W. Gardner,
Enameling Machine.

No. 21,192. Patented Aug. 17, 1858.

Fig: 1.

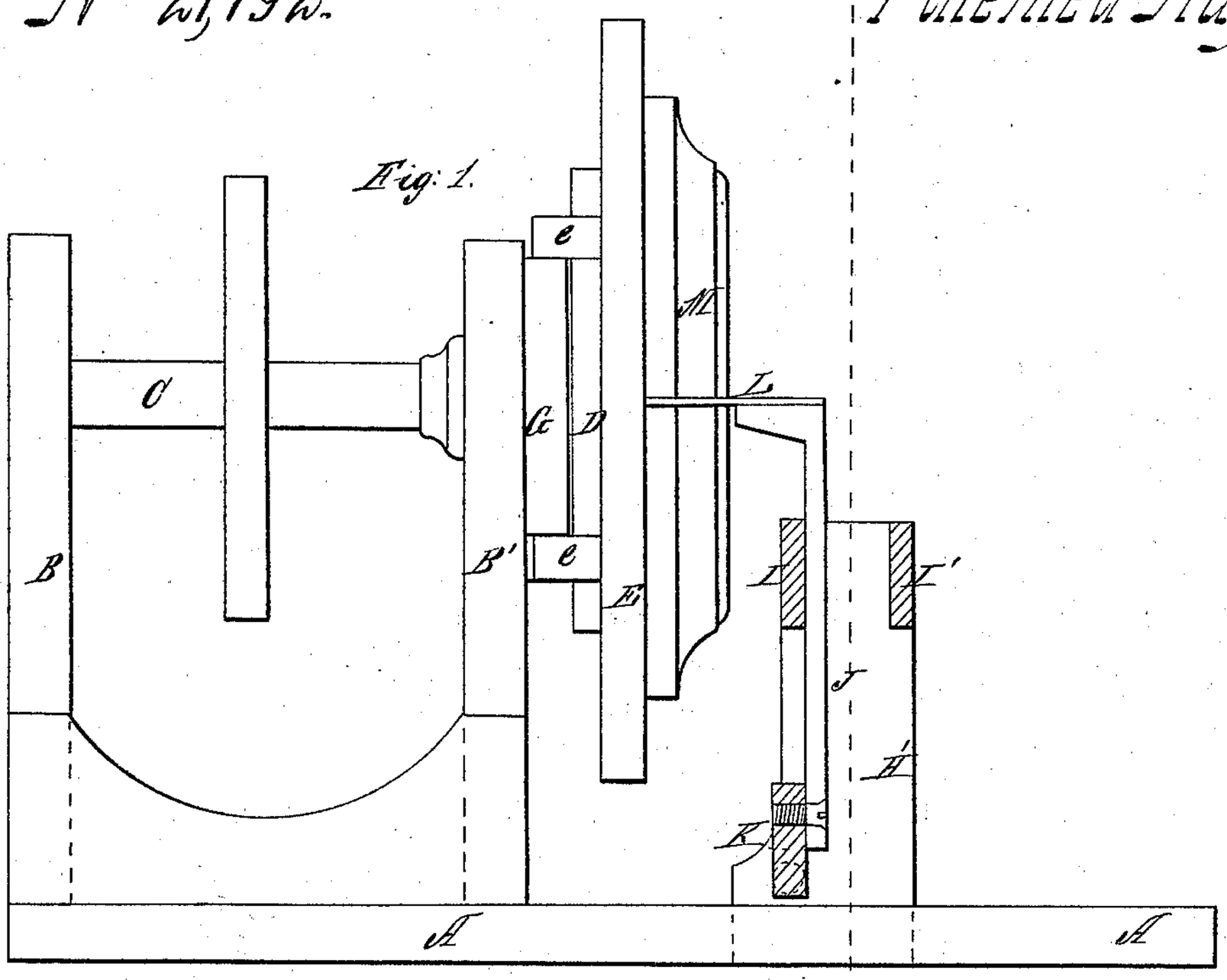


Fig: 2.

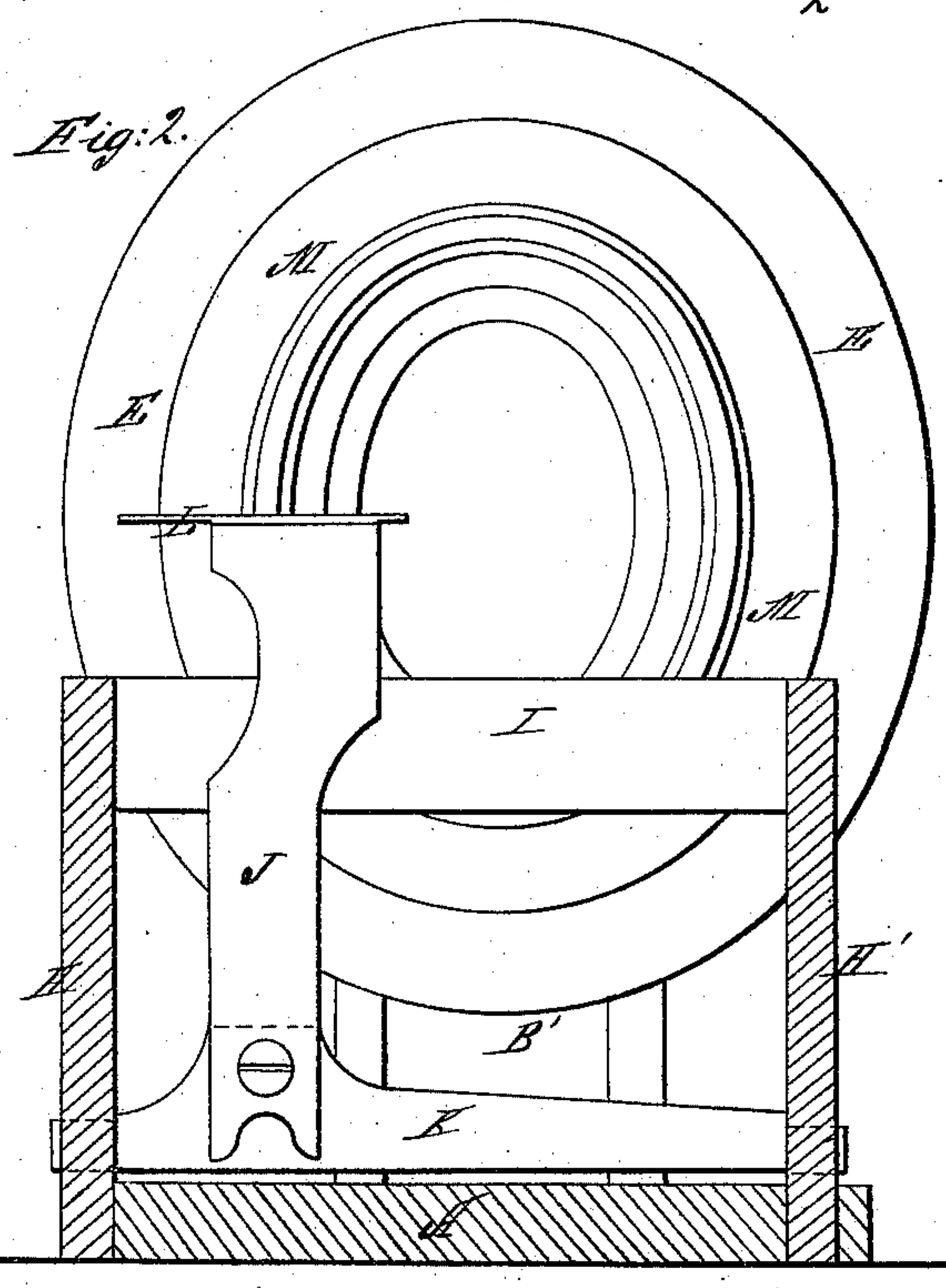
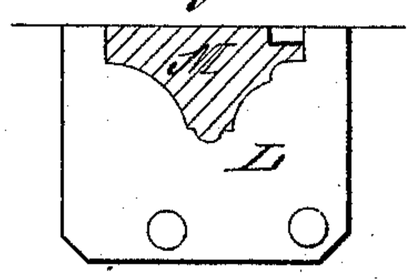


Fig: 3.



UNITED STATES PATENT OFFICE.

W. GARDNER, OF NEW YORK, N. Y.

MACHINE FOR PREPARING OVAL PICTURE-FRAMES.

Specification forming part of Letters Patent 21,192, dated August 17, 1858; Reissued March 15, 1859, No. 672.

To all whom it may concern:

Be it known that I, WILLIAM GARDNER, of the city and county of New York and State of New York, have invented a new and useful Improvement in Machinery for Preparing Oval Picture-Frames; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawing and to the letters of reference marked thereon.

My invention relates to machinery for laying onto the wooden or other bodies of picture frames, the coats of cement necessary for forming the ground-work for the gilding; and my improvement consists in a combination of a lathe, the face plate of which is caused to traverse in an oval path, with a scraper formed to coincide with the desired molding, said scraper being self adjusting laterally, as fully described hereafter, so that it may accommodate itself to any irregular motion of the frame caused by the latter being placed, between the intervals allowed for the drying of the several coats of cement, in such a position on the face plate of the lathe, as not to coincide with the oval path of the lathe.

In order to enable others to make and use my invention, I will now proceed to describe the manner, in which I carry it into effect.

On reference to the drawing, which forms a part of this specification; Figure 1 is a side view, (partially in section) of my machine for preparing oval picture frames; Fig. 2 a transverse section on the line 1, 2, (Fig. 1;) Fig. 3 a plan view of the self adjusting scraper.

A is the base of the machine, to which are secured the two uprights B and B′ for the spindle C.

E is the face-plate, having at the back permanent projections *e*, *e*, which are arranged to fit over and slide freely on the bar D. Between the projections *e*, *e*, and secured to the face of the upright B′, is a disk G, situated eccentrically with the center of the spindle C.

As the parts above described have been heretofore used in connection with lathes for turning oval objects, a further description of their construction and operation will be unnecessary.

In front of the face plate, and at a suitable distance from the same, are erected the two uprights H and H′, which are connected together at the top by the transverse bars I and I′. Between the latter is situated the arm J, which is jointed at the bottom to the rock-shaft K, the ends of which are allowed to turn freely in the opposite uprights H and H′. The top of the arm J is furnished with a thin metal plate L, one edge of which is so cut out, as to coincide with the form of the molding of the frame M, the latter being attached to the face plate E.

The term "preparing," as applied to picture frames by those engaged in their manufacture, signifies the covering of the wooden body or foundation of the frame, with coatings of cement, which forms the ground work for the gilding. It is necessary that this cement should be so laid on, as to have a smooth and uniform surface. The preparation of oval frames has hitherto been accomplished by taking the wooden body from the lathe, in which it was turned, and attaching it temporarily to that of a preparing lathe, as seen in Fig. 1. A layer of the usual picture frame cement, in a semiliquid state is then laid on the wooden body, which is caused to revolve while the attendant, by means of a scraper or other appropriate instrument, held in his hands, smooths off the surface. One layer being laid on, the frame is removed from the face-plate, and another from the turning lathe, is operated on in a similar manner. When the first coat of cement is partially dried, the frame is again attached to the face plate, and another coating is laid on, and this is continued, until the desired thickness of cement is deposited on the body of the frame, and the required smoothness of surface obtained. After the several removals of the oval frames from the face plate, it is almost impossible to replace them in their proper position, in order that they may revolve with accuracy. As the attendant cannot possibly follow with his scraper the irregular movement of the frame, consequent upon an untrue attachment of the same to the face plate, an irregularity of surface, and a difference in the size of the moldings of the different frames, which are intended to be alike, must be the result. By my improved mode, however, even should the frame be attached to the face-plate considerably out of true with the latter, the scraper L must accommodate itself to the

irregularity of the movement, inasmuch as the arm J, to which the scraper is attached, is so jointed to the rock-shaft K, that it can move freely backward and forward laterally with the frame; and, as the rock shaft is allowed to turn freely in the uprights, the scraper can as easily be moved from and toward the molding of the frame, and this movement may be effected either by the hand of the attendant, or by any suitable arrangement of springs.

It will now be seen without further explanation, that, by the above described mode of preparing oval picture-frames, perfect accuracy and uniformity of surface must be imparted to the moldings, and that, in a series of frames intended to correspond with each other, the moldings of all must be exactly alike, and this, although the frames, after the drying of each successive coating of cement, are not placed on the face plate so as to coincide exactly with the oval path in which it turns.

I claim and desire to secure by Letters Patent,

As a means of preparing oval picture frames, a lathe, with a face plate revolving in an oval path, in combination with a scraper adapted to the form of the desired molding of the oval frame, when the said scraper is so arranged, as to be self adjusting laterally with the said molding, substantially as and for the purpose herein set forth.

In testimony whereof, I have signed my name to this specification before two subscribing witnesses.

WILLIAM GARDNER.

Witnesses:
J. N. WEATHERILL,
JOHN MYERS.

[FIRST PRINTED 1911.]