

(No Model.)

2 Sheets—Sheet 1.

C. SEYMOUR.
POLISHING MACHINE.

No. 487,785.

Patented Dec. 13, 1892.

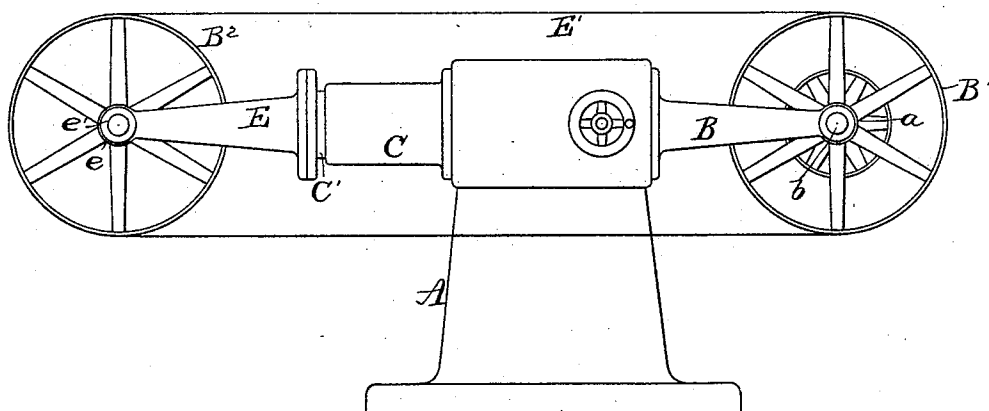


Fig. 1.

Witnesses

G. F. Downing.
Harry B. Ames.

Inventor

Charles Seymour

By Leggett & Leggett
Attorneys

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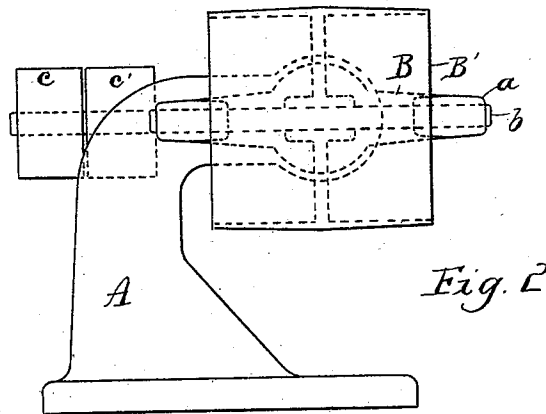


Fig. 2

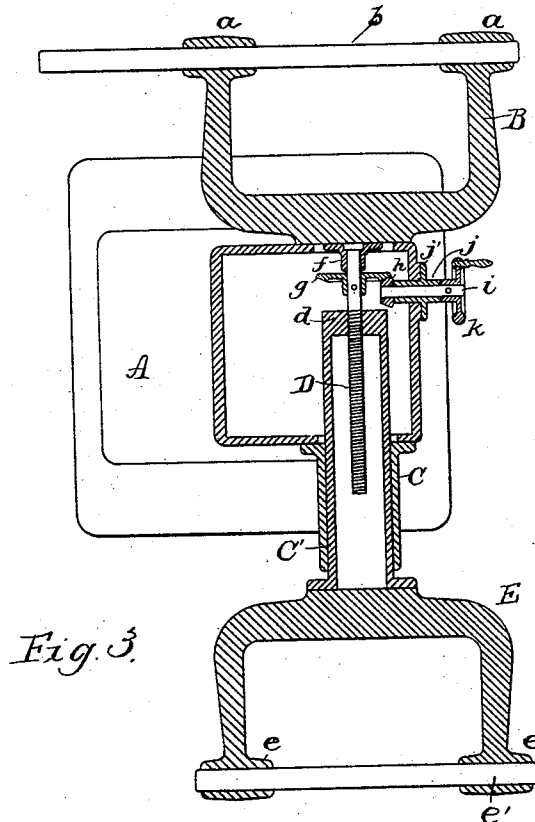


Fig. 3

Witnesses
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Harry B. Ames.

Inventor
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Attorneys

UNITED STATES PATENT OFFICE.

CHARLES SEYMOUR, OF DEFIANCE, OHIO, ASSIGNOR TO THE DEFIANCE MACHINE WORKS, OF SAME PLACE.

POLISHING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 487,785, dated December 13, 1892.

Application filed July 29, 1892. Serial No. 441,633. (No model.)

To all whom it may concern:

Be it known that I, CHARLES SEYMOUR, a resident of Defiance, in the county of Defiance and State of Ohio, have invented certain new and useful Improvements in Polishing-Machines; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to an improvement in machines for polishing objects of wood or other material, the object of the invention being to produce a machine for the purpose stated which shall be of compact construction and neat in appearance.

A further object is to produce simple and efficient means for supporting a polishing-belt and securing the proper tension thereof. With these objects in view the invention consists of certain novel features of construction and combinations and arrangements of parts, as hereinafter set forth, and pointed out in the claims.

In the accompanying drawings, Figure 1 is an elevation of my improved machine. Fig. 2 is an end view. Fig. 3 is a horizontal sectional view.

A represents a combined hollow base and support, the upper portion of which is preferably contracted somewhat and made to project horizontally. Secured to one side of the hollow support in any suitable manner is a yoke B, having boxes *a* for the accommodation of a shaft *b*, which latter carries a hollow pulley B' between the arms of the yoke B. One end of the shaft *b* is extended beyond its bearing for the reception of tight and loose pulleys *c c'* for the accommodation of a belt from any convenient source of power.

Secured to the hollow standard at the side thereof opposite to the yoke B is a sleeve C, through which a tube or cylinder C' is adapted to pass freely, one end of said tube or cylinder being closed, as at *d*, and the portion *d* provided with a screw-threaded perforation for the accommodation of a screw D. A yoke E is secured to the outer end of the tube or cylinder C' and provided with boxes *e* for the accommodation of a shaft *e'*, which carries

a hollow pulley B². One end of the screw D passes into the tube or cylinder C', while the other end has its bearing in a block or bracket *f*, secured to the yoke B. A bevel-toothed wheel *g* is secured to the screw D and meshes with a bevel-pinion *h*, carried by a shaft *i*. The shaft *i* is supported in a sleeve *j*, which passes through the wall of the hollow standard, said sleeve having a flange *j'*, whereby to secure it to the standard. A hand-wheel *k* is secured to the outer or free end of the shaft *i*, by means of which to turn it. A band or belt E', having a roughened or polishing surface of sand, emery, or other suitable material, is passed about the pulleys B' B². The objects to be polished will be brought into contact with this band or belt. By thus constructing and arranging the machine the tension of the band or belt E' may be easily and quickly adjusted by simply turning the hand-wheel *k*.

The machine is very simple in construction, easy to manipulate, neat in appearance, and effectual in the performance of its functions.

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

1. In a polishing-machine, the combination, with a post or upright, of a yoke secured thereto, a pulley carried by said yoke, a sleeve secured to the other side of said post or standard, a tube or cylinder adapted to pass loosely through said sleeve, a yoke secured to the sleeve, a pulley carried by the yoke, a screw passing through one end of the tube or cylinder, a toothed wheel carried by said screw, a shaft passing through the wall of the post or standard, a pinion carried by said shaft and meshing with the toothed wheel, and a hand-wheel carried by said shaft, and a polishing band or belt passing over said pulleys, substantially as set forth.

2. In a polishing-machine, the combination, with a hollow post or upright, of a yoke secured thereto, a pulley carried by said yoke, a sleeve secured to the other side of the post or upright, a cylinder or tube passing loosely through said sleeve and into the hollow post or upright, a screw passing through one end of said cylinder or tube, a bracket secured to

said yoke and serving as a bearing for one
end of the screw, a toothed wheel carried by
the screw, a sleeve passing through the wall
of the hollow post or upright, a shaft passing
5 through said sleeve, a pinion carried by said
shaft and adapted to mesh with the toothed
wheel on the screw, a hand-wheel carried by
said shaft, a yoke secured to the cylinder or
tube, a pulley carried by said yoke, and a

polishing band or belt passing over said pul- 10
leys, substantially as set forth.

In testimony whereof I have signed this
specification in the presence of two subscrib-
ing witnesses.

CHARLES SEYMOUR.

Witnesses:

GEO. W. DEATRICH,
MAY E. FISHER.