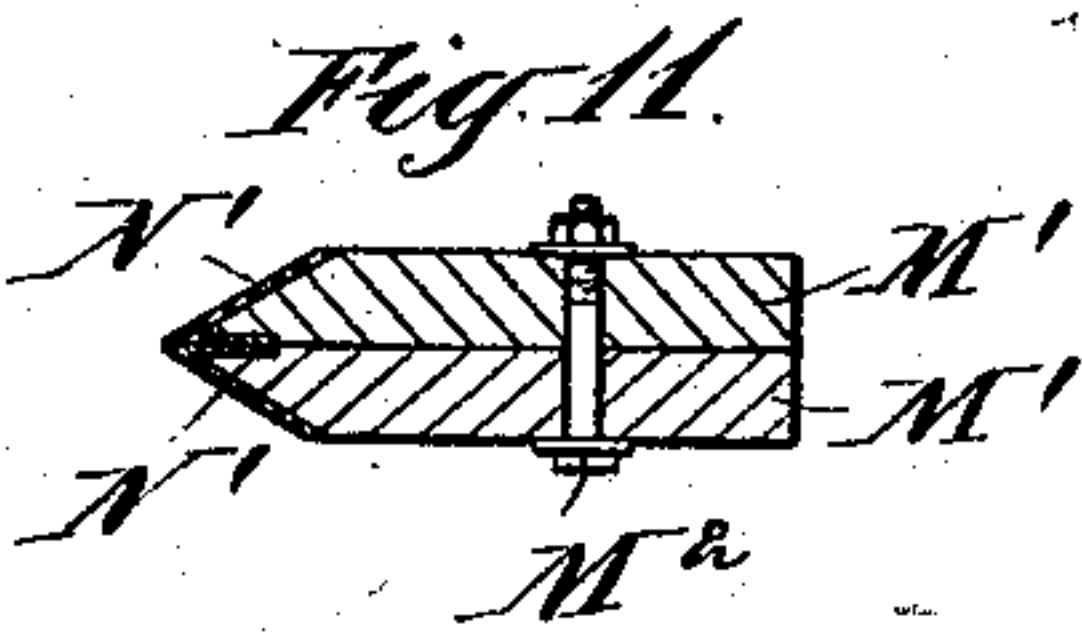
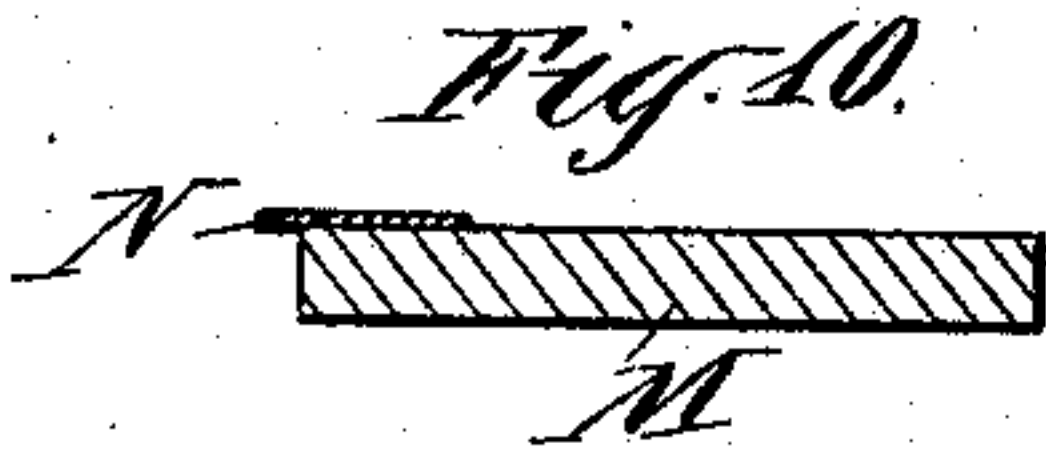
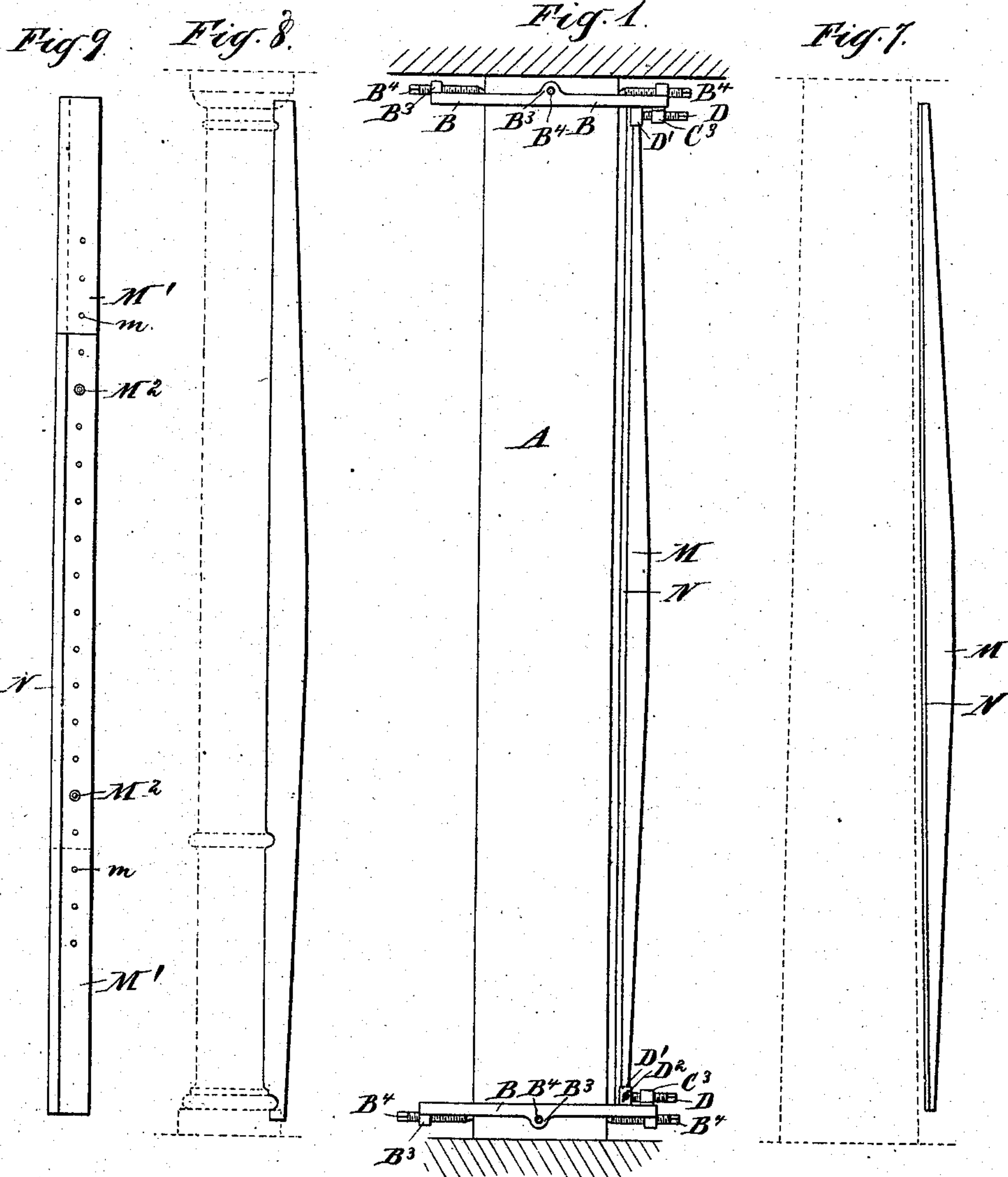


No. 866,984.

PATENTED SEPT. 24, 1907.

P. M. THOMSON.
PLASTERING APPARATUS.
APPLICATION FILED FEB. 7, 1907.

2 SHEETS--SHEET 1.



Witnesses:
A. E. Ecardt.
J. J. Greene.

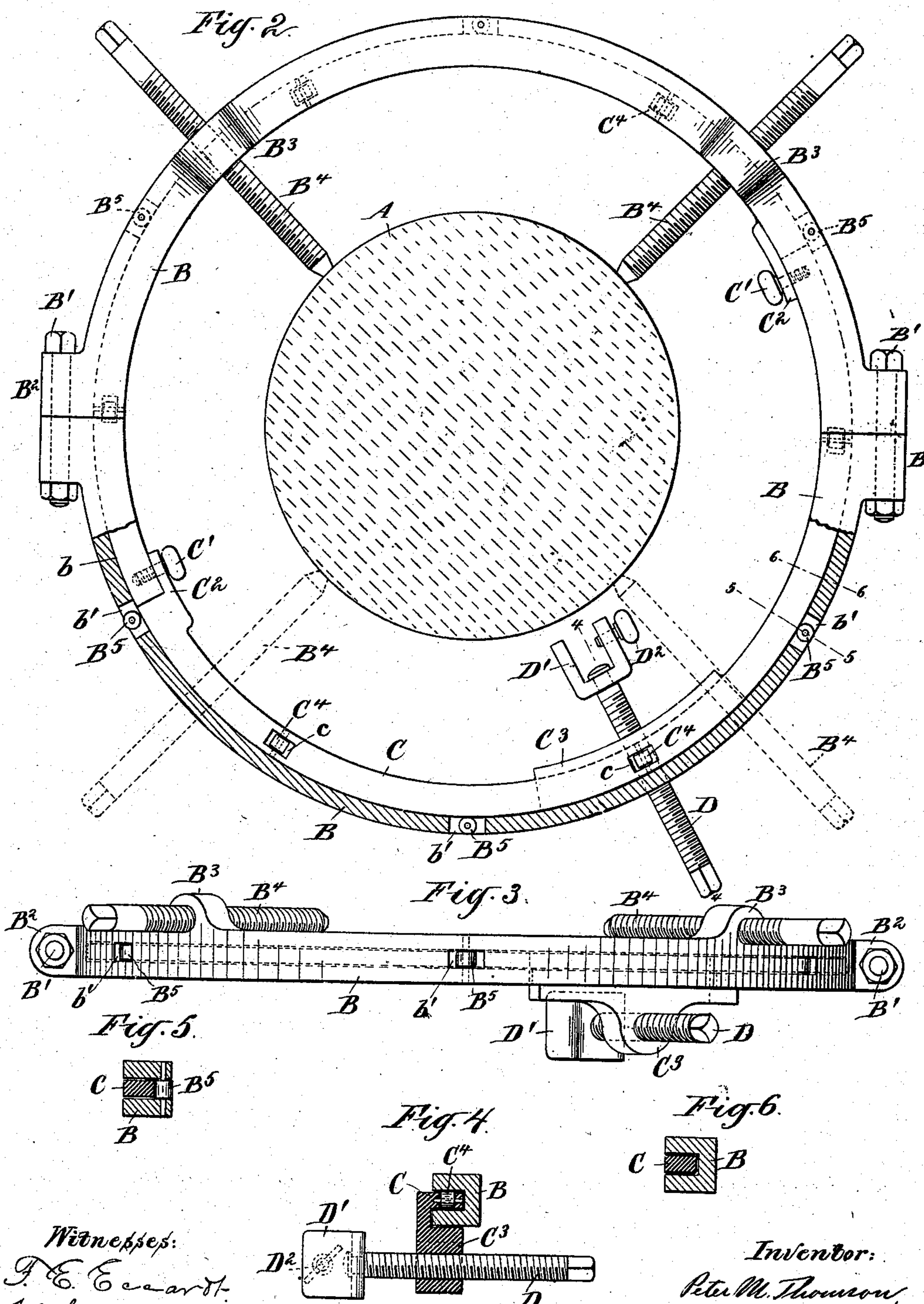
Inventor:
Peter M. Thomson.
by his attorney.
Charles R. Searle.

No. 866,984.

PATENTED SEPT. 24, 1907.

P. M. THOMSON.
PLASTERING APPARATUS.
APPLICATION FILED FEB. 7, 1907.

2 SHEETS—SHEET 2.



Witnesses:
J. E. E. E. E.
J. J. Greene.

Inventor:
Peter M. Thomson,
by his attorney,
Charles R. Seale.

UNITED STATES PATENT OFFICE.

PETER M. THOMSON, OF NEW YORK, N. Y.

PLASTERING APPARATUS.

No. 866,984.

Specification of Letters Patent.

Patented Sept. 24, 1907.

Application filed February 7, 1907. Serial No. 356,189.

To all whom it may concern:

Be it known that I, PETER M. THOMSON, a subject of the King of Great Britain, residing in the city of New York, borough of Manhattan, in the county and State of New York, have invented a certain new and useful Improvement in Plastering Apparatus, of which the following is a specification.

The invention relates to means for shaping the exterior surfaces of columns, balusters and analogous structures of plastic material, and the object of the invention is to provide a portable apparatus, easily applied and adjusted, and simple in construction and operation by which the shaping and finishing of such structures may be quickly and accurately effected.

The invention consists in certain novel features and details of arrangement by which the above objects are attained, to be hereinafter described.

I employ two guide-rings fastened one at the top and the other at the base of the unfinished column, each inclosing a traveling ring to which is secured one end of a striker-board or rod arranged to travel circumferentially of the column and shape the plastic material applied thereon.

The accompanying drawings form a part of this specification and show a preferred form of the invention.

Figure 1 is an elevation showing the apparatus in place on a plane cylindrical column. Fig. 2 is a plan view on a larger scale, partly in horizontal section, showing the top guide-ring applied to a column, the striker-board being omitted. Fig. 3 is a corresponding side view. Fig. 4 is a vertical section taken on the line 4—4 in Fig. 2, and Figs. 5 and 6 are similar sections on the lines 5—5 and 6—6 respectively, in the same figure. Fig. 7 is an elevation showing the position of the striker-board in shaping a tapered column. Fig. 8 is a corresponding view showing the striker-board shaped to produce a base-molding, dado-molding and cap-molding on a cylindrical column. Fig. 9 is an elevation showing a modified form of striker-board. Fig. 10 is a transverse section on a larger scale through the striker-board shown in Figs. 1 and 7, and Fig. 11 is a similar view of the striker-board shown in Fig. 9.

Similar letters of reference indicate like parts in all the figures.

A is the shaft of an unfinished column, which may be of wood, iron, terra-cotta or other material serving to support the load and to be built or "cored" out and finished on the exterior surface. B B are the stationary guide-rings considerably larger in diameter than the finished column, each in two semi-circular portions which may be similar, and joined by bolts B¹ B¹ extending through bosses B² B² cast on the abutting ends thereof. The guide-rings are of channel-iron shape in

section thus providing an annular groove *b* open on the interior of the ring. On the upper face of the upper ring and lower face of the lower ring are cast four swells B³ B³ tapped to receive radially-extending holding and adjusting screws B⁴ B⁴ having their outer ends squared to receive a suitable wrench, not shown, or, provided with heads or handles by which they may be turned, as will be understood.

C is one of the traveling-rings, made in halves and joined at the ends by thumb-screws C¹ C¹ extending through overlapping lugs C² C². Each traveling-ring or annulus is received in the groove *b* of its guide-ring and may rotate freely therein, and each carries a swell C³ tapped to receive a screw D having its outer end squared and carrying at its inner end a swiveled jaw or clamp D¹ in which is a clamping screw D². The swell C³ of the upper annulus is on the under face and that of the lower annulus on the upper face so that both may be rotated without interference of the screws D D with the screws B⁴ B⁴.

M is a striker-board or rod, similar to a straight-edge, held at the ends in the clamps D¹ and thus moved circumferentially about the shaft of the column. The working edge is preferably "horsed" or protected by a strip of sheet metal N adapted to produce a smoothly finished surface on the plastic material supplied on the exterior of the shaft.

In using the apparatus the two halves of the upper guide-ring, each containing one segment of the traveling-ring, are applied to inclose the shaft of the column and joined by the bolts B¹ and thumb-screws C¹, the lower rings are similarly applied and joined and each guide-ring is then carefully leveled and adjusted circumferentially to the axial line of the column by manipulation of the screws B⁴ B⁴. The striker-board is then introduced and secured in the clamps D¹ D¹ and the screws D D turned to bring the inner or working edge of the board parallel with the finish-line of the exterior of the column but preferably about one-half inch within such line; coarse material, as mortar, is then laid on the shaft and the board traversed circumferentially about the shaft until the column is built out. The screws D D are then again turned to draw the working edge of the board to the finish-line and the finishing coat, as plaster, applied to the column and the board traversed as before until finished to a smooth surface. The apparatus is then removed for service on another column, and the base and cap of the column applied in the usual manner after the finishing coat is sufficiently hard. The surface produced is true and polished and no hand troweling or slicking is required. Each annulus C is preferably equipped with anti-friction devices as the horizontal rollers C⁴ C⁴ in equally spaced holes *c* and projecting slightly above and below

the annulus to match to the smoothly finished upper and lower interior faces of the groove *b*, and the guiderings are also each provided with rollers *B⁵* *B⁵* in openings *b¹* *b¹* in its exterior wall in contact with the periphery of the inclosed annulus.

The rings are thin and may be placed close to the ceiling at the upper end of the shaft and near the floor at the lower end so that nearly the whole height of the column may be treated. It will also be noted that all the segments for the upper and lower guide-rings are cast from one pattern, and that but two patterns are required for the segments of the traveling-rings.

By properly adjusting the screws *D D* the board may be inclined to finish a tapered column, as indicated in Fig. 7, and an annular portion of a base, cap or dado-molding or bead may be formed by similarly shaping the working edge of the board as in Fig. 8. The surface of an ornamental baluster may be formed in like manner.

Fig. 9 shows an adjustable board comprising two strips *M¹* *M¹* laid face to face and having holes *m* receiving bolts *M²* by which the length may be varied to suit columns of various heights. The working edges are shown as beveled and protected by metal coverings *N¹*.

Other modifications may be made in the forms and proportions without departing from the invention.

Although I have described the apparatus as adapted for finishing columns, it will be understood that it will serve successfully in the production of newel-posts and like structures of circular section.

The working edge of the board may be curved to finish columns having an entasis or swelled contour.

I claim:—

1. In an apparatus of the character set forth, guide-rings each in two portions constructed to inclose the shaft of a column, and means for securing said guide-rings to said shaft, traveling-rings guided by said guide-rings, and a striker-board carried by said traveling-rings. 35

2. In an apparatus of the character set forth, guide-rings each in two portions constructed to inclose the shaft of a column, means for securing said guide-rings to said shaft and adjusting them relatively to the axial line thereof, an annular groove in each of said guide-rings, a sectional traveling-ring in each of said grooves, and a striker-board carried by said traveling-rings. 40

3. In an apparatus of the character set forth, guide-rings each in two portions constructed to inclose the shaft of a column, screws extending radially of said guide-rings for securing the latter to said shaft and adjusting them relatively to the axial line thereof, an annular interior groove in each of said guide-rings, a sectional traveling-ring received in each groove, a clamp on each of said traveling-rings means for adjusting said clamps radially, and a striker-board held by said clamps. 45

4. In an apparatus of the character set forth, guide-rings each in two portions joined at the ends to inclose the shaft of a column, screws extending radially of said guide-rings for securing the latter to said shaft and adjusting them relatively to the axial line thereof, an annular interior groove in each of said guide-rings, a traveling-ring received in each groove and consisting of two portions joined at the ends, a clamp on each of said traveling-rings, means for adjusting said clamps radially, a striker-board held by said clamps, and anti-friction rollers mounted in said guide-rings and traveling-rings. 55

In testimony that I claim the invention above set forth I affix my signature, in presence of two witnesses. 60

PETER M. THOMSON.

Witnesses:

CHARLES R. SEARLE,
CHAS. A. HAUCK.