

(No Model.)

F. J. WOOSTER.
MOLD FOR CASTING.

No. 475,652.

Patented May 24, 1892.

Fig. 1.

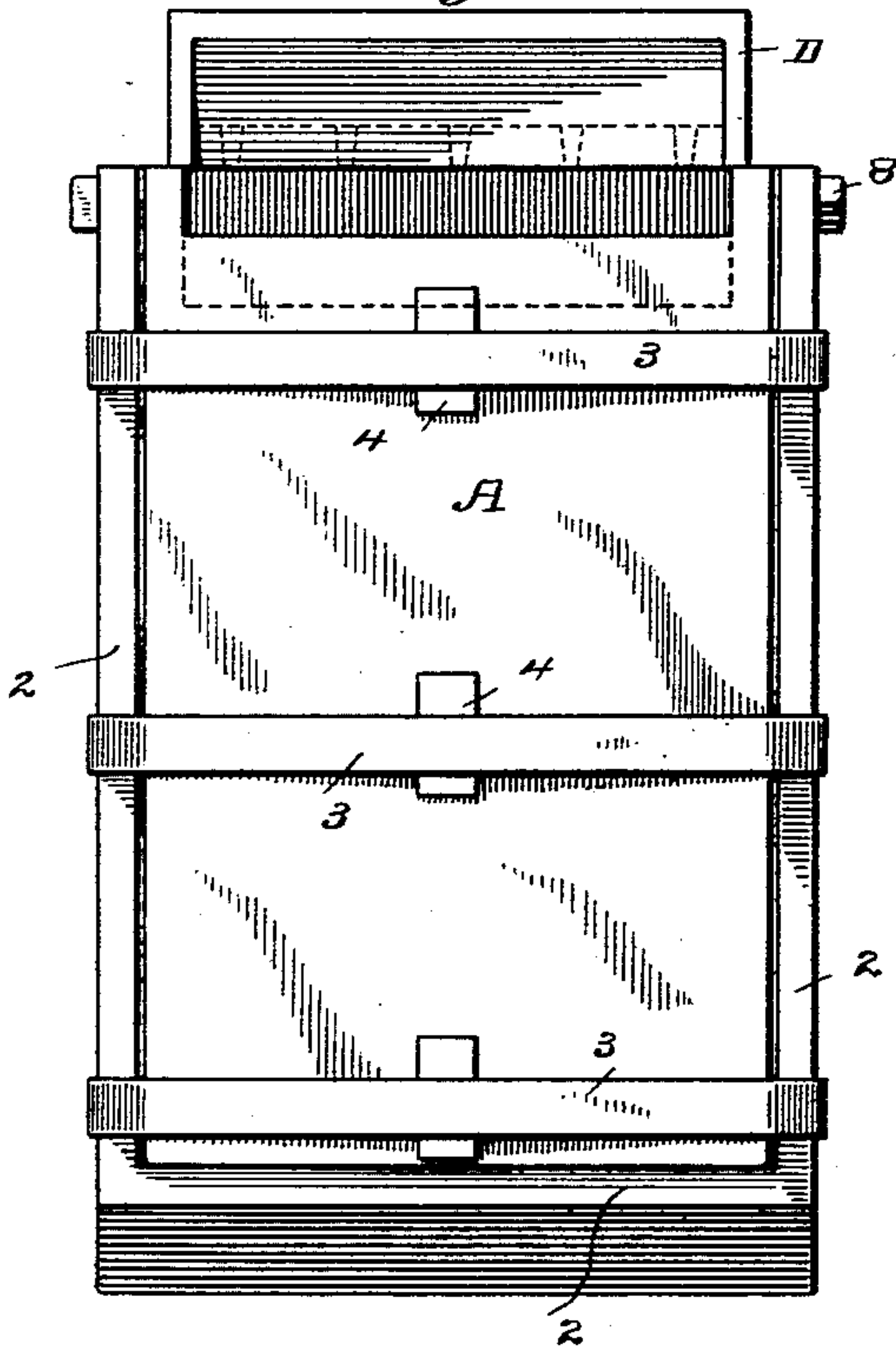


Fig. 2.

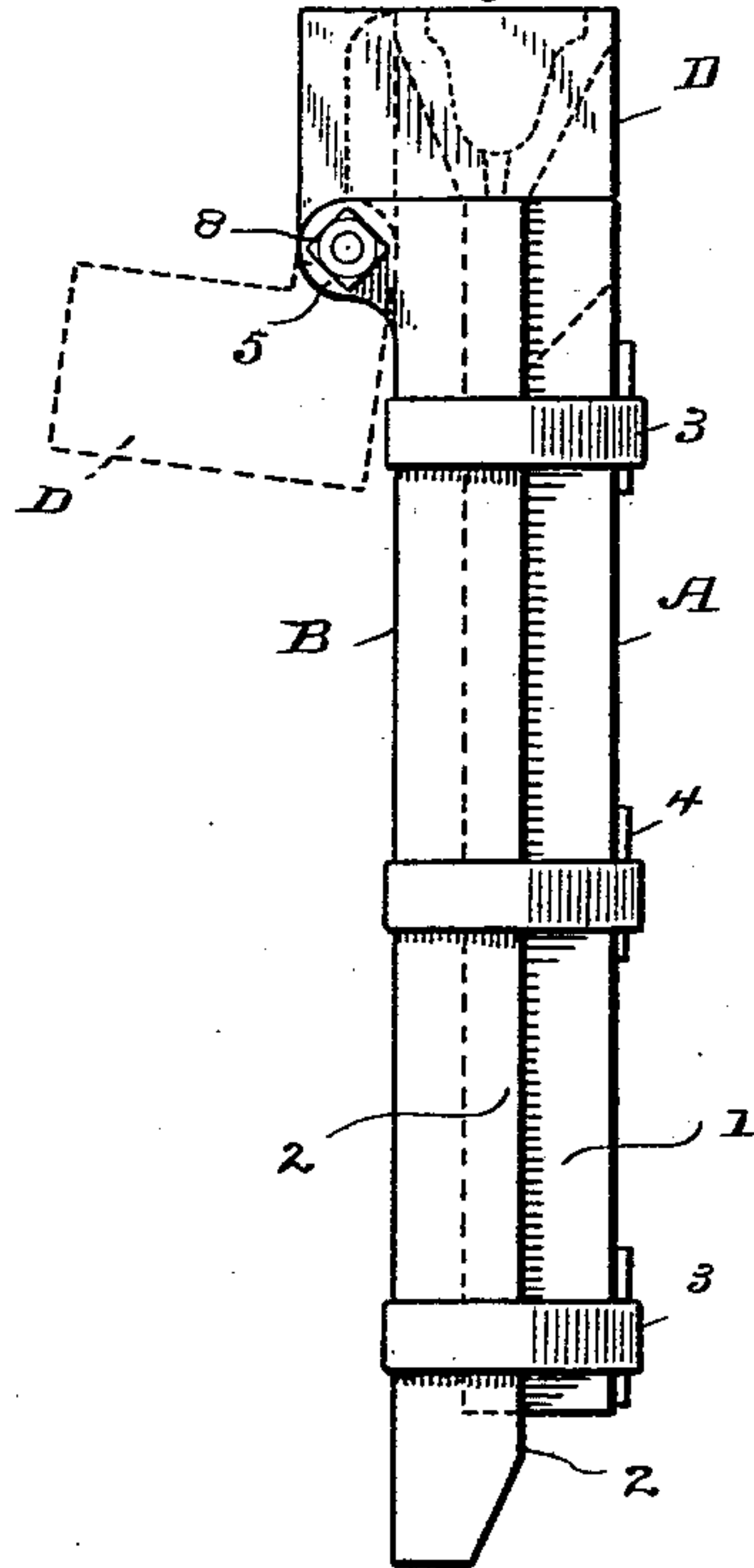


Fig. 3.

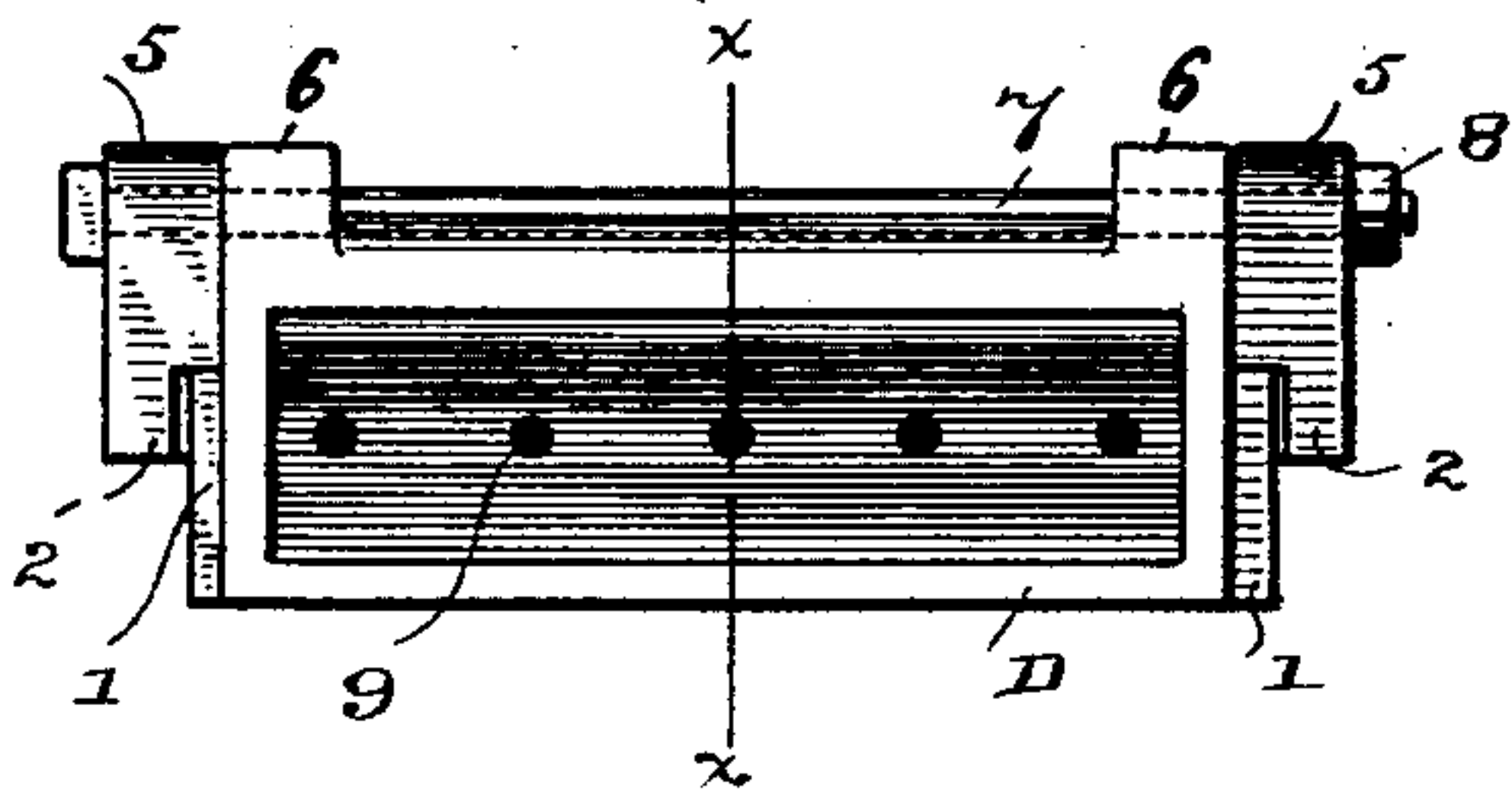
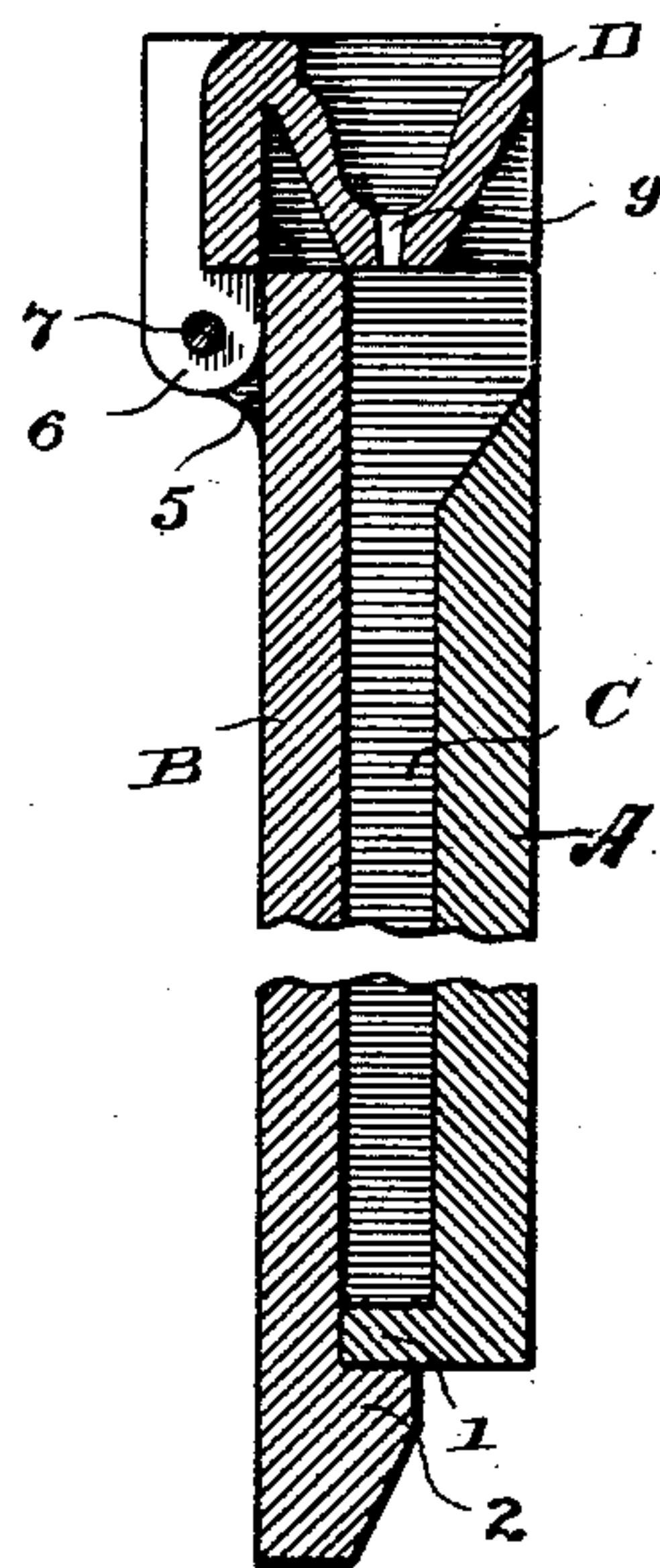


Fig. 4.



WITNESSES

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INVENTOR

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UNITED STATES PATENT OFFICE.

FREDERICK J. WOOSTER, OF WATERBURY, CONNECTICUT, ASSIGNOR TO THE
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MOLD FOR CASTING.

SPECIFICATION forming part of Letters Patent No. 475,652, dated May 24, 1892.

Application filed October 26, 1891. Serial No. 409,794. (No model.)

To all whom it may concern:

Be it known that I, FREDERICK J. WOOSTER, a citizen of the United States, residing at Waterbury, in the county of New Haven and State of Connecticut, have invented certain new and useful Improvements in Molds for Casting; 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 appertains to make and use the same.

My invention has for its object to improve the construction of molds for casting brass and other alloys and metals so as to greatly simplify the operation of casting and to enable the operator to produce large-sized solid ingots of uniform and perfect quality with slight waste of metal at the upper or sprue end of the ingot and with but slight wear upon the mold.

With these ends in view I have devised the novel mold of which the following description, in connection with the accompanying drawings, is a specification, letters and numbers being used to designate the several parts.

Figure 1 is a front elevation of my novel mold in position for use; Fig. 2, an end elevation thereof; Fig. 3, a plan view; and Fig. 4 is a section on the line $x x$ in Fig. 3.

A and B denote, respectively, the front and back parts of the mold. The front is provided with the usual flange 1, extending on three sides thereof, and the back with the usual flange 2, which also extends on three sides, as clearly shown in the drawings. In use the two parts are placed together, as shown, the flange on the front being inclosed by the flange on the back, the cavity C, into which the molten metal is poured, lying between the front and back, as clearly shown in Fig. 4. In use the parts are held together by the usual metallic straps 3, which are tightened by keys or wedges 4 or in any suitable manner. At the top of one of the parts of the mold, ordinarily the back, I provide ears 5, to which is hinged a pouring-cup D, the pouring-cup being provided with ears 6, by which it is attached in place, a long rod or bolt 7 being shown in the drawings as passing through both pairs of ears, the parts being securely, but detachably, held together by a nut 8.

In practice I construct the interior of the

pouring-cup to incline downward and inward, so as to make it relatively narrow at the bottom, the bottom being provided with a suitable number of holes 9, through which the molten metal passes.

The operation of casting is performed with the molds in the vertical position, the holes in the cup being located directly over the center of the mold, so that in pouring the molten metal passes down into the center of the mold instead of running down the back thereof. This effects a great saving in the wear of the backs, and also produces denser ingots and of more uniform quality. By causing the interior of the pouring-cup to incline downward and inward, so as to make it relatively narrow at the bottom, I avoid any cooling of the metal in the pouring-cup and insure that all the metal poured in will pass directly through the holes in the bottom into the mold.

In use the operator simply rests the crucible upon the top of the cup and pours in the usual manner. The pouring-cup when not in use is simply turned backward away from the top of the mold and is then wholly out of the way, as shown in dotted lines in Fig. 2. It cannot become detached from the mold in use, but may be readily removed and replaced by a new one when required.

I claim—

A mold for casting ingots, consisting of the part A, having the flange 1 around three sides and an opening across the top, the part B, having the flange 2 around three sides, adapted to overlap the flange of the part A and provided at its upper end with the rearwardly-projecting ears 5, and the pouring-cup D, having lugs 6, fitting between the ears 5 and hinged upon the removable rod 7, said cup being formed to rest upon the top of the mold and having a relatively-narrow bottom provided with a series of holes 9 of a diameter smaller than the width of the mold-cavity C and in line with the middle thereof, substantially as described.

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

FREDERICK J. WOOSTER.

Witnesses:

E. D. STEELE,
JOHN P. ELTON.