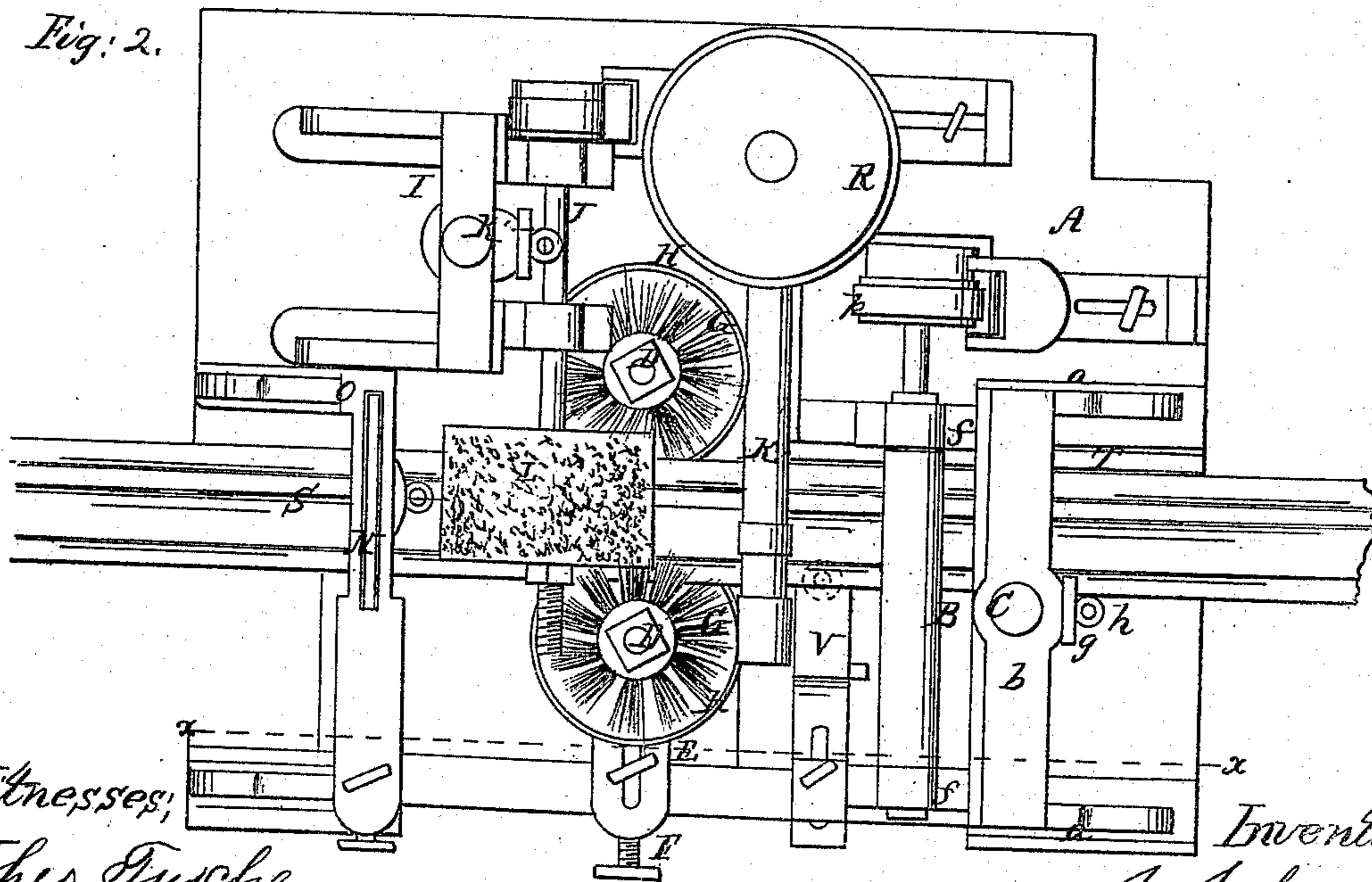
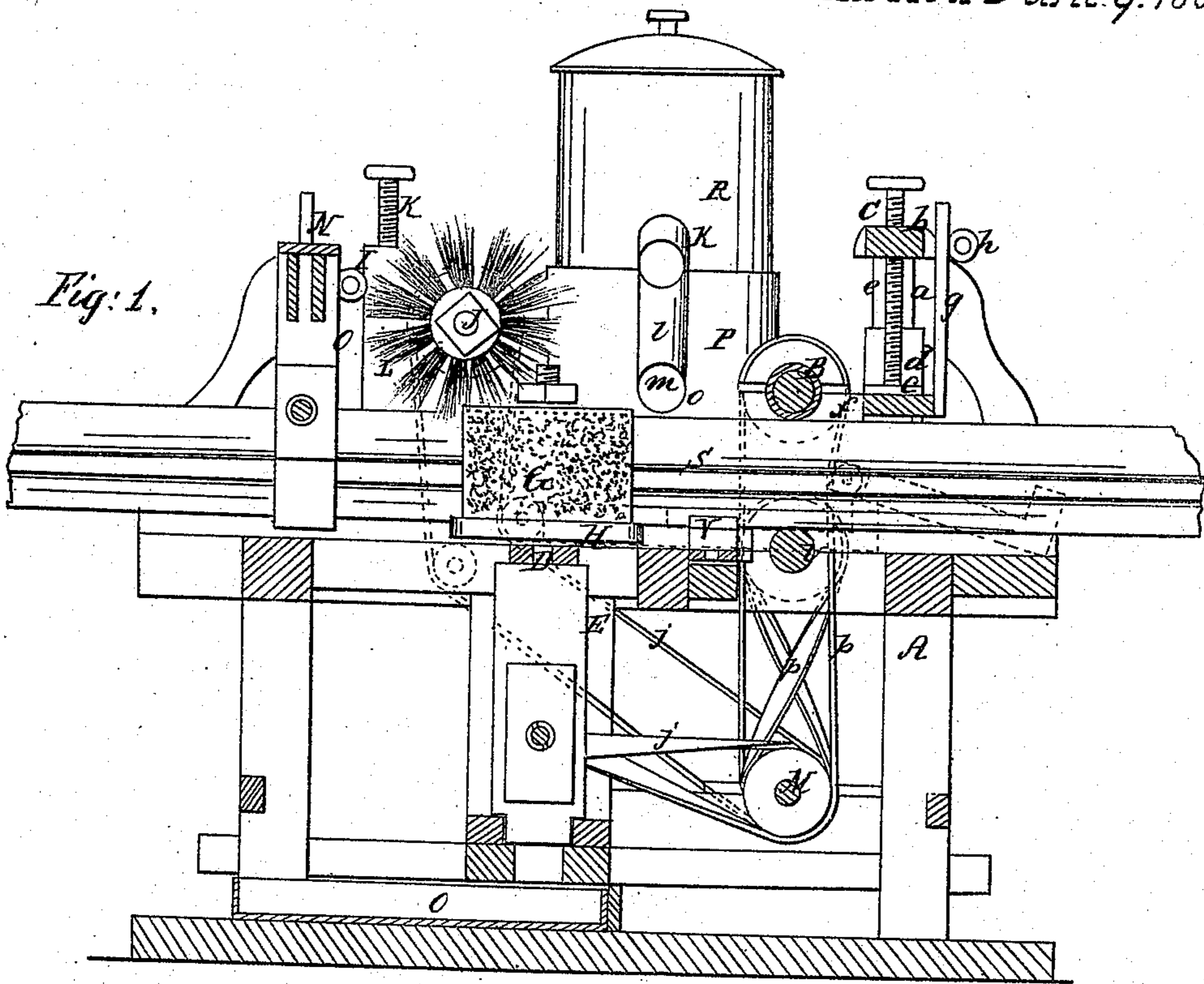


J. Johnson,
Enamelling Molding.

N^o 78,747.

Patented June 9. 1868.



Witnesses,
Thos. Ducho
W. Brown

Inventor,
J. Johnson
Per Munn & Co
Attorneys

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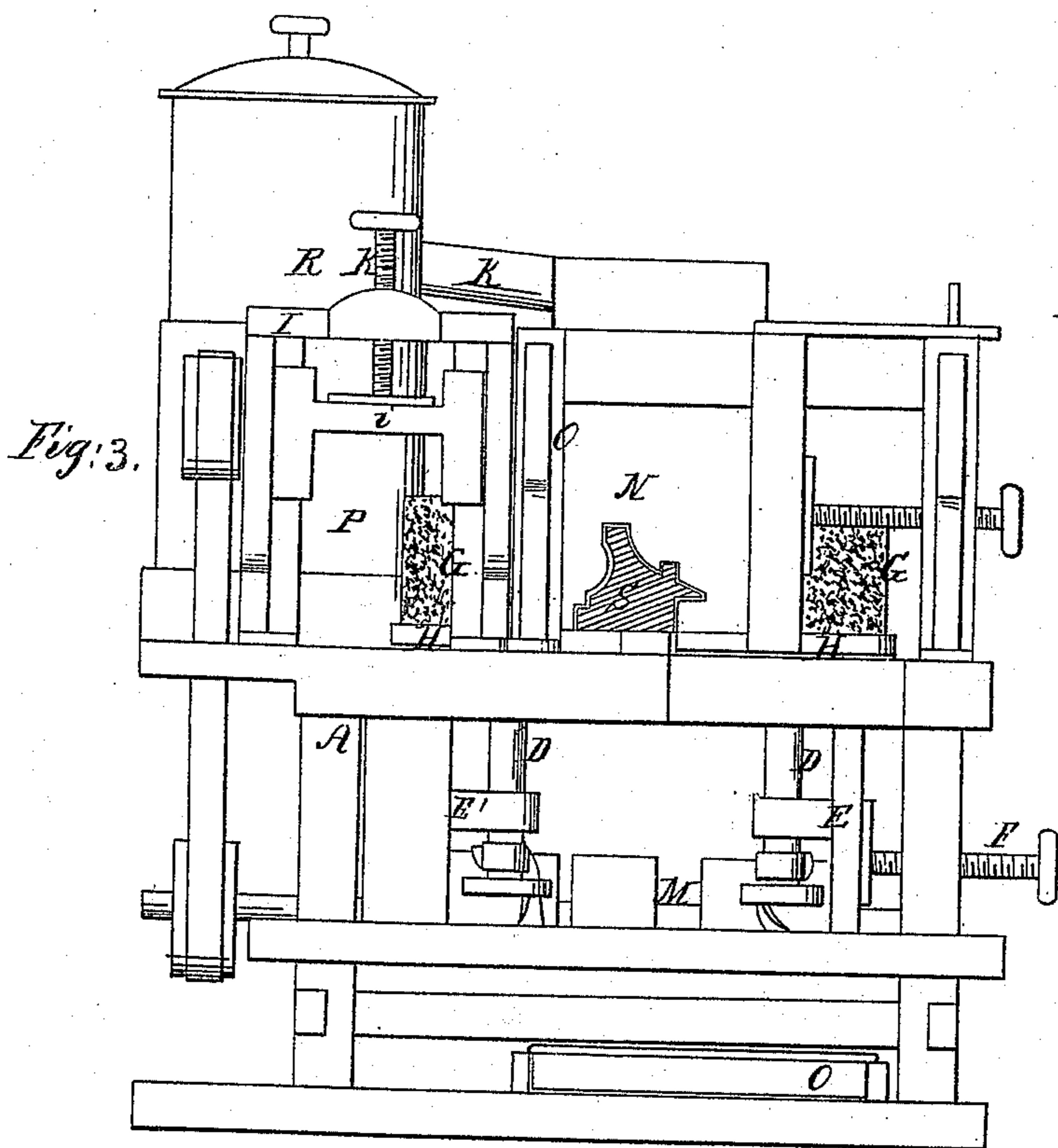
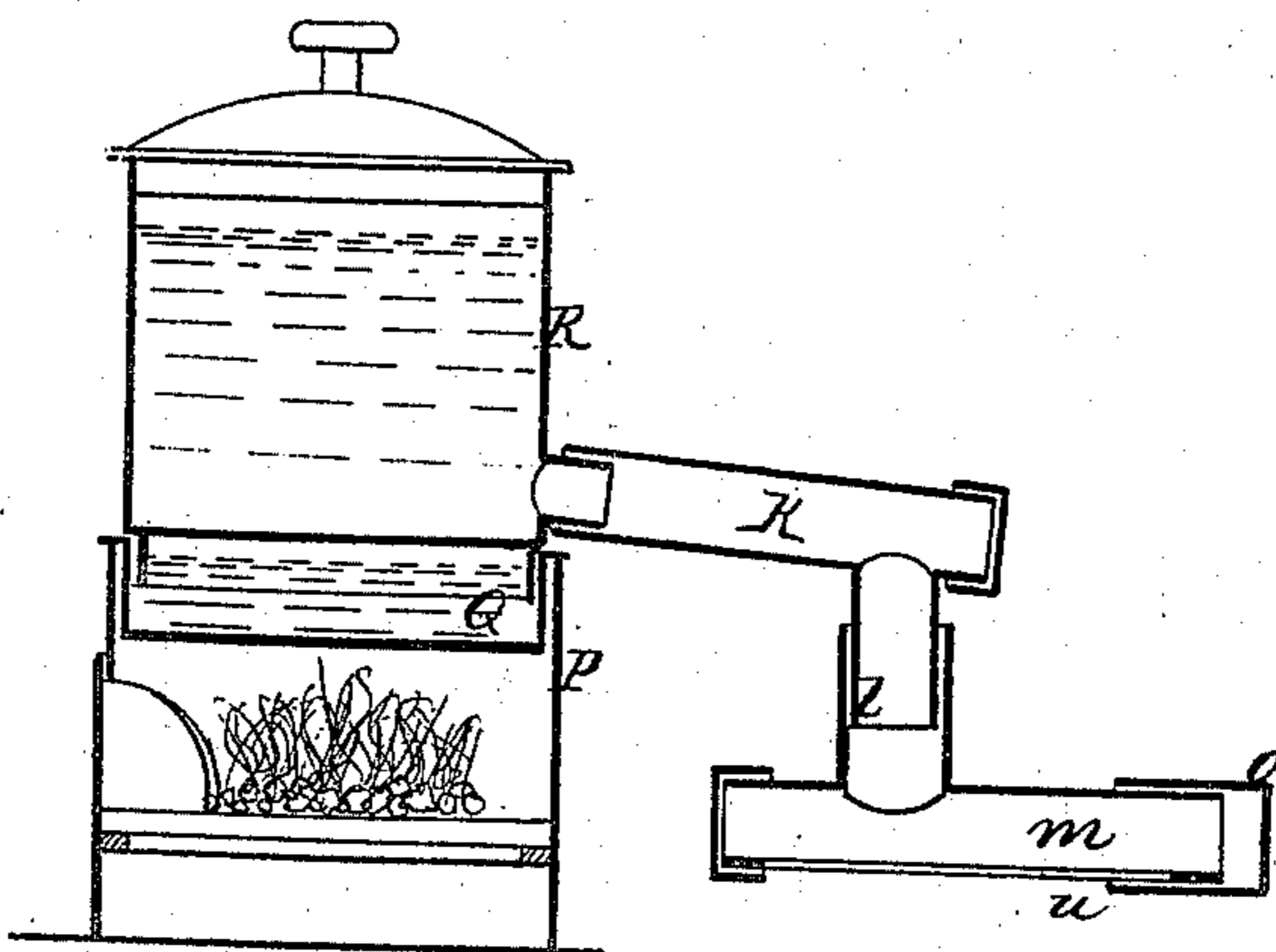


Fig. 4.



Witnesses,
Thos. Fische
W. Frewin

Inventor,
J. Johnson
Per Murray & Co
Attorneys

United States Patent Office.

JOHN JOHNSON, OF BOSTON, ASSIGNOR TO HIMSELF AND N. A. BRICKETT,
OF QUINCY, MASSACHUSETTS.

Letters Patent No. 78,747, dated June 9, 1868.

MACHINE FOR ENAMELLING MOULDINGS.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, JOHN JOHNSON, of Boston, in the county of Suffolk, and State of Massachusetts, have invented a new and improved Machine for Enamelling Mouldings; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable those skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification.

This invention relates to a new and improved machine for enamelling mouldings, preparatory to gilding the same; and it consists in a novel and improved heating arrangement for warming the preparation, smoothing-brushes, and a scraper, all arranged in such a manner that the desired work may be performed expeditiously and in a perfect manner.

In the accompanying sheet of drawings—

Figure 1, Sheet No. 1, is a side sectional view of my invention, taken in the line *x x*, fig. 2.

Figure 2, a plan or top view of the same.

Figure 3, Sheet No. 2, an end view of the same.

Figure 4, a detached vertical section of the heating-apparatus for warming the enamel.

Similar letters of reference indicate corresponding parts.

A represents the frame of the machine, which may be constructed in any proper manner to support the working parts.

On this frame A there are secured two upright plates or standards, *a a*, the upper ends of which are connected by a cross-bar, *b*, and between these upright plates or standards, *a*, a horizontal plate, *c*, is fitted, the ends of the plate *c* being provided with sockets, *d*, to work on guide-cleats *e*, at the inner sides of the upright plates or standards *a a*. The sockets *d* have bearings, *f*, projecting laterally from them, in which the journals of a roller, B, are fitted, said roller having an elastic covering.

This roller is raised or lowered by means of a screw, C, which passes through the cross-bar *b*, and has its lowered end secured to the plate *c* by a swivel connection.

The plate *c* also has an upright, *g*, attached to its front or outer side, said upright being slotted vertically for a screw or pin, *h*, to pass through into the cross-bar *b*. This slotted upright and screw or pin serve as a guide.

D D represent two upright arbors, which are fitted in frames E E', in the frame A, one of which, E, is adjustable, and operated by a screw, F, or otherwise.

On the upper ends of the arbors D D there are placed cylindrical brushes, G G, one on each, and these brushes are directly over circular plates, H, on the frames E E'.

There is also placed on the frame A, a small frame, I, having an adjustable plate, *i*, fitted in it, said plate having the bearings of a horizontal shaft, J, attached.

The plate *i*, and, consequently, the shaft J, are raised and lowered by a screw, K, and on the inner end of shaft J there is placed a cylindrical brush, L.

These brushes are driven by belts, *j*, from a driving-shaft M, and the brush L operates on the upper or face-side of the moulding, and the brushes G G, against the sides thereof.

N represents what may be termed a scraper, formed by having an opening made through it corresponding to the shape transversely of the moulding to be enamelled, (see fig. 3.)

This scraper is fitted in a frame, O, and is capable of being adjusted vertically and laterally, and different scrapers may be fitted in this frame O, to suit the size and shape of the moulding to be enamelled.

On the frame A there is placed a furnace, P, in the top of which a vessel of water, Q, (see fig. 4,) is fitted, and over the vessel Q a chamber, R, is placed, which contains the enamel to be deposited on the moulding.

This chamber R has a tube, *k*, projecting from its lower part, and slightly inclined, said tube *k* having a pendent extension-tube, *l*, attached to its outer end, the lower end of *l* communicating with a horizontal tube

m, which is slotted longitudinally at its under side, as shown at *u*, said slot *u* extending nearly the whole length of the tube *m*, the latter having a sliding cap, *o*, at one end, which cap, by being adjusted further on or off from the tube, admits of the slot *u* being varied in length to suit the width of the moulding.

The moulding *S*, shown in red, bears against a guide, *T*, and rests upon a roller, *U*, on the frame *A*, the roller *U* being underneath the roller *B*.

These rollers constitute the feed, and are driven by belts *p p* from the shaft *M*. The moulding *S* is held against the guide *T* by an adjustable bar, *V*.

The enamel, whiting, and size, after being properly mixed or prepared, is placed in the chamber *R*, and is heated and kept in a warm fluid state by the water-bath *Q*, and flows out through the slot *u* of tube *m* upon the top of the moulding, as the latter is fed along by the rollers *B U*.

The brushes *G G* and *L* distribute the enamel on the moulding in an even manner, while the scraper *N* takes off the superfluous enamel; and smooths or polishes the portion on the moulding.

The enamel that is brushed and scraped from the moulding drops down into a receptacle, *O*, underneath the machine.

The plates *H*, on the frames *E*, prevent the enamel from passing down into the bearings of the upright brush-arbors *D D*.

I claim as new, and desire to secure by Letters Patent—

1. The brushes *G*, mounted upon the vertical shafts *E*, one of which is adjusted laterally by the screw *F*, and both bearing beneath the brushes the disks *H*, arranged in relation with the vertically-adjustable brush *L*, as herein described, for the purpose specified.

2. The combination of the furnace *P*, feed-rollers *B U*, brushes *G G L*, and laterally adjustable scraper *N*, all arranged and combined to operate in the manner substantially as and for the purpose set forth.

3. The combination of the furnace *P*, brushes *G G L*, elastic roller *B*, feed-roller *U*, scraper *N*, and guides *T V*, all arranged as described, for the purpose specified.

JOHN JOHNSON.

Witnesses:

JOHN P. DAVIS,

ALBERT H. HOBART.