

E. B. BEACH.  
Border-Trimming Machine.

No. 219,842.

Patented Sept. 23, 1879.

fig. 1

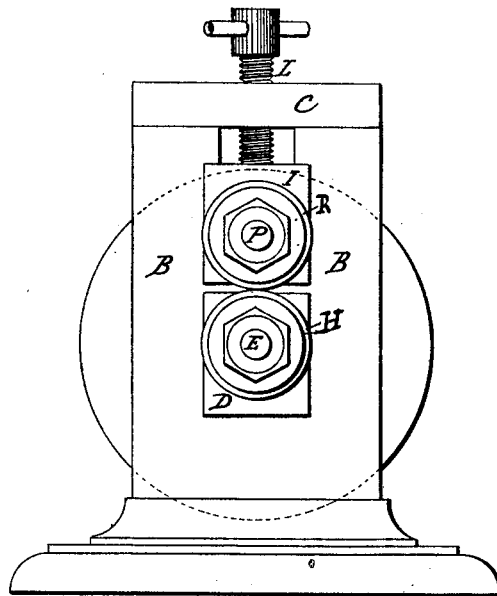


fig. 2

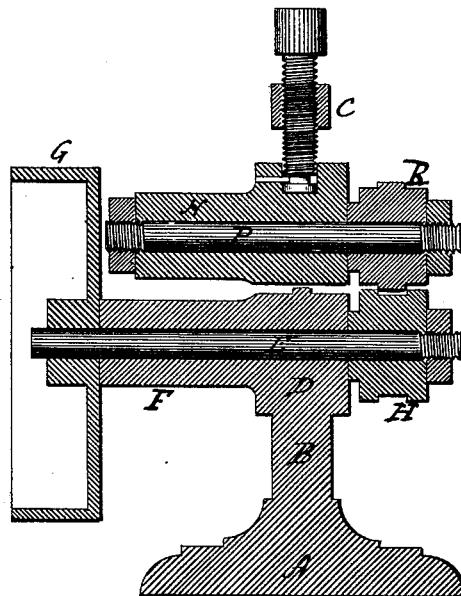


fig. 3  
a b a

Witness:

*John H. Murray*  
*Jos. C. Earle*

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Inventor.  
By atty-  
*John E. Earle*

# UNITED STATES PATENT OFFICE.

EDGAR B. BEACH, OF WEST MERIDEN, CONNECTICUT.

## IMPROVEMENT IN BORDER-TRIMMING MACHINES.

Specification forming part of Letters Patent No. 219,842, dated September 23, 1879; application filed April 25, 1879.

*To all whom it may concern:*

Be it known that I, EDGAR B. BEACH, of West Meriden, in the county of New Haven and State of Connecticut, have invented a new Improvement in Border-Trimming Machines; and I do hereby declare the following, when taken in connection with the accompanying drawings and the letters of reference marked thereon, to be a full, clear, and exact description of the same, and which said drawings constitute part of this specification, and represent, in—

Figure 1, front view, Fig. 2 longitudinal section.

This invention relates to a device for trimming what is called "border" in silver-plated work.

This border is rolled in soft metal, and so as to leave a thin fin upon edge, as at *a*, Fig. 3, *b* being the molded border.

This fin requires to be cut away, and it is for trimming this article that this invention is made; but it is applicable to other similar uses.

It consists in the construction as hereinafter described, and more particularly recited in the claim.

*A* is the base, from which rises a vertical support in the form of two posts, *B B*, with a bar, *C*, across the top. In the space between these posts a stationary box, *D*, is arranged, for the lower or driving shaft, *E*, and from the box *D* a sleeve, *F*, projects, and through which the shaft *E* also extends, and so as to form a long bearing for the said shaft *E*.

The shaft *E* is provided with a pulley, *G*, or other means for driving it, and at the other end one of the cutter-wheels, *H*, is fixed.

In the space between the posts and above the lower box is a second box, *I*, guided vertically between the posts, and so as to be moved up and down by means of the adjusting-screw *L*.

The box *I* is constructed with a sleeve, *N*, similar to the sleeve *F*, and for the support of the second shaft *P*. This second shaft is ar-

ranged to revolve freely in its bearing, and is provided at its outer end with a cutter-wheel, *R*, corresponding to the cutter-wheel *H* below.

The two cutter-wheels are, preferably, made the one with an annular groove and the other with a corresponding annular rib, the rib and groove corresponding to the width of the border to be cut in like manner to similar cutter-wheels used for other purposes.

The strip of border to be trimmed is run through between the cutter-wheels, the adjacent edges of the rib or groove cutting or trimming the edge of the border.

In the usual construction of machines of this character two bearings are made for each shaft, each adjustable by independent screws. The result of this is, it is difficult, or at least requires careful manipulation to preserve the parallelism of the two shafts. This difficulty is avoided by constructing the boxes with the projecting sleeve, and this construction offers the further advantage of a long bearing, and consequently less wear than in the usual two short bearings.

I am aware of Patent No. 110,354, and claim nothing therein shown as of my invention.

I claim—

The machine herein described for trimming borders, consisting of the stationary box *D*, constructed with the projecting sleeve *F* and carrying the shaft *E*, the cutter-wheel *H* on said shaft *E*, the adjustable box *I*, constructed with a projecting sleeve, *N*, arranged between the two posts *B*, and vertically guided thereby and carrying the shaft *P*, cutter-wheel *R* on said shaft *P*, and adjusting-screw *L*, arranged to raise or lower said box *I*, one of said cutter-wheels constructed with an annular groove and the other with a corresponding annular rib, and all combined and arranged substantially as and for the purpose specified.

EDGAR B. BEACH.

Witnesses:

I. A. HADLEY,  
ASAHEL HARVEY.