(No Model.)

O. J. MAIGNE.

APPARATUS FOR CASTING PRINTERS' ROLLERS.

No. 466,569. Patented Jan. 5, 1892.

Fig. 3.

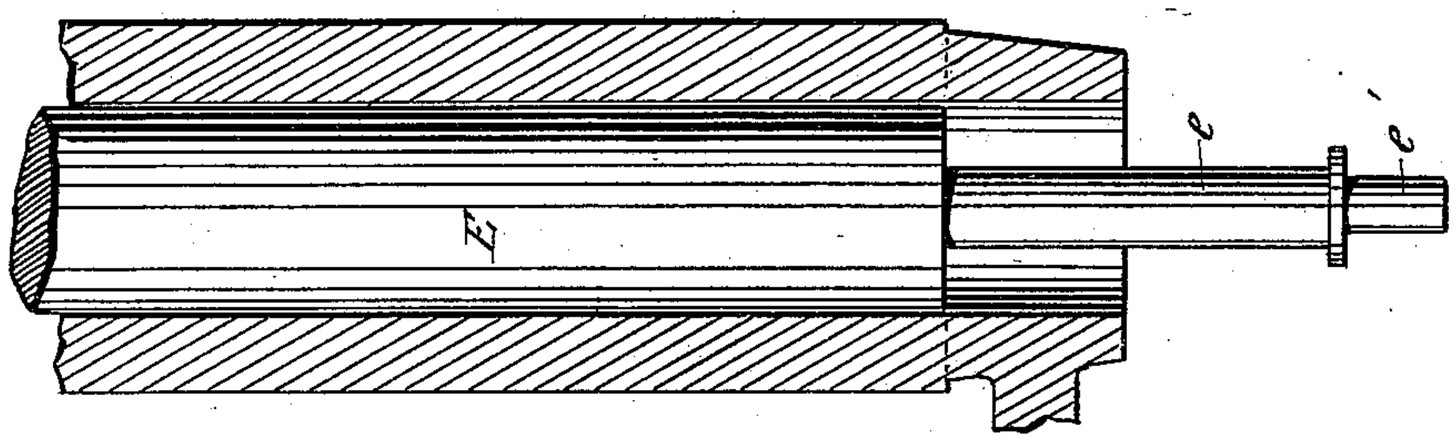


Fig. 2.

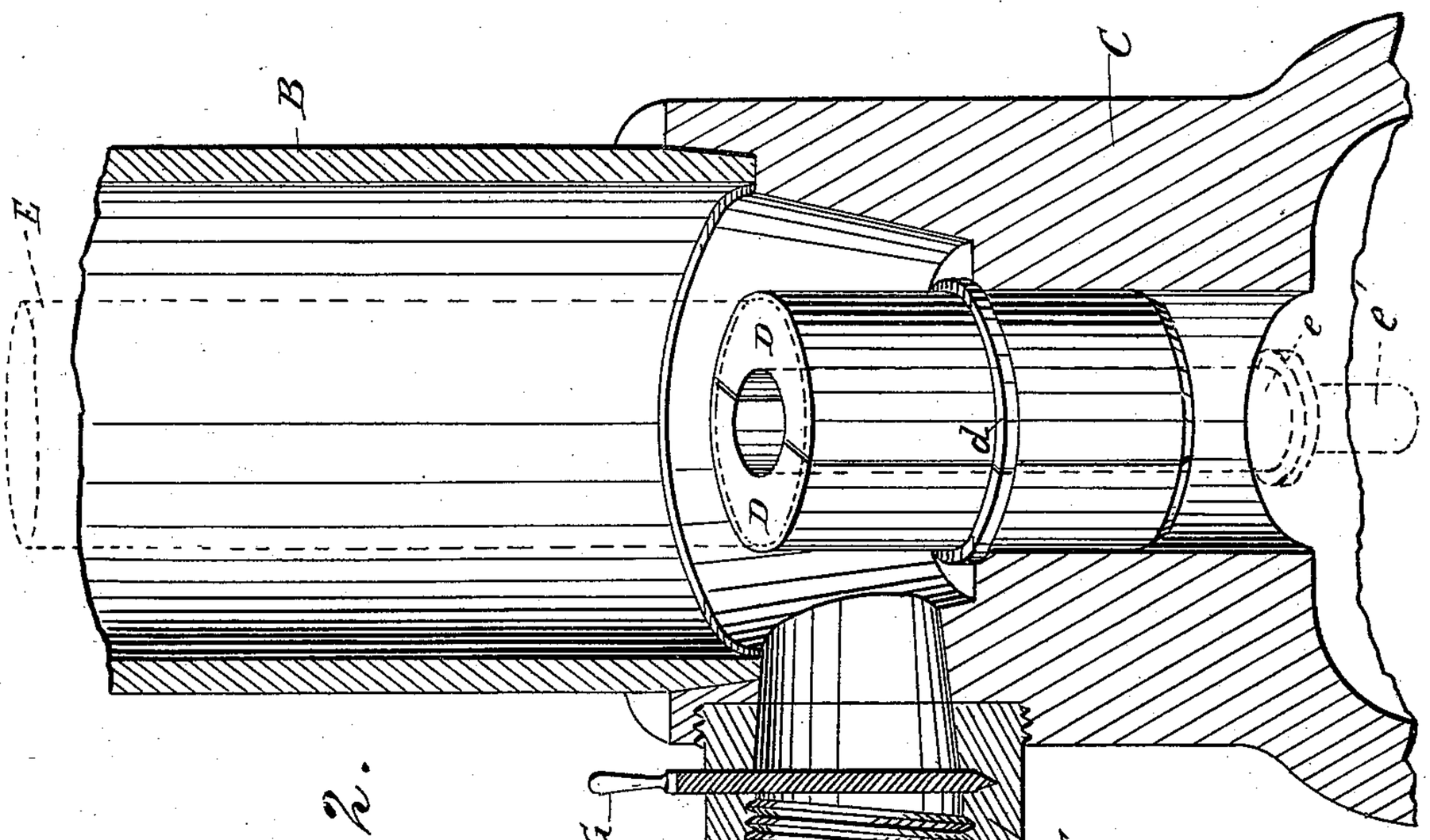
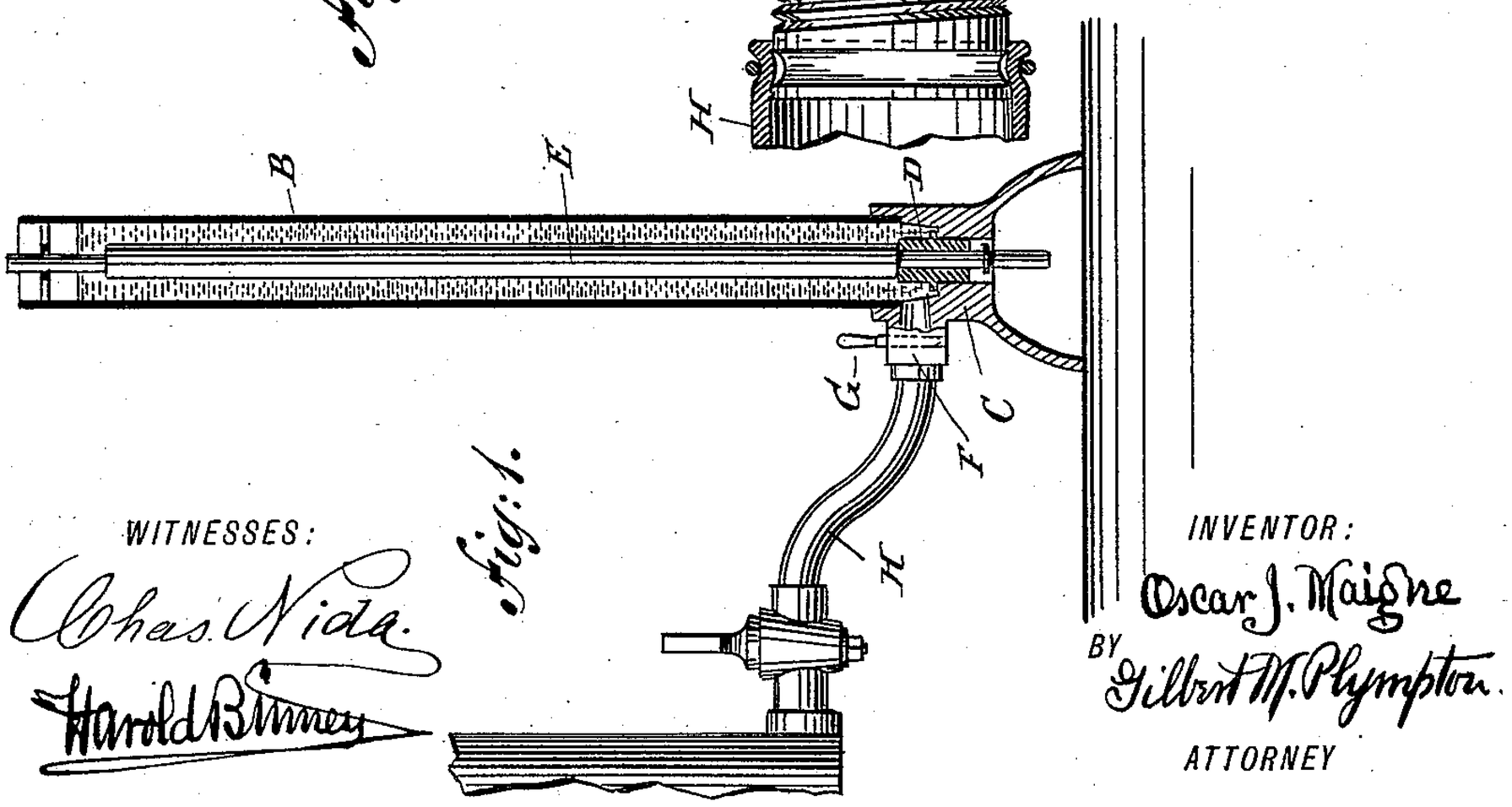


Fig. 1.



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APPARATUS FOR CASTING PRINTERS' ROLLERS.

SPECIFICATION forming part of Letters Patent No. 466,569, dated January 5, 1892.

Application filed September 27, 1890. Serial No. 366,410. (No model.)

To all whom it may concern:

Be it known that I, OSCAR J. MAIGNE, a citizen of the United States, residing in New York city, county and State of New York, have invented a new and useful Apparatus for Casting Printers' Rollers, of which the following is a specification.

My invention consists in the parts constructed, combined, and arranged in the manner hereinafter shown, described, and claimed.

In the accompanying drawings, Figure 1 is an elevation, partly in section, of my mold tube, base, and attachments when in use. Fig. 2 is a detail view of parts of my device. Fig. 3 shows part of roller as it comes from the mold-tube.

In the drawings like letters of reference refer to like parts.

B is the mold tube or flask resting in a recess in the top of the stand or base C. My base has a center hole or orifice passing vertically through it, and preferably of somewhat smaller diameter than the smallest roller to be cast. The upper part of this hole is enlarged to give greater freedom of flow to the roller composition and to afford a support for the flange *d* of a split bushing D, that surrounds, centers, and supports the lower end of the roller-stock E. The gudgeon *e* passes through and snugly fits the center bore of the bushing, while the bearing *e'* and flange therefor project beneath. The upper end of the stock is centered in any desirable manner in the tube B.

The composition is admitted to the enlargement of the center hole in base C by an orifice in the side of the base. To the mouth of this orifice is secured the coupling-block F. This block F contains a valve or gate G for closing the inlet. The hose H from the supply-kettle couples directly to the block F by any convenient device, though I have for simplicity shown screw connections. It will of course be clear that the mouth-piece F may form an integral part of my base C, though I prefer to make it as shown.

I use various sizes of mold-tubes, it being only necessary to have the external diameter at the lower end fit the circular recess in base C. So I have various bushings D, having bores fitted for various gudgeons.

I operate my device as follows: Selecting a tube of proper length and bore for the roller to be cast and a bushing which fits the stock to be used, I place the tube in position on the base, the stock being centered therein at its upper end and the bushing about its gudgeon being dropped into the center hole in the base. All the fittings are composition-tight, so that after coupling on the hose and having the parts at proper temperature I have only to open valve G and the kettle-valve, and the composition flows into the base C, rising around the roller-stock. When the composition has risen sufficiently, the valve G is closed, the kettle-valve closed, the hose uncoupled, and the tube allowed to cool. When suitably cooled, the parts are separated. The roller is left somewhat as shown, in part, in Fig. 3. The ends of the composition are then trimmed off, as shown by the dotted lines in this figure, and the roller is complete.

I have now described one form of my device and how the same may be used.

I therefore claim, broadly, with only the limitations therein set forth, the following:

1. In an apparatus for casting printers' rollers, the base C, provided with a central orifice and composition-inlet and with an internal conical bearing-surface adapted to fit interchangeable tubes of different internal diameters, a bushing D, centered and supported in the said central orifice, and a mold-tube provided with a conical bearing-surface fitting to, but removable from, the bearing-surface of the said base C, whereby the said tube may be removed and like tubes of varying sizes and lengths substituted.

2. In an appparatus for casting printers' rollers, the base C, having a central orifice provided with an internal bearing-surface and composition-inlet, the split bushing within the said orifice, but removable therefrom, and the roller-mold tube provided with an external bearing-surface adapted to fit a bearing-surface on the said base, whereby other mold-tubes and bushings of different sizes may be substituted, substantially as and for the purposes set forth.

In testimony whereof I have set my hand, in the presence of the two subscribing witnesses, this 19th day of September, A. D. 1890.

OSCAR J. MAIGNE.

Witnesses:
G. M. PLYMPTON,
HAROLD BINNEY.