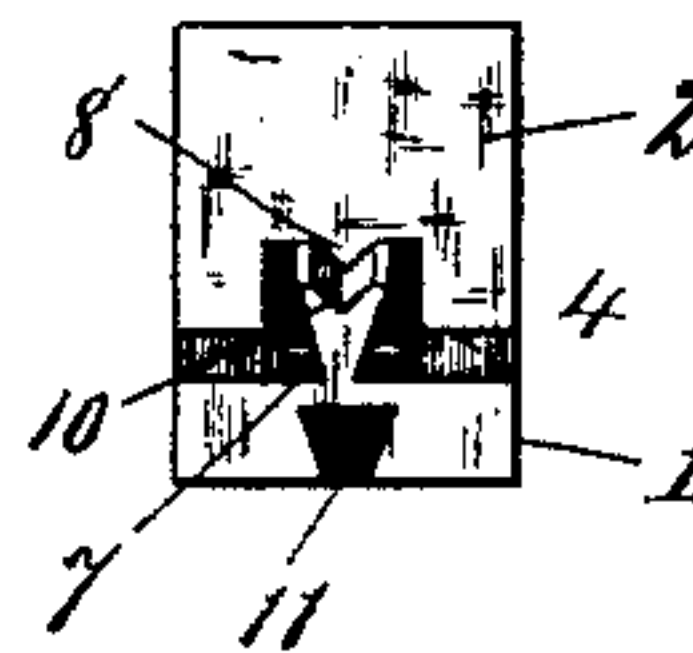


Fig. 3.

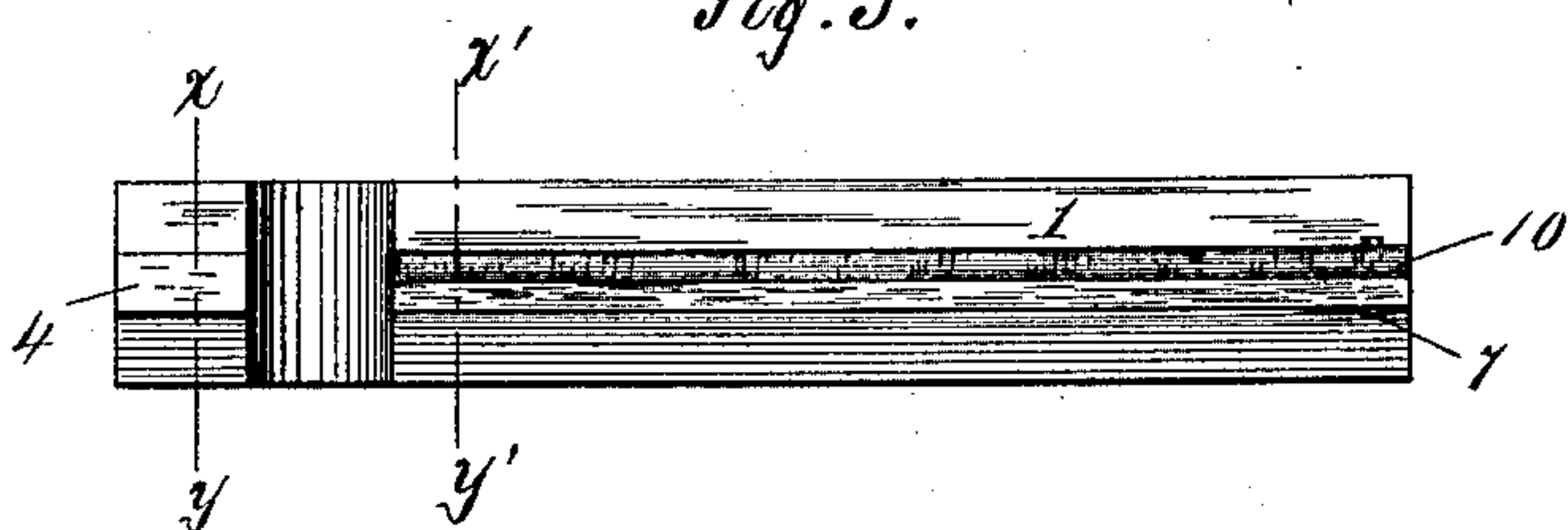


Fig. 4.

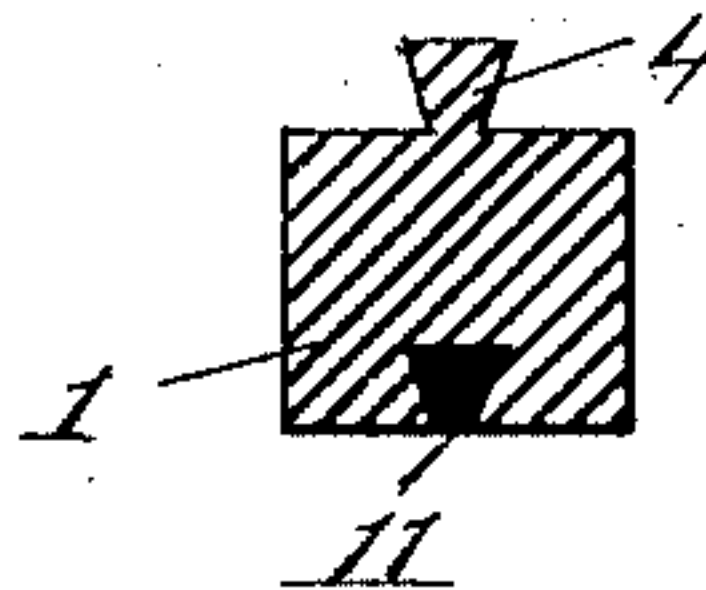


Fig. 6.

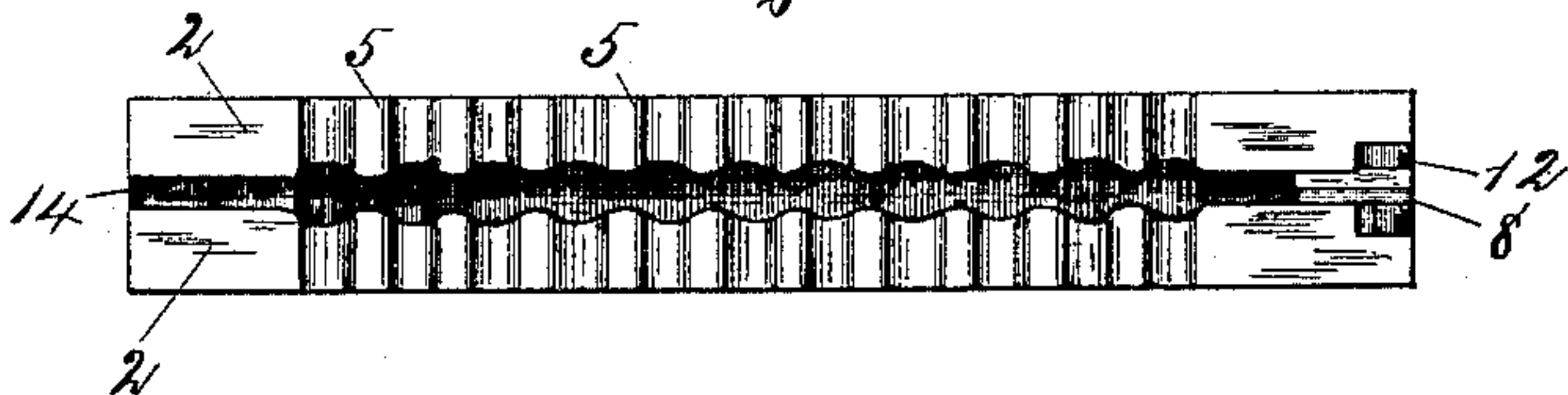


Fig. 5.

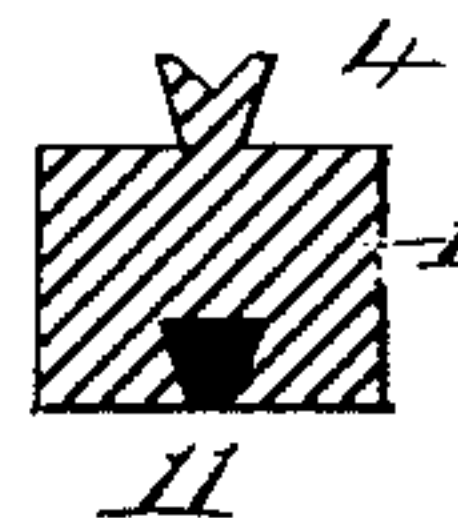
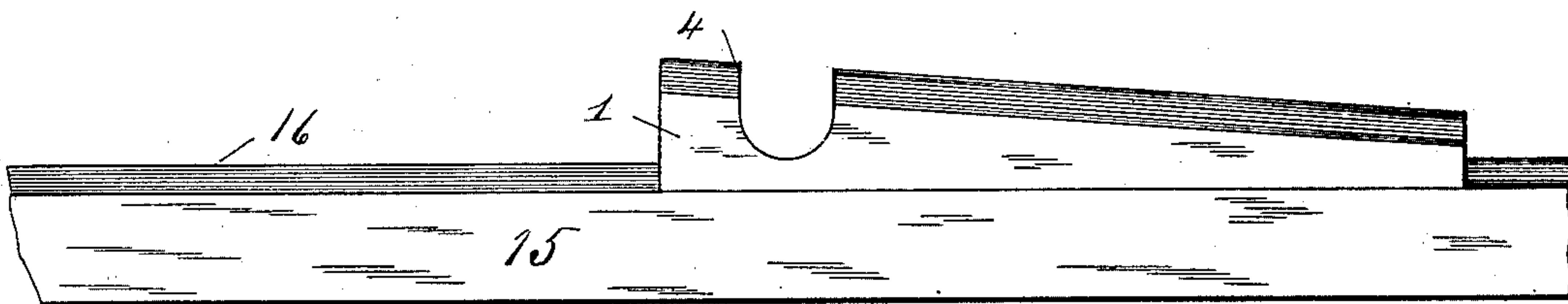


Fig. 7.



Witnesses

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Inventor

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UNITED STATES PATENT OFFICE.

WILLIAM H. WRIGHT, OF FREEPORT, ILLINOIS, ASSIGNOR TO DWIGHT B. BREED AND JOSEPH H. KELLOGG, BOTH OF SAME PLACE.

PRINTER'S QUOIN.

SPECIFICATION forming part of Letters Patent No. 360,501, dated April 5, 1887.

Application filed April 20, 1886. Serial No. 199,554. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM H. WRIGHT, a resident of Freeport, in the county of Stephenson and State of Illinois, have invented certain new and useful Improvements in Printers' Quoins; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use the same.

My invention relates to improvements in printers' quoins of that class in which each complete quoin is made up of two wedge-shaped blocks provided with means for sliding each longitudinally upon the other.

The invention is fully described and explained in this specification, and shown in the accompanying drawings, to which this specification refers.

Figure 1 is a side view of a pair of quoins provided with my devices; Fig. 2, an end view of the same, looking from the right; Fig. 3, a plan of the part 1, Fig. 1, seen in the direction of the arrow *m*. Fig. 4 is a section on the line *x* *y*, Fig. 3. Fig. 5 is a section on the line *x'* *y'*, Fig. 3. Fig. 6 is a view of the part 2, Fig. 1, seen in the direction of the arrow *m'*. Fig. 7 shows the method of attaching the quoins to any bar of proper construction.

In the drawings, 1 and 2 are two quoins adapted by inclined contiguous faces to slide upon each other in the usual manner, varying the distance between the exterior faces, which are parallel at all times. One of these quoins has a dovetail central rib, 4, extending from end to end of its inclined face, and the other is provided with a corresponding groove, 14, Fig. 6, in which the rib 4 slides. When the quoins are engaged or united by means of the tongue and groove, constructed as set forth, it is evident that they can be separated only by longitudinal motion with reference to each other. Such separation is prevented by a pin, 7, Figs. 1, 2, 3, fixed transversely in the tongue or rib 4, near one extremity, and by a projection, 8, upon the quoin 2, Figs. 2 and 6, sliding in a groove, 10, Figs. 2 and 3, in the upper surface of the tongue 4. This projection 8 is at one end of the quoin 2, and the groove 10 extends from the corresponding end of the tongue 4 nearly, but not quite, to the opposite end. It fol-

lows that the quoin 2 may slide upon the quoin 1 in one direction until the projection 8 reaches the end of the groove 10 in the tongue 4, and in the opposite direction until the end of the block 2 meets the pin 7. To allow the latter motion to continue till the ends of the two quoins are in the same plane, the quoin 2 is provided with a recess, 12, Fig. 6, for the passage of the pin 7 into the quoin 2 to a distance equal to its own distance from the end of the quoin 1. The quoin 1 is further provided with a dovetail groove, 11, Figs. 2, 4, and 5, formed in the side opposite the tongue 4 and having the same or substantially the same cross-section as that of the tongue, as illustrated in Fig. 4.

It is evident that a series of quoins having the cross-section shown in Fig. 4 may be built up to form a compound quoin of any desired size, the tongue of each quoin of the series entering and interlocking with the groove of the quoin next it, and the whole quoin so formed being adapted to connect with a complementary quoin having the form 2. In the building up of a compound quoin as suggested, each of the single quoins used may be wedge-shaped, like the quoin 1, (shown,) or a part of the quoins may be parallel-sided. By another and somewhat similar use of the groove 11 (illustrated in Fig. 7) a pair of quoins may be secured as a whole upon a straight bar, 15, of any desired length, having a tongue, 16, adapted to fit said groove. Any number of pairs of quoins may be placed upon the bar, and the whole be handled as a unit where it is desired to repeatedly lock forms of nearly the same size.

I am aware that a wedge-shaped quoin has been formed with a groove on one face to receive the tongue of a supplemental wedge-shaped quoin, and with a groove, or its equivalent, in its opposite face, to receive the tongue of a side-stick corresponding to the bar 15. So long as the only object of the dovetails on the quoin is to lock it on one side to a single supplemental quoin and on the other side to a single bar or side-stick, it is immaterial whether the quoin has both faces tongued or both grooved or one tongued and the other grooved. For the more important purpose, however, of building up a compound quoin from a series of single quoins, the form of the quoin 1 (shown

in the drawings) is a material improvement over any prior construction with which I am acquainted.

Any means may be employed for actuating
5 each pair of quoins, whether separate or upon a bar, 15, provided that sufficient material be left in one quoin to allow the formation of the groove 11.

In the drawings one quoin is shown as pro-
10 vided with teeth 5, forming a rack upon its inclined face, and the other is provided with a recess, 3, Figs. 1 and 3, adapted to receive a pinion-key, 6, Fig. 1, which engages the rack 5 and by its rotation forces the quoin 2 in either
15 direction, as desired.

Operative forms of my devices are shown; but I do not wish to limit myself to the precise forms illustrated, since mere mechanical skill may produce many substantially equivalent

combinations. The grooves and stops may 20 each be varied in form and position and still embody operative forms of my invention, although the forms set forth are believed to be the most advantageous.

Having now fully illustrated and described 25 my invention, what I claim as new, and desire to secure by Letters Patent, is—

The grooved quoin 2, having a stop, 8, and a recess, 12, combined with the tongued quoin 1, having the groove 10 and stop 7, substan- 30 tially as set forth.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

WILLIAM H. WRIGHT.

Witnesses:

D. B. BREED,

J. H. KELLOGG.