

No. 725,357.

PATENTED APR. 14, 1903.

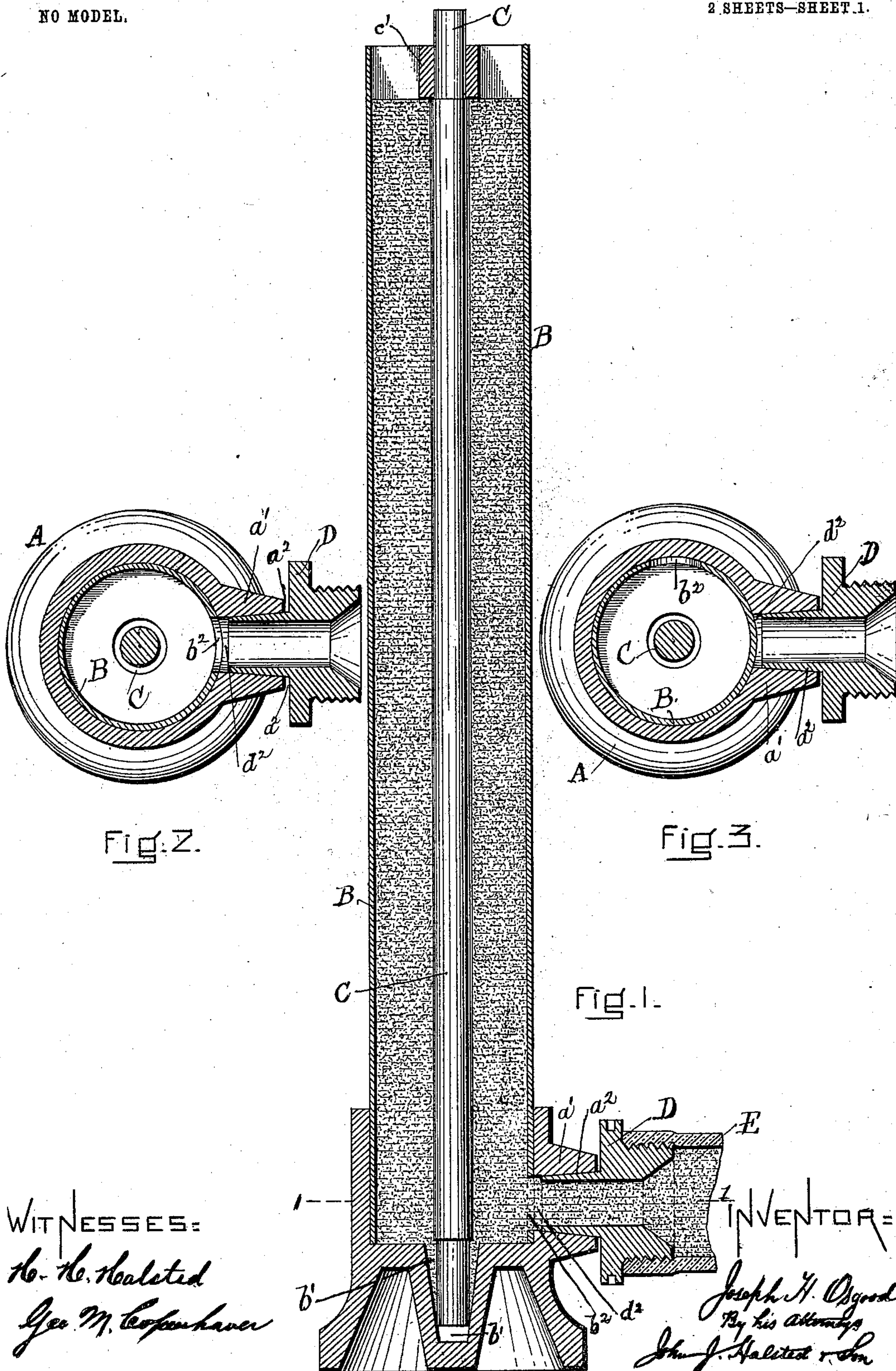
J. H. OSGOOD.

MOLD FOR CASTING PRINTERS' INKING ROLLERS.

APPLICATION FILED FEB. 12, 1902.

NO MODEL.

2 SHEETS—SHEET 1.



WITNESSES:

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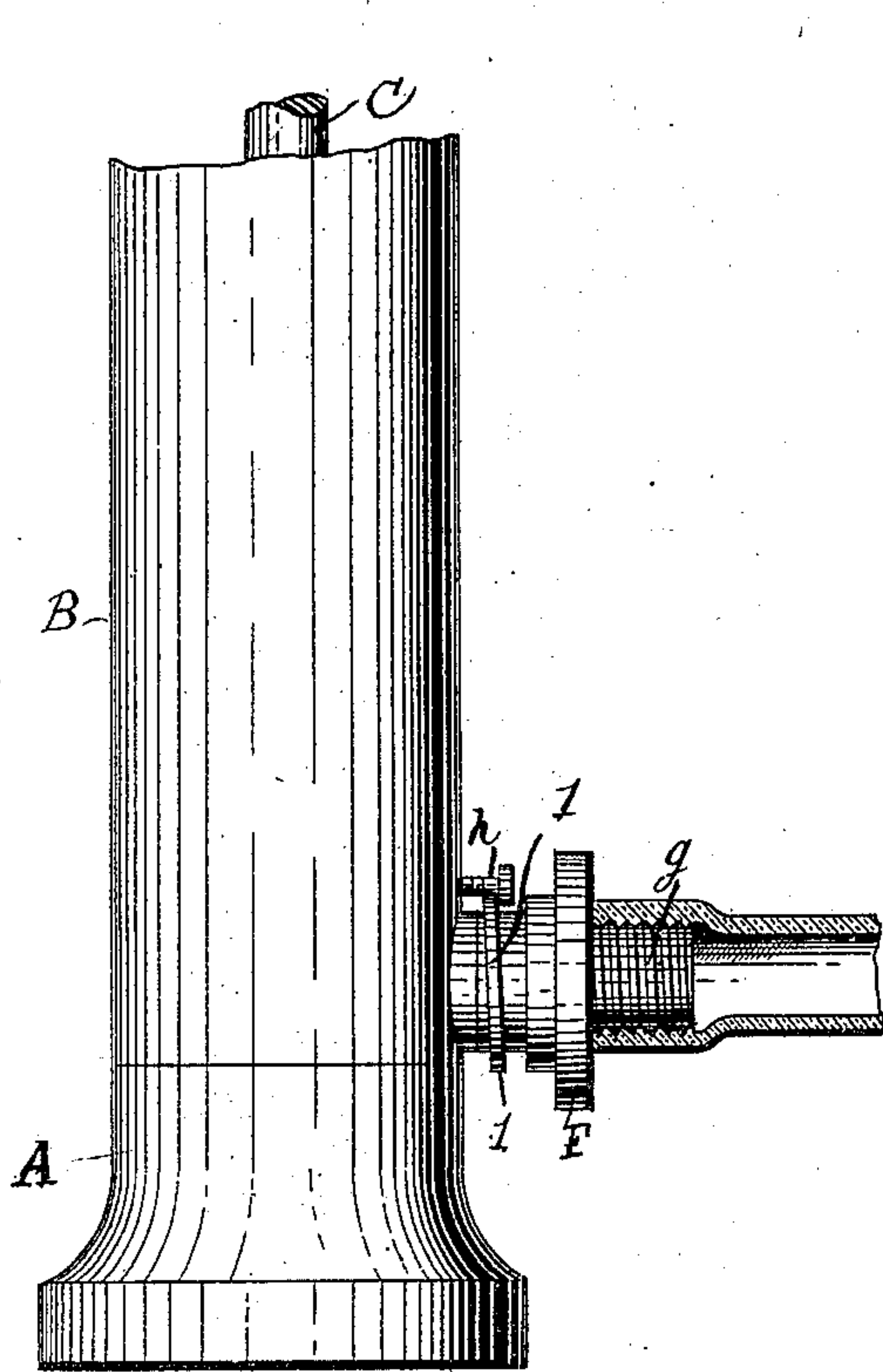


Fig. 4.

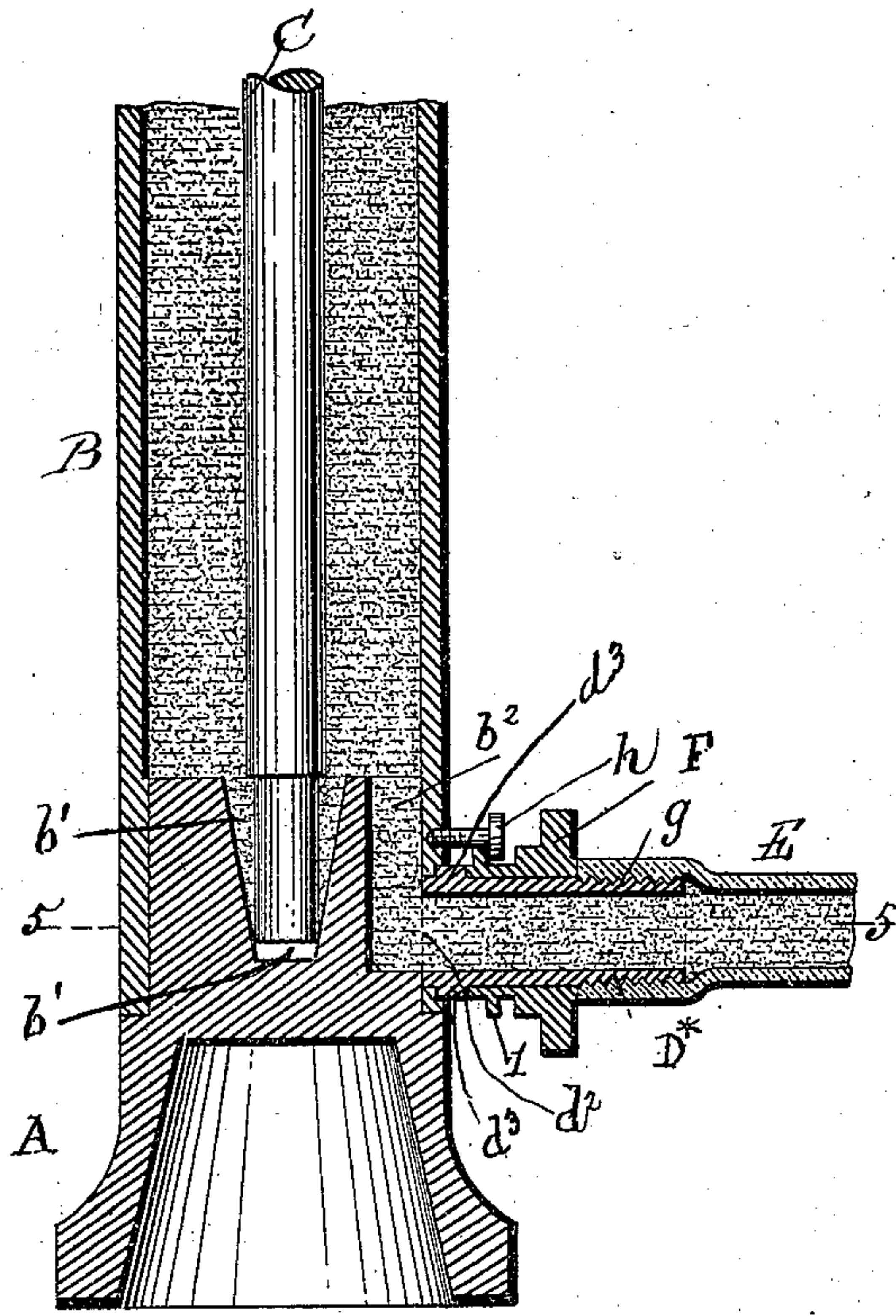


Fig. 5.

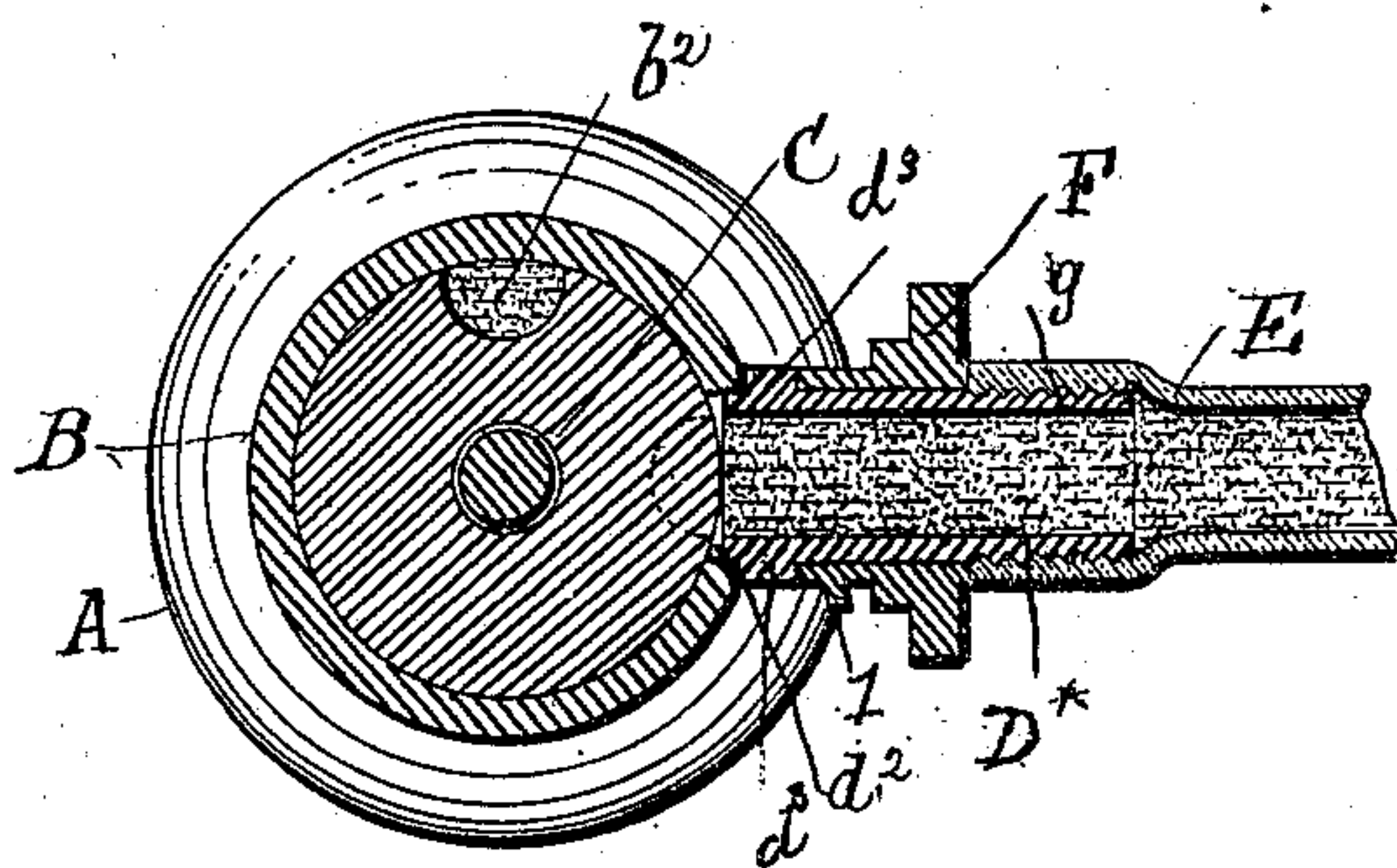


Fig. 6.

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MOLD FOR CASTING PRINTERS' INKING-ROLLERS.

SPECIFICATION forming part of Letters Patent No. 725,357, dated April 14, 1903.

Application filed February 12, 1902. Serial No. 93,722. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH H. OSGOOD, a citizen of the United States, residing at Peabody, in the county of Essex and State of Massachusetts, have invented certain new and useful Improvements in Molds for Casting Printers' Inking-Rollers; 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 consists of an improved mold for casting printers' inking-rollers, and relates to novel features in the foot and tube and to the connection of the foot with devices for letting on or cutting off the supply of the composition.

In the drawings serving to illustrate my invention, Figure 1 shows a central vertical section of the device; Fig. 2, a transverse section through the line 1 1 of Fig. 1; and Fig. 3, a similar transverse section, but when the tube has been turned partly around. Fig. 4 shows a partial elevation; Fig. 5, a similar central section showing the lower end of the tube surrounding instead of being within the foot or base, and Fig. 6 a transverse section in the line 5 5 of Fig. 5.

The improved mold has two main or leading features—viz., A its foot, and B the tube.

Referring to Figs. 1 and 4, the foot A is stationary or non-revoluble, and its bottom is closed and has in it a central conical depression b' , into which the ordinary roller stock or core may by its own weight truly center itself at its lower end, and at the upper end, as shown in Fig. 1, this stock or core is centered and supported by a removable piece, the usual "center" or "star" C, having projections which bear upon the inside of the tube. The tube fits snugly into its foot tight enough to prevent the composition from leaking out and yet to allow the tube to be readily inserted and turned around readily in its foot and freely lifted and removed therefrom, as presently will be described. The foot A being stationary or non-revoluble does not shift or turn around or pull its supply-pipe or connections, and therefore avoids all risk of loosening or deranging them. These roller stocks or cores belong to the printing-presses and are placed in the mold

to be cast upon, but form no part of the mold itself.

As shown in Figs. 1, 2, 3, the foot A has a projection a' upon one side, but has no opening at its bottom. Through this projection a tapering hole a^2 is cut, as shown. Into this hole a conical nipple D fits closely. This nipple is adapted to be connected directly or by means of a tube, as indicated at E, with any air-tight tank or vessel, as will be understood, for containing the melted composition under sufficient pressure to force it into the mold.

It will be understood, of course, that upon sufficiently filling the mold the supply tank or vessel should by any ordinary stop-cock or equivalent device be able to control the flow of the melted composition.

The tube B has a hole or inlet-passage b^2 to permit the inlet near the lower end of the composition, and this passage is adapted to admit this composition as it enters through the nipple D. This hole, as shown in Figs. 1, 2, 3, is of as large diameter as the inner end of the conical nipple D, passing through the projection a' of the foot A. When this hole b^2 near the end of the tube B is opposite or in coincidence with the hole d^2 in the foot A, there is a clear passage into the tube for the liquid composition.

The operation is as follows: The tank being partially or wholly filled with the melted composition under pressure and the roller-stock being put in its place in the mold and the nipple D and its adjacent parts being in position, as shown in Fig. 1, the cock used to control the flow is then opened. The melted composition is thus allowed to flow into the tube of the mold until it becomes filled. Then the supply is stopped by turning a cock to shut off further supply of the composition.

In order to keep the composition from flowing out from the filled or charged mold when this mold is to be removed from its connection with the supply tank or vessel, the tube B is turned or revolved upon its foot A sufficiently to bring the hole b^2 away from the hole d^2 in the foot and against the solid part of the foot. This closes the tube perfectly.

A slight variation, though having the same principle, object, and mode of action, is illustrated in Figs. 4, 5, 6. In this variation or

style the tube B fits the exterior of the foot A instead of its interior, this foot being preferably turned off or reduced externally, as shown, for the purpose, as seen in Fig. 5.

5 The manner of closing the mold after filling it is the same as already stated, by simply revolving the tube to the right or to the left, so that its inlet-passage b^2 shall be turned away from the inlet tube or nipple D^* , and

10 thus close it. This nipple-tube D^* has near its inner end a flange d^3 . Around this tube fits a ring F, adapted to be moved easily, and it is provided at its front end at 1 with a cam or section of a screw-thread. This cam

15 or thread 1 is interrupted or cut away in one portion, so as to allow it to pass or slide under or beyond the head of a screw h , fixed in the tube B. Then the ring is turned. The cam 1 engages the inner side of the screw-

20 head h and forces this ring up to the flange d^3 of nipple-tube D^* , thus crowding the flange tightly around the hole d^2 in the tube B. As will be seen in Fig. 5, the hole d^2 in foot A is, as shown, countersunk around it, and

25 is thus adapted to receive the inner end and also the annular flange d^3 of the nipple-tube D^* , and thus the end of this tube fits tightly against said flange when it is crowded or pushed by the turning action of the cam 1,

30 bearing upon the fixed screw-head h .

In my invention the tube B is not screwed or fixed in any way at its bottom, but is simply deposited in or on its foot A, as stated, and which alone supports it vertically. It

35 can therefore be removed from its foot or base by merely lifting it out, and in order to aline its lateral passage b^2 with the hole or passage d^2 in the foot A the tube B is merely to be turned to cause these passages to coincide,

and in order to close b^2 it is simply needed to 40 turn its passage d^2 away from b^2 .

I claim—

1. A mold for casting printers' rollers, composed of a tube readily removable from its stationary foot or base and having an inlet- 45 passage near its lower end, and adapted to be freely turned within such base, the latter having a lateral inlet-passage for admitting the composition to such mold, all substantially as shown and described. 50

2. A mold for casting printers' rollers, composed of a simple tube freely revoluble on and removable from its supporting-base and having an inlet-passage near its lower end, combined with a base stationary or non-revo- 55 luble relatively to such tube, said base having a lateral inlet for admitting the composition to such mold, all substantially as shown and described.

3. In combination with a readily revoluble 60 and removable tube, having an inlet-passage near its lower end, the stationary or non-revoluble base for supporting said tube and having the bottom of the base permanently closed and provided therein with a conical 65 recess as and for the purpose set forth.

4. In combination with the base A closed at its bottom, the tube B axially turnable on said base, and having an inlet as described, the flanged nipple-tube D^* , d^3 , ring F and its 70 cam 1, and the fixed screw-head h , as and for the purpose set forth.

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

JOSEPH H. OSGOOD.

Witnesses:

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HENRY O. OSGOOD.