

J. W. Campbell, Enameling Machine.

N^o 59817.

Patented Nov. 20, 1866.

Fig: 1.

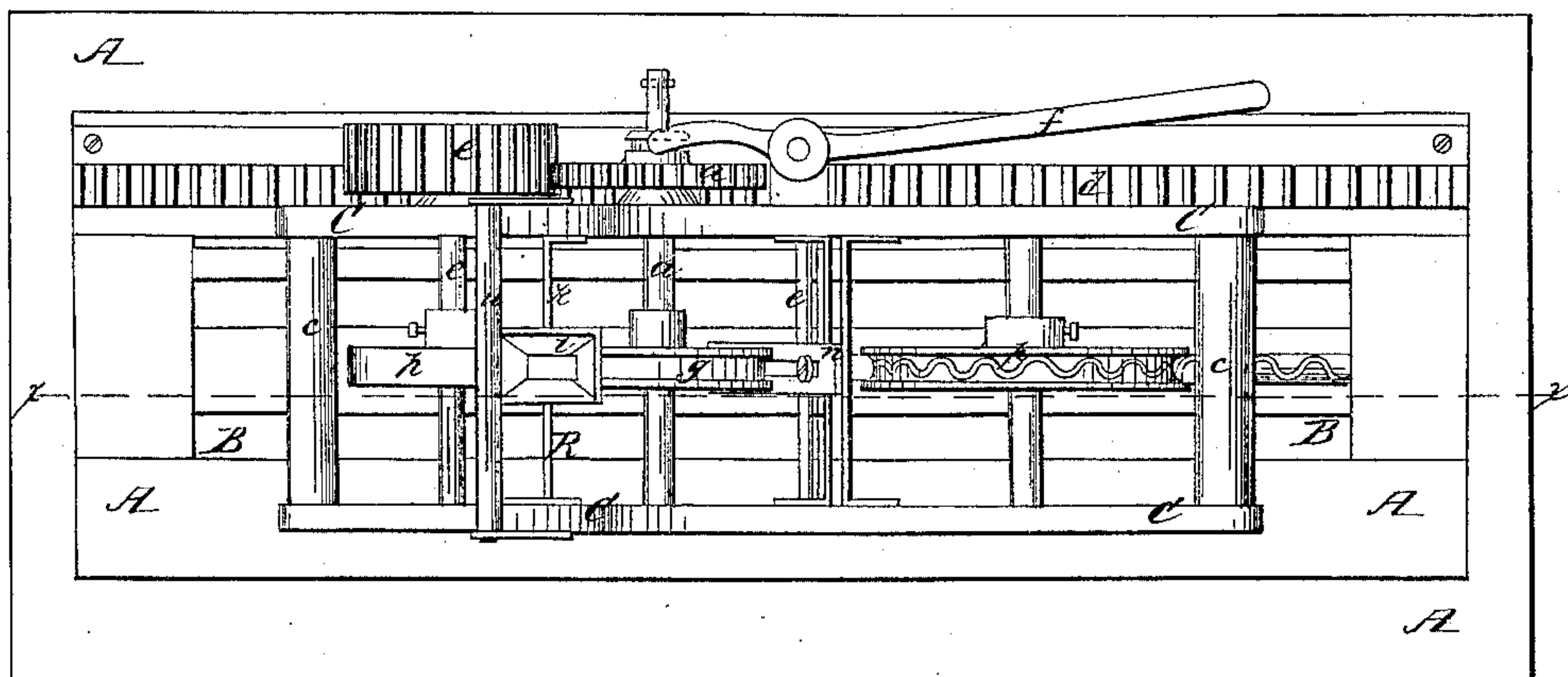


Fig: 3.

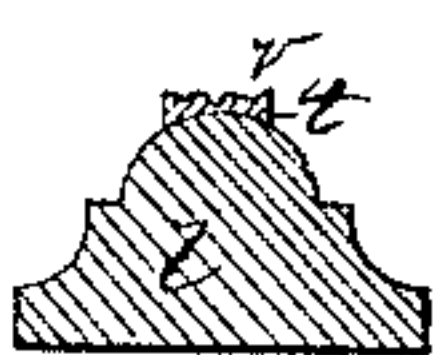
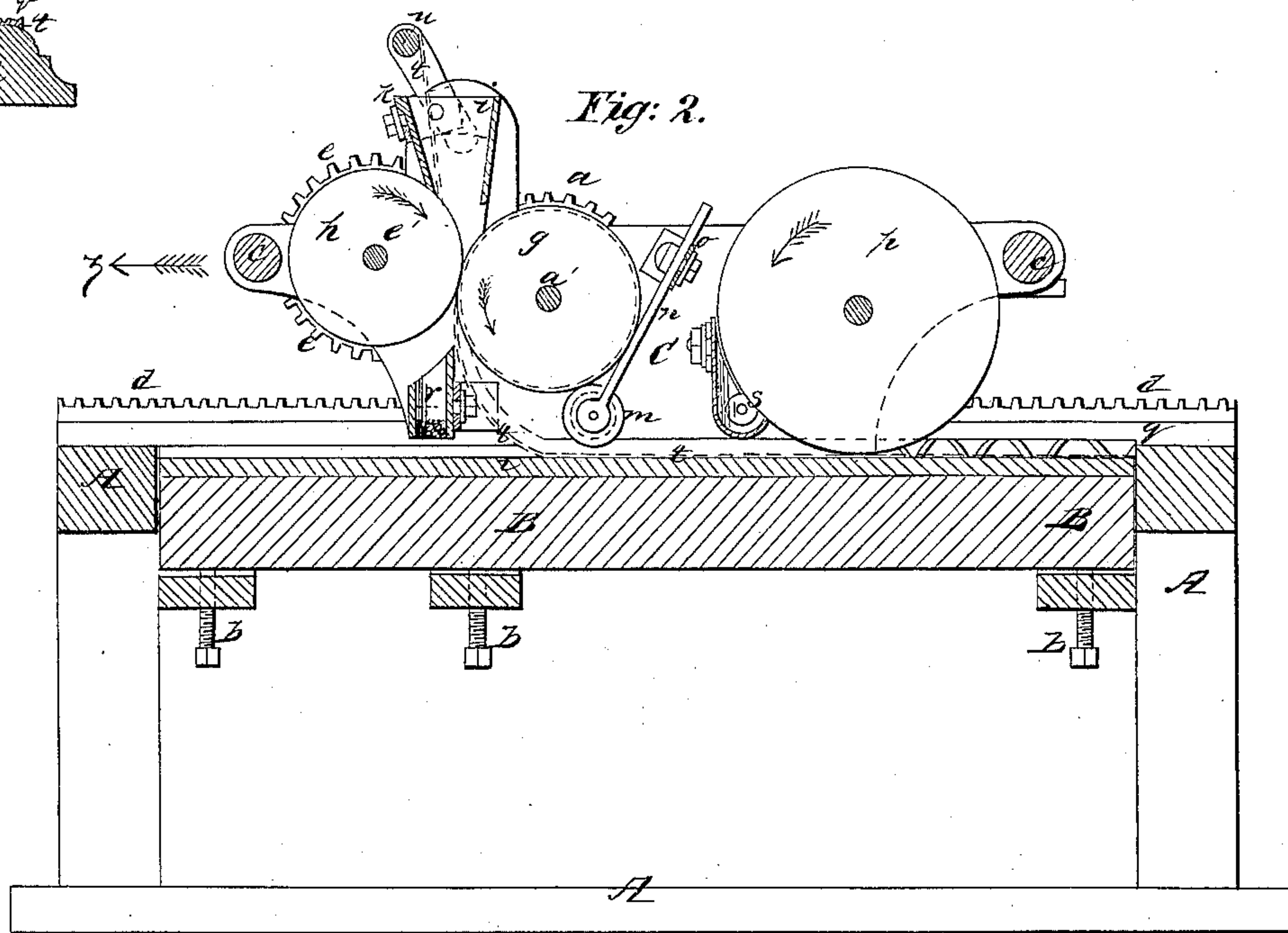


Fig: 2.



Witnesses:

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United States Patent Office.

MACHINE FOR ORNAMENTING MOULDINGS.

J. W. CAMPBELL, OF NEW YORK, NEW YORK.

Letters Patent No. 59,817, dated November 20, 1866.

SPECIFICATION.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, J. W. CAMPBELL, of the city, county, and State of New York, have invented a new and improved Machine for Ornamenting Mouldings; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings forming part of this specification, in which—

Figure 1 represents a plan or top view of my invention.

Figure 2 is a vertical longitudinal section taken on a plane indicated by the line *xx*, figure 1.

Figure 3 is a cross-section through a moulding after the ornament is applied.

The object of this invention is to construct a machine by which ornaments of whatever description may be applied to and pressed upon mouldings used for various purposes, or by which the said ornaments may also be cast in independent strips.

And the invention consists, first, in constructing a machine by which the above-mentioned objects may be attained and in which the various portions constituting it are combined in such a manner that not only a perfect article may be manufactured, but that, also, by shifting or exchanging some of the parts, different sized and shaped ornaments may be cast; and second, in applying and feeding a strip of muslin or other similar substance under the plastic matter of which the ornament consists, so as to keep it together before it is applied to the wooden moulding or to give it proper consistency in case the ornament is cast independent.

Heretofore such ornaments had to be applied to mouldings by very complicated and still incomplete operations, such as casting them in forms, etc., and it was therefore a matter of considerable expense to have mouldings ornamented nicely. But my invention overcomes all these objections. The machine is very simple, not liable to get out of order, and manufactures a most perfect article in a very short time, by only placing a quantity of the mixture out of which the ornament is to be made into the machine, and by then driving forward a carriage by which all the necessary wheels, etc., are held.

To the frame, *A*, which is of sufficient strength to support the carriage, hereinafter mentioned, is attached the adjustable bed-plate, *B*, which can be raised or lowered by means of the set-screws *b*, *x*.

A carriage consisting of two side-boards, *C*, held together by strong rods, *c*, said rods acting also as handles to the carriage, rests and travels on the frame, *A*, as seen. A cog-wheel, *a*, fixed to the carriage, and working in the rack, *d*, which is attached to the frame, drives the cog-wheel, *e*, when the carriage is moved forward in the direction of the arrow; but when moved in the opposite direction, the wheel, *a*, has to be thrown out of gear by the lever, *f*, so that the wheel *e* and its shaft, *e'*, will not revolve.

On the axles *a'* and *e'* of the cog-wheels *a* and *e* are attached the wheels *g* and *h*, which are far enough apart to allow a sufficient quantity of the mixture of which the ornament is made to pass between them in a strip just narrow and thin enough to answer the size of ornament wanted; flanges on the wheel, *g*, tend to keep the mixture in its place. The plastic material is placed into the hopper, *i*, fastened to and adjustable sideways on a metal bridge, *k*; thence the plastic is carried down by the wheels *g* and *h*, and pressed upon the moulding, *l*, which rests on the bed-plate, *B*, by a small roller, *m*, by which also the necessary width and thickness are imparted to it. The roller *m* is adjustable up and down as well as sideways by means of the slotted handle, *n*, attached to the slotted bridging *o*.

The carriage progressing in the direction of the arrow, *z*, the wheel *p*, into whose edge the ornament is engraved, comes in contact with the plastic and impresses the same with the necessary shape and figures.

As soon as the whole length of material is finished, which will generally be made in twelve-foot strips, the cog-wheel *a* is thrown out of gear and the carriage returned to its place so as to begin at the point *g* with a new moulding. In front of the wheel, *h*, is a small box, *r*, open at the bottom for the purpose of applying liquid glue or other adhesive material to the wood, so that the plastic will at once be firmly attached to the moulding. A small soft roller, *s*, supplies the wheel *p* with moisture so as to prevent any particles of the plastic from adhering to it; the said roller is held in a box in which the moisture is contained, as seen in figure 2.

As the plastic material may be apt to fall to pieces while on its way from the wheels *g* and *h* to the roller, *m*, I wind a strip of muslin or any other suitable material around the roller, *m*, and allow it to be pulled down by the wheels *g* and *h* with the plastic, so as to form a rest for the latter as long as suspended, but also to enable me to cast the ornaments by themselves, without attaching them to a wooden moulding, in which case the muslin strip will form a good means of keeping the whole together.

In figure 3 is shown in red lines a cross-section of a moulding when ornamented, in which *l* represents the wooden moulding, *t* the strip of muslin, and *v* the plastic.

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

1. Constructing a machine for forming long strips of ornaments either independently or to be attached to mouldings, consisting of a combination of the hopper *i*, wheels *g* and *h*, rollers *m* and *s*, and wheel *p*, and operating substantially as described.

2. The application of the strip of muslin or other material for the purpose of supporting the plastic material while and after the same is being finished, in the manner specified.

3. The box *r* for the purpose of supplying gum to the moulding, so that the ornament may at once be firmly attached to the same, substantially as herein shown and specified.

The above specification of my invention signed by me this 31st day of July, 1866.

J. W. CAMPBELL.

Witnesses:

WM. F. McNAMARA,

ALEX. F. ROBERTS.