

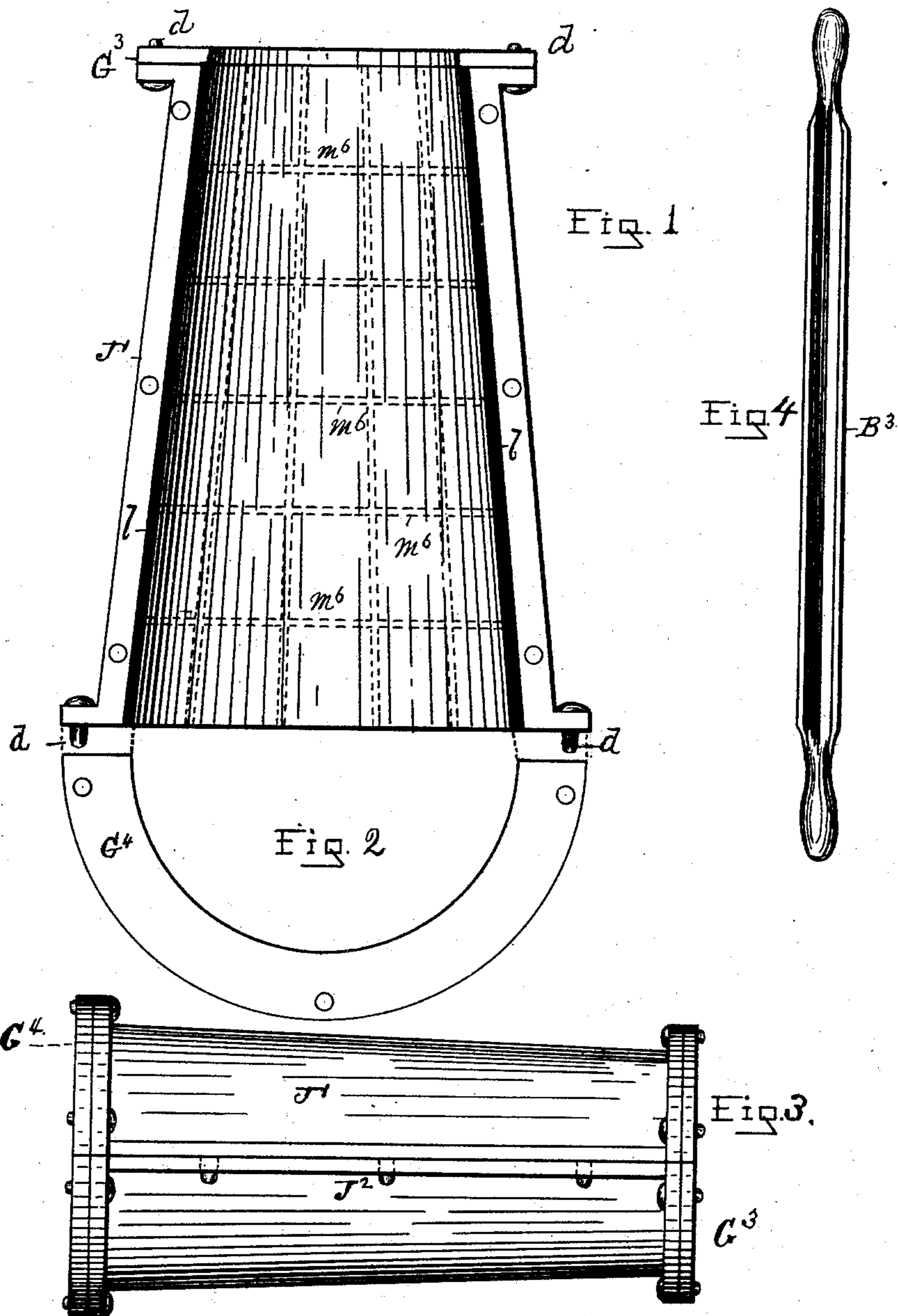
(No Model.)

J. FLEMING.

APPARATUS FOR SHAPING MOLDS.

No. 363,620.

Patented May 24, 1887.



WITNESSES

Geo. A. Garby

Charles S. Brintnall

INVENTOR

James Fleming

by E. H. Bates Atty

UNITED STATES PATENT OFFICE.

JAMES FLEMING, OF TROY, NEW YORK.

APPARATUS FOR SHAPING MOLDS.

SPECIFICATION forming part of Letters Patent No. 363,620, dated May 24, 1887.

Application filed November 25, 1885. Serial No. 183,980. (No model.)

To all whom it may concern:

Be it known that I, JAMES FLEMING, of 72 Federal street, in the city of Troy, county of Rensselaer, state of New York, have invented
5 a new and useful Apparatus for Brushing and Shaping Molding-Forms, of which the following is a specification.

My invention relates to improvements in apparatus for brushing and shaping the interior of molding-forms such as are used for
10 casting cylindrical forms of metal; and it consists in providing the mold with sectional gage-plates of semicircular form, each half or section of which is adapted to remain with
15 its section of the mold when the latter is removed, or when the two halves of the mold are connected, all as will be hereinafter described, and pointed out in the appended claim.

Accompanying this specification to form a part of it there is a plate of drawings containing four figures, illustrating my invention, with the same designation of parts by letter-reference used in all of them. Of these illustrations, Figure 1 is a side elevation of a molding jacket or flask, used to produce one-half
25 of a cylindrical form, said jacket being shown as adapted to have at each end a gage-plate attached thereto by means of dowels. Fig. 2 shows one of said gage-plates as detached from the flask or jacket. Fig. 3 shows the jacket or flask illustrated at Fig. 1 united with another jacket having the same half-cylindrical form to produce a casting having a cylindrical
30 exterior form. Fig. 4 shows the templet or shaping-tool used in connection with the interior of the jackets and the end gage-plates to give a well-defined and true finish to the interior of the mold made in the flasks or
40 jackets.

The several parts of the apparatus thus illustrated are designated by letter-reference, and the function of the parts is described as follows:

45 The letter J' designates one of the jackets, of which there are two interiorly and exteriorly alike, each representing one-half of a cylinder, and these jackets are adapted to connect by means of side flanges and dowels made in the
50 usual way. The letter J² designates the other jacket. The interior rounded out surfaces of

these jackets are provided with the usual sand-clinching projections, indicated by the dotted line m^o.

The letter G³ designates a gage-plate composed of two sections or halves, which is designed to overlap the opening in the mold and lie flush with the lining of sand, and is adapted by means of dowels d to attach to the top of each of the jackets, and G⁴ gage-plates adapted
55 to attach to the bottom of each of the said jackets, and designed to overlap the end of the opening in the mold, and the letter B³ designates a blade or templet used for finishing up and trimming the said lining of the jackets.
60 65

The letters l designate a lining of cohesive molding-sand that has been pressed into the clinching projections upon the interior cylindrical face of the jackets. When this lining is applied, it is made to project in thickness
70 inwardly beyond the gage-plates G³ and G⁴. This lining of sand is turned down and scraped off by the templet or blade B³ until it is in line with the gage-plates, as shown at Fig. 1.

The templet-blade B³ is made with straight
75 side edges like a strickle; but it is also provided with a groove through its longitudinal center and with end handles for operating it. The function of the groove is to gather up the sand scraped from off the interior of the form while
80 being finished. The gage-plates G² and G³ are held in position by dowels, which are passed through the perforations in the semicircular plates and the perforations on the flanges on the mold, and the two halves of said mold are
85 connected by the dowels passing through the perforations in the flanges thereof while the rounded interior of the mold is being finished up by the templet-blade, the said gage-plates forming no part of the cap or base-plate, as in
90 older devices.

With an apparatus thus arranged and operated the jacket linings are finished up so as to have true surfaces, and the work is done rapidly and at much less cost than when done in
95 the usual manner, and the end pieces being in halves of semicircular form allows each half of the mold to retain its half of the plate. I am aware that prior to my invention a similar patent was granted in England in 1870, and
100 numbered 2,819, and I do not claim such construction as therein shown; but,

Having thus described my invention, what I claim, and desire to secure by Letters Patent, is—

5 Combined with the mold constructed as described, the gage-plates G^3 G^4 , composed of two halves of semicircular form, having the perforations to receive the pins d , as shown, and for the purpose set forth.

Signed at Troy, New York, this 24th day of October, 1885, and in the presence of the two witnesses whose names are hereto written.

JAMES FLEMING.

Witnesses:

N. E. HAGAN,

CHARLES S. BRINTNALL.