JOHN JOHNSON, ENAMELING MOULDING MACHINE.

2 Sheets--Sheet 1.

No. 121,628.

Patented Dec. 5, 1871.

Fig 1

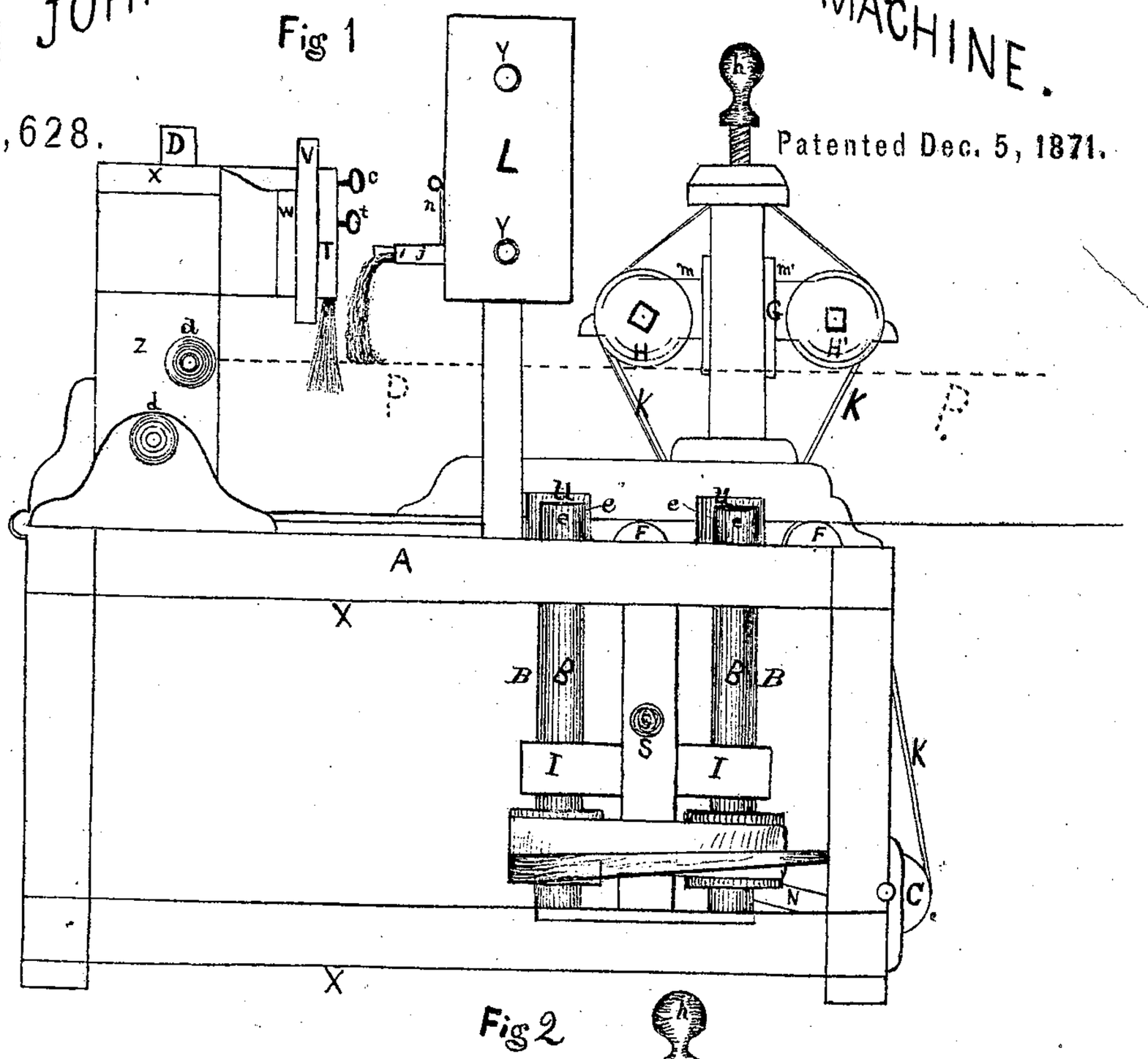
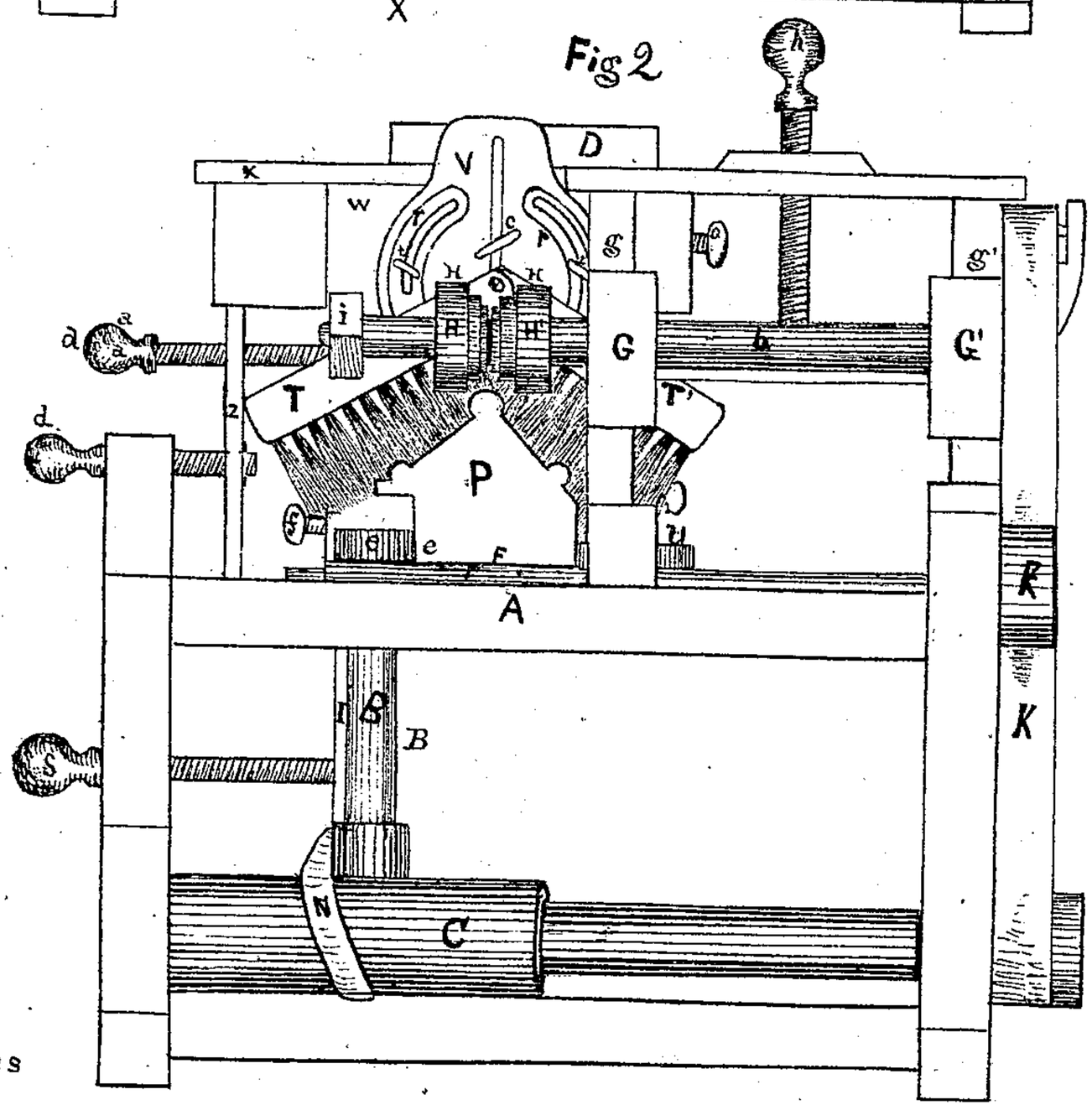


Fig 2



Witnesses

Sylvenus Walker

Thomas Moore

Inventor

John Johnson

2 Sheets--Sheet 2.

JOHN JOHNSON.

Enameling Moulding Machines.

No. 121,628. Patented Dec. 5, 1871.

Fig 3

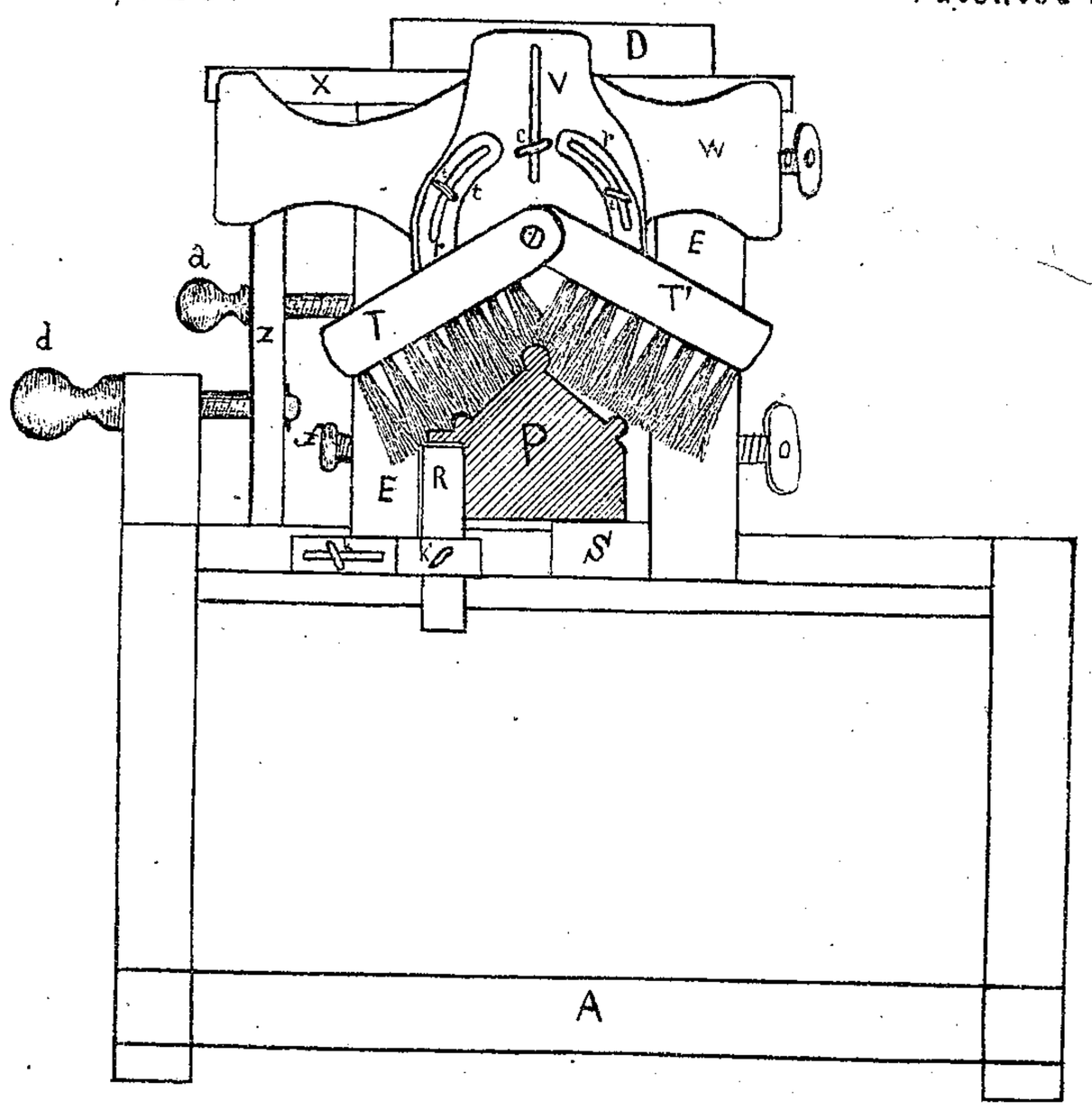


Fig 4

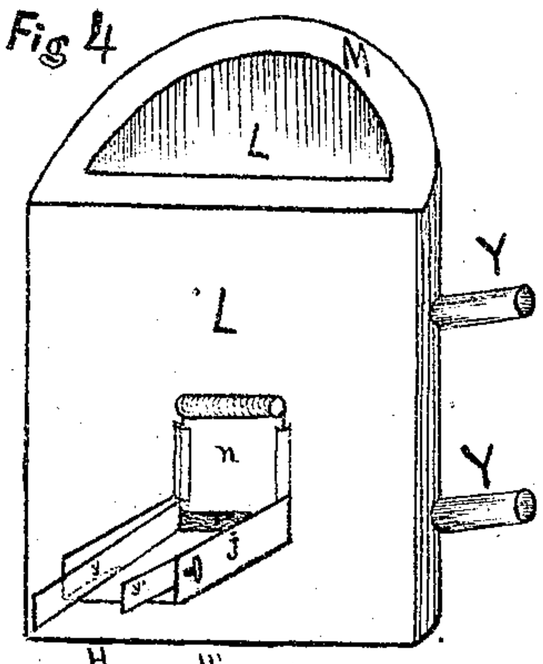
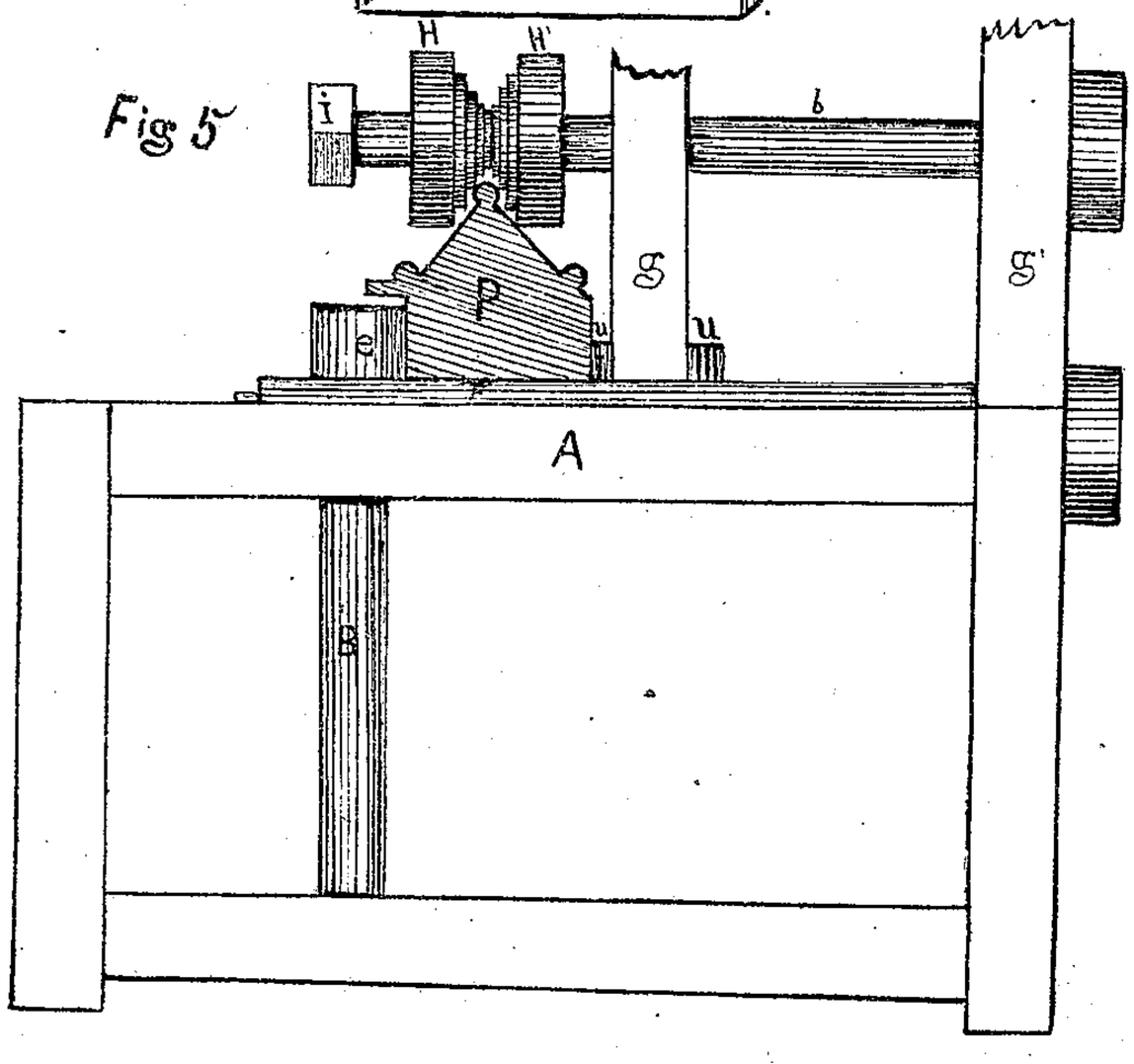


Fig 5



UNITED STATES PATENT OFFICE.

JOHN JOHNSON, OF BOSTON, MASSACHUSETTS, ASSIGNOR TO HIMSELF AND THOMAS MOORE, OF SAME PLACE.

IMPROVEMENT IN MACHINES FOR ENAMELING MOLDINGS.

Specification forming part of Letters Patent No. 121,628, dated December 5, 1871; antedated November 30, 1871.

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 certain new and useful Improvements in Machines for Enameling Moldings, of which the following is a specification:

This invention relates to a new and improved machine for enameling moldings preparatory to gilding the same, and is an improvement upon a similar machine patented by me upon the 9th day of June, 1868. It consists in hinged adjustable brushes for spreading the enamel in a novel manner, in connection with an adjustable guide-way for the former or die for smoothing and polishing the enamel, with adjustable sectional elastic pressure-rolls, double driving and feed-rolls, adjustable rabbet and back-edge scrapers, and steam-bath or jacket around the reservoir, all arranged in such a manner that the desired work may be performed in an expeditious and perfect manner.

In the accompanying drawing, Figure 1, Sheet 1, is a side view of the machine. Fig. 2 is an end view of the same. Fig. 3, Sheet 2, is an end sectional view taken in line *x x*, Fig. 1. Fig. 4 is a detached perspective view of the reservoir. Fig. 5 is a cross-section or end view, showing the sectional elastic pressure-rolls.

A represents the frame of the machine, which may be constructed in any suitable manner to support the working parts. In this frame A are two upright shafts, B B′, with an adjustable frame, I, operated by a screw, S. Said shafts B B′ have adjustable elastic driving-heads *e e′*. F F′ are two supporting driving-rolls. *u u′* are friction-pulleys in the upright *g*, to which is attached the adjustable guides G G′, which are adjusted by hand-screw *h*. Said guides are provided with bearings *m m′*, in which shafts *b b′* revolve, carrying elastic section pressure-rolls H H′. L is a reservoir, having a steam-bath or jacket around the same. A spout, J, is affixed near the bottom, having adjustable side pieces *y y′* for regulating the width of the flow of the enamel. T T′ are two hinged adjustable brushes, and are attached to the adjustable support V. Said brushes have circular slotted plates *r r*, held by set-screws *t t*. The adjustable support V is held in position by set-screw *c*. W is a cross-piece, to which the support V is attached, and is connected to the uprights Z. X is a top piece having a slot through which the die or former D is inserted, and held by set-screws *o o f*. The die or former is brought in true line with the molding P by means of the hand-screw *d′*. Hand-screw *a* confines the die or former D in the frame E. R is a rabbet-scraper, adjusted by set-screws *k k′*, while S represents the back-edge scraper. Said scrapers remove all superfluous enamel which runs underneath. The die or former D has an opening made through it corresponding to the shape of the molding to be enameled, and is adjustable vertically and laterally; and different dies may be inserted to suit the size and shape of the molding to be enameled. C is a driving-shaft, to which is attached belt K, which drives the various shafts or rolls. Suitable gearing may be employed instead. The molding P bears against rollers *e e* and rests upon rolls F F, and is held down by the pressure section elastic rolls H H. These rolls constitute the feed, and are driven by belts K and N. The enamel, whiting, and glue-size, after being properly mixed, is placed in the reservoir L, and is heated and kept in a proper fluid state by the steam-jacket which surrounds said reservoir, steam being admitted by pipes Y Y; by this means it is kept heated all through to the proper temperature without the necessity of constant stirring up.

The adjustable spout J *y y′* conducts the enamel to the face of the molding P; the hinged adjustable brushes T T spread the same evenly; and the former or die D removes all superfluous enamel and forms and polishes that remaining. The sectional adjustable pressure-rolls are adapted to the various forms of the faces of the moldings. By their elasticity the moldings are held firmly down without injury to the soft enamel. The driving and feed rolls F F *e e* carry the molding through the machine as often as may be desired.

I claim—

1. The adjustable guide-way E, rabbet-scraper R, and back-edge scraper S, substantially in the manner as hereinbefore set forth.

2. The combination of the sectional elastic adjustable pressure-rolls H H′ with the adjustable guide-way E and scrapers R and S, when combined and arranged so as to operate substantially in the manner as hereinbefore set forth.

3. The combination of the adjustable feed-rolls *e e'* and pulleys *u u'* with the adjustable guide-way E and scrapers R and S, when combined and arranged substantially in the manner as and for the purposes set forth.

4. The combination of the stationary reservoir L, surrounded with a steam-jacket, M, adjustable delivery-spout J *y y'*, with the adjustable guide-way E, scrapers R and S, when combined and arranged substantially in the manner as hereinbefore set forth.

5. The combination of the hinged adjustable brushes T T' with the adjustable guide-way E, and scrapers R and S, when combined and arranged substantially in the manner as and for the purposes hereinbefore set forth.

JOHN JOHNSON.

Witnesses:
SYLVANUS WALKER,
THOMAS MOORE. (54)