

(No Model.)

M. J. HUGHES.
QUOIN AND SIDE STICK.

No. 324,699.

Patented Aug. 18, 1885.

Fig. 1.

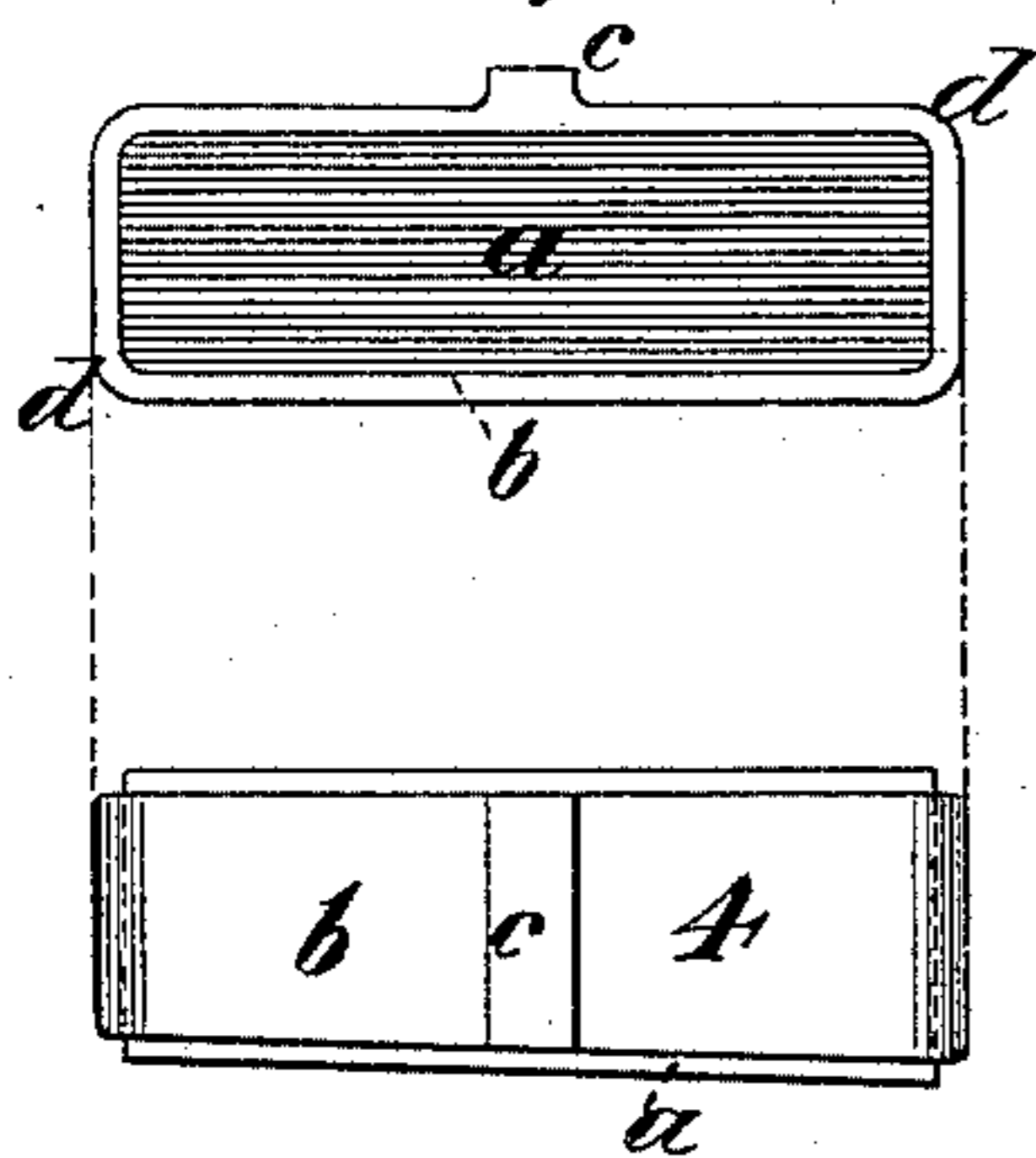


Fig. 2.

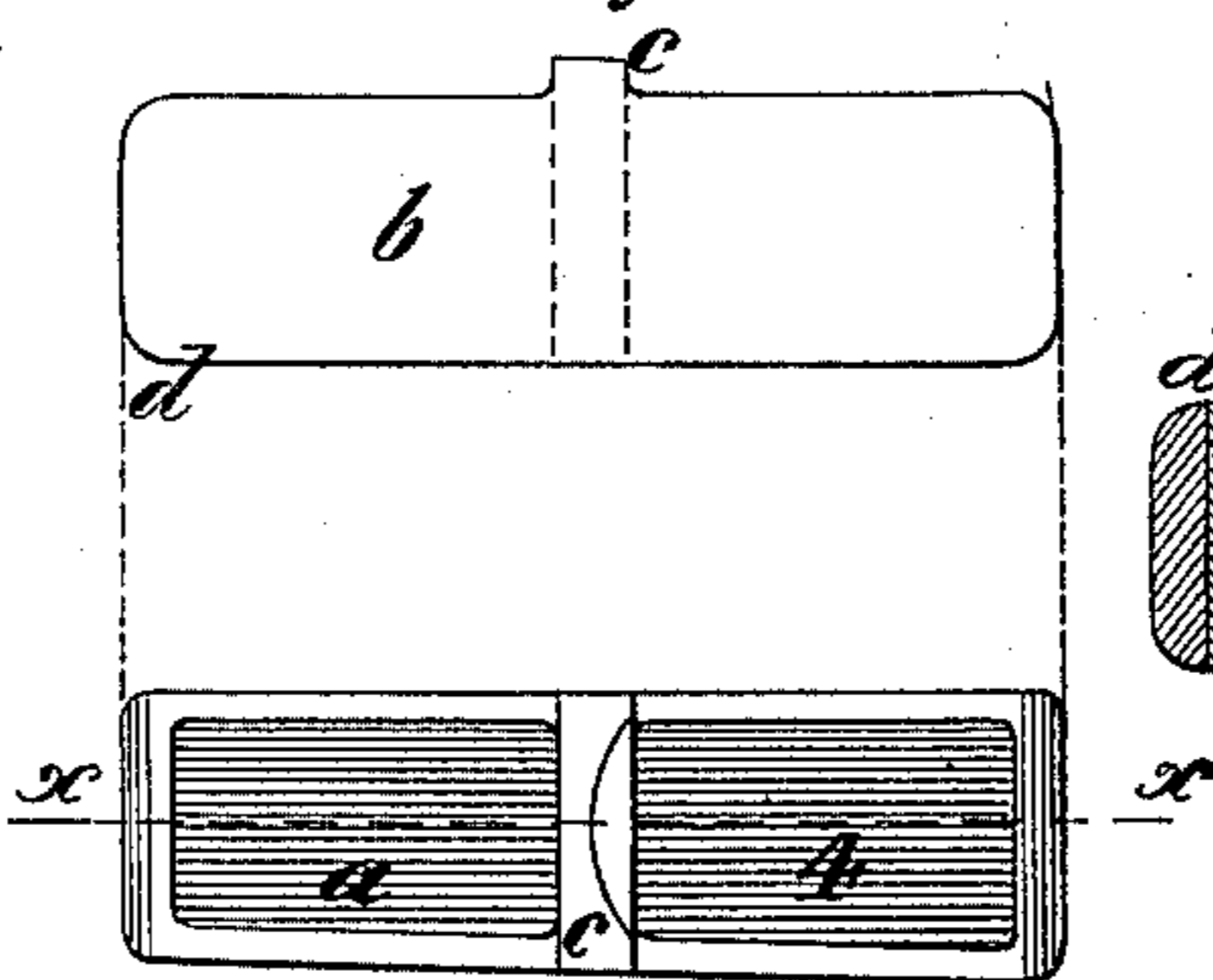


Fig. 3.

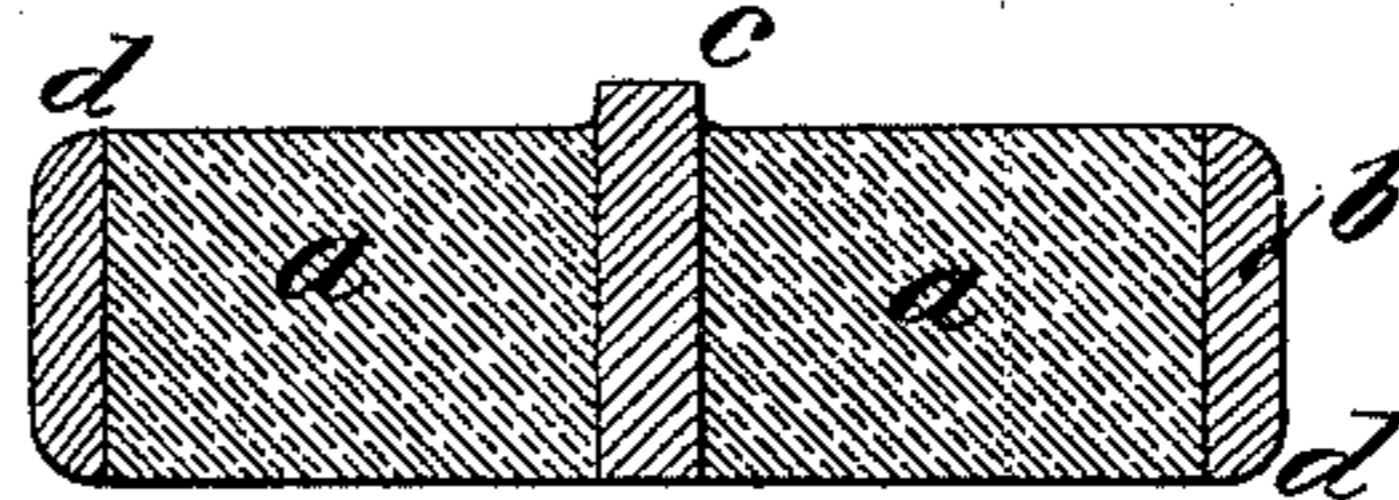


Fig. 4.

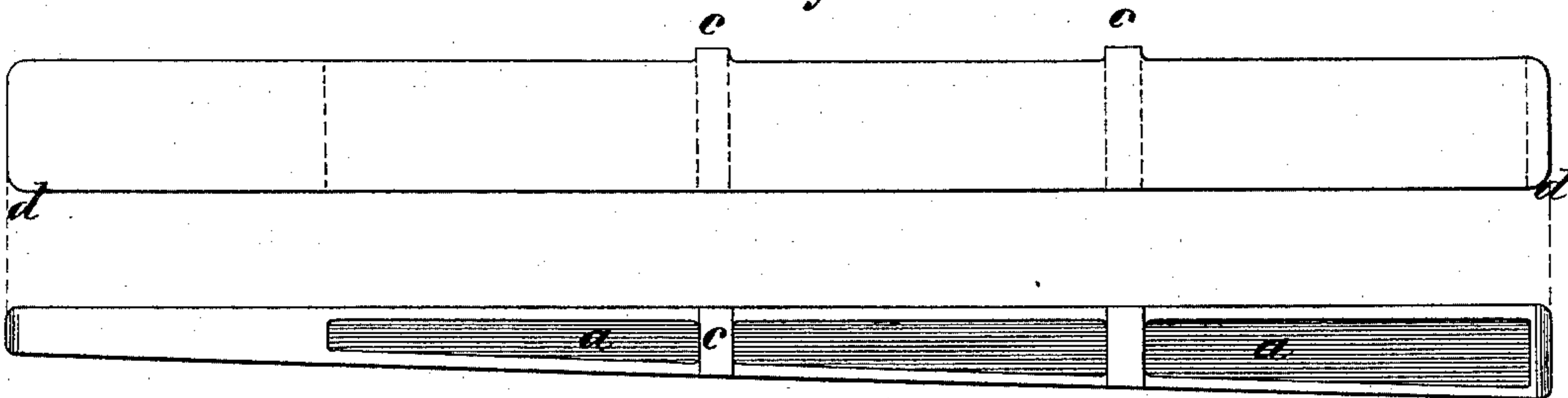
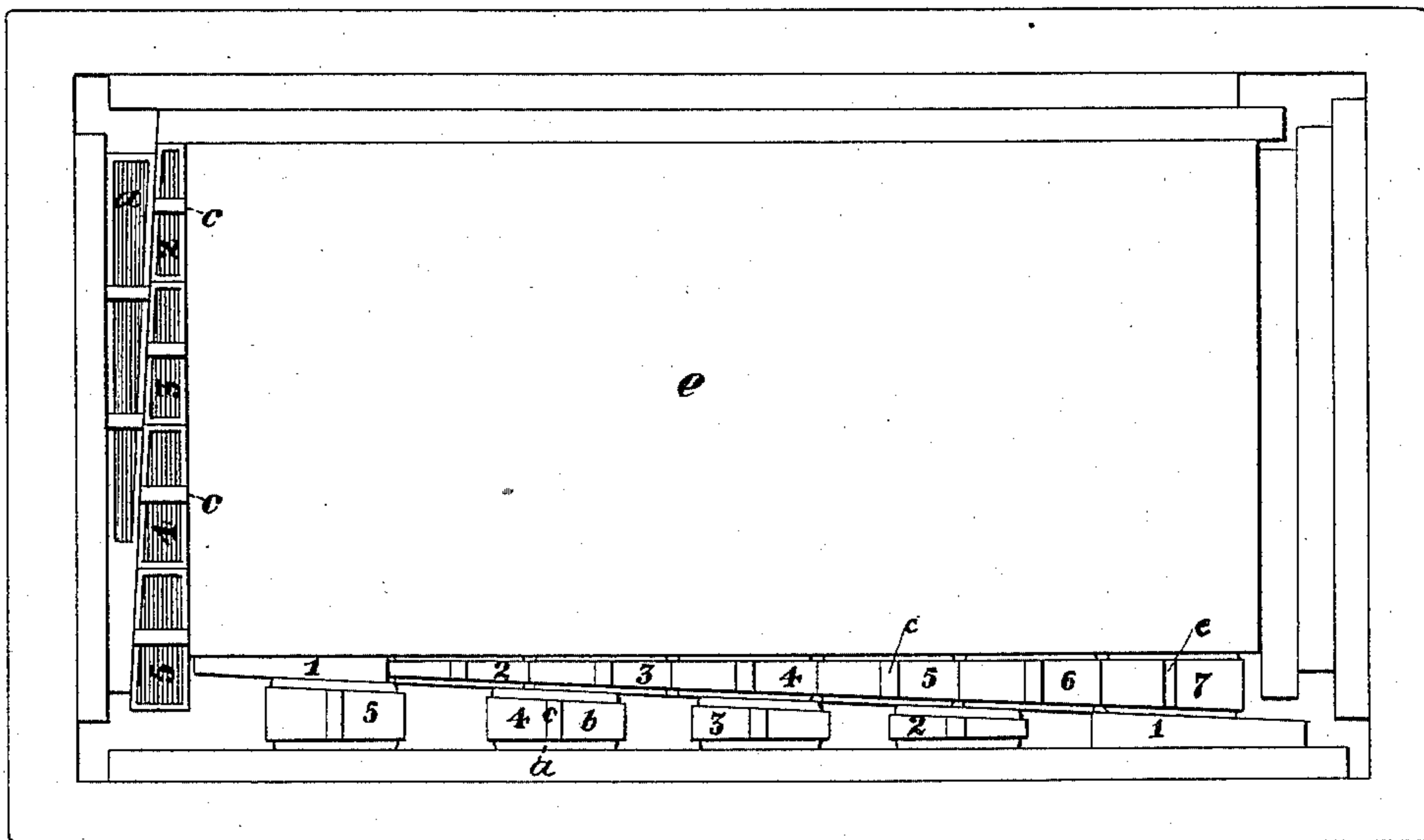


Fig. 5.



Witnesses

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UNITED STATES PATENT OFFICE.

MARSHALL J. HUGHES, OF JERSEY CITY, NEW JERSEY.

QUOIN AND SIDE-STICK.

SPECIFICATION forming part of Letters Patent No. 324,699, dated August 18, 1885.

Application filed June 2, 1884. (No model.)

To all whom it may concern:

Be it known that I, MARSHALL J. HUGHES, a citizen of the United States, residing at Jersey City, in the county of Hudson and State
5 of New Jersey, have invented certain new and useful Improvements in Quoins and Side-Sticks, of which the following is a description.

My invention is an improvement in the class of quoins and side-sticks which are constructed
10 of iron or other metal.

The improvement consists, first, in constructing such devices of wood and metal—that is to say, of a cast-metal band or hollow frame and a wooden block constituting the fill-
15 ing thereof; secondly, in providing such metal band or frame with a projection on its upper side, for use in driving the quoin or side-stick, as hereinafter explained.

In the accompanying drawings, Figure 1
20 represents both side view and plan of my improved quoin or side stick. Fig. 2 represents similar views of a slightly-modified form. Fig. 3 is a vertical longitudinal section of the quoin shown in Fig. 2 (line *xx*.) Fig. 4 is a side
25 view and plan of a side-stick or long quoin embodying my improvement. Fig. 5 is a plan of a form illustrating the practical use of quoins and side-sticks made in sections, which are marked by numbers indicating size.

30 As before indicated, my improved quoin or side-stick is composed of wood and metal.

The letter *a* indicates the wooden block or filling, and *b* the metal band or hollow frame, which is cast on and around it, so that the
35 two parts are firmly and permanently secured together. As shown in Fig. 1, the filling *a* is one solid piece; but in Fig. 2 the frame *b* is shown constructed with a transverse central brace or partition, and hence the filling *a* is in
40 two equal parts, one part occupying the cavity on one side of the partition and the other part the space on the other side. This partition will obviously serve to support the sides
45 of the hollow frame *b* against lateral pressure, and therefore enables it to be made thinner and lighter than would be otherwise practicable.

On the upper side and in the middle of the metal frame *b* is a transverse projection or rib,
50 *c*, which serves as an abutment or rest for the shooting-stick in "driving up" the quoin or side-stick in the operation of "locking up"

the form—that is to say, the end of the driver or shooting-stick is placed against the abutment *c*, instead of the end of the quoin, as
55 usual, and thus battering, upsetting, and consequent enlargement of the ends of the quoin are avoided. These projections *c* are preferable to cavities, since the latter not only weaken the quoin, but become filled with ink and other
60 substances, which interfere with the operation of driving up.

The corners *d* of the metal frames *b* are rounded or beveled, so that in driving them
(with mallet and shooting-stick) there is no
65 danger of gonging or abrading the surface of imposing-stone, as all metal quoins with right-angular corners and angles are liable to do.

In practice much time may be saved by numerically designating the succession or gradation in size of the quoins, and also several
70 pieces composing a side-stick. Thus, as shown in Fig. 5, the smallest or thinnest section of a side-stick, as well as quoin, is designated or marked by the number 1, the next in size by
75 2, the third by 3, and so on. In other words, the gradation in size and number correspond, so that the quoins or sections that must be used adjacently may be instantly selected and
80 laid in line.

If in practice difficulty should occur in selecting graded quoins from side-stick sections when lying promiscuously together, the quoins
85 may be distinguished by a different color or any other suitable mark.

Taking my invention as a whole, it is designed and adapted to effect a considerable economy in material, time, and labor in ways
90 above indicated.

What I claim is—

1. A quoin composed of the oblong metal
90 band *b* and inclosed wooden block *a*, filling the cavity of the same, substantially as shown and described.

2. A quoin or side-stick having projections
95 from the top plane thereof for use in driving in the operation of locking up.

In testimony that I claim the foregoing as my own invention I affix my signature in presence
of two witnesses.

MARSHALL J. HUGHES.

Witnesses:

W. J. GAVENS,

T. J. McWILLIAMS.