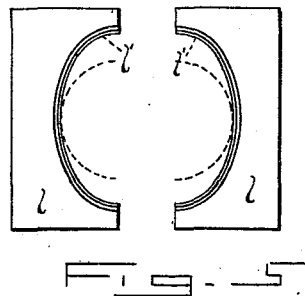
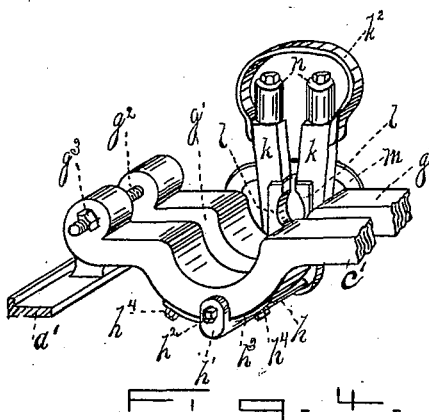
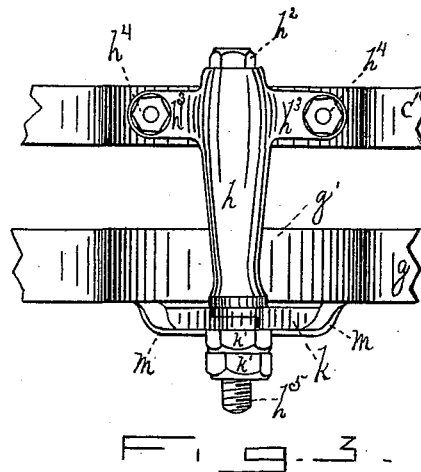
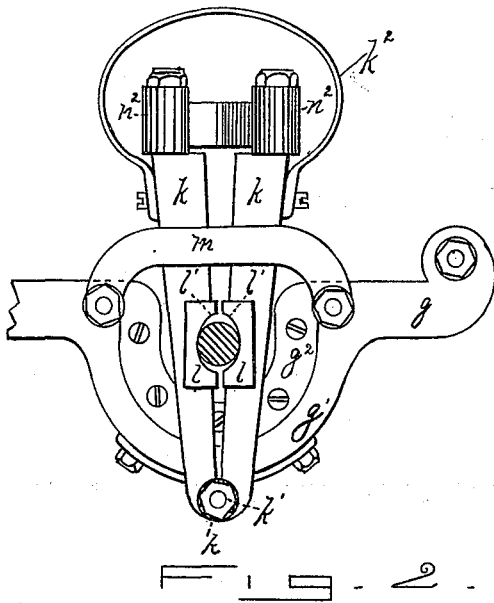
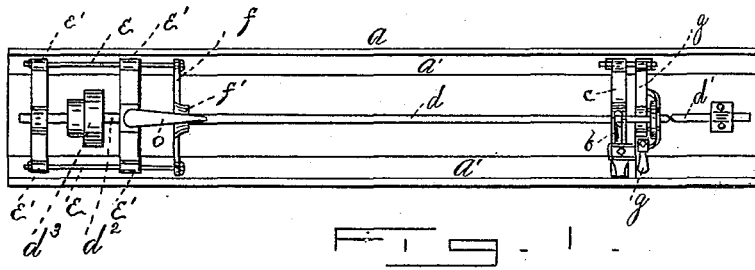


C. A. ARTMAN.

POLISHING ATTACHMENT FOR LATHES.

No. 348,146.

Patented Aug. 24, 1886.



Witnesses:

*Otto Haddick*  
*Max Y. Biehl*

Inventor:

*Clifford A. Artman*  
 by *W T Miller*  
 Attorney.

(No Model.)

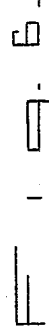
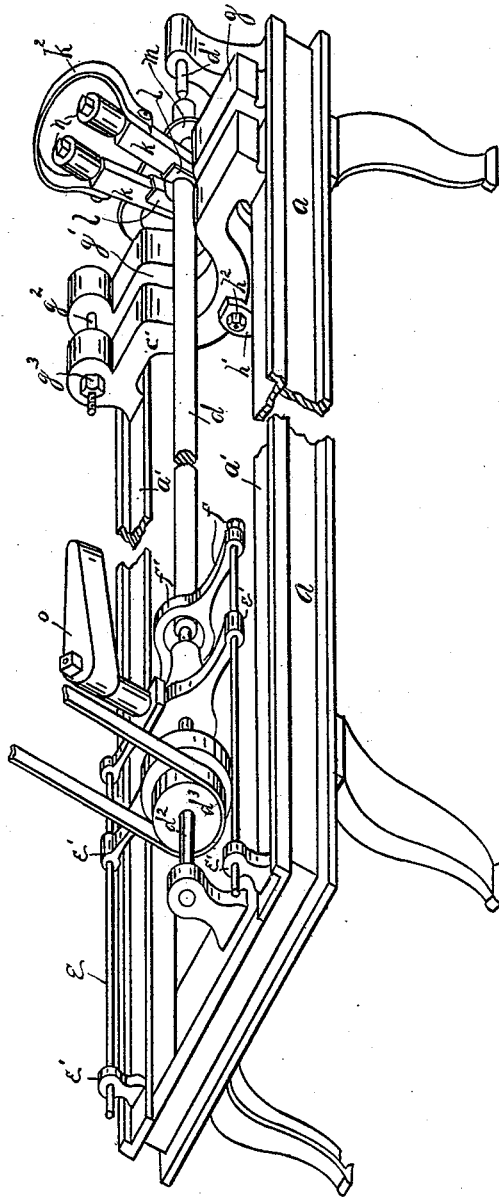
2 Sheets—Sheet 2.

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Inventor.

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# UNITED STATES PATENT OFFICE.

CLIFFORD A. ARTMAN, OF DANSVILLE, NEW YORK.

## POLISHING ATTACHMENT FOR LATHES.

SPECIFICATION forming part of Letters Patent No. 348,146, dated August 24, 1886.

Application filed January 26, 1885. Serial No. 154,072. (No model.)

*To all whom it may concern:*

Be it known that I, CLIFFORD A. ARTMAN, a citizen of the United States, residing at Dansville, in the county of Livingston and State of New York, have invented certain new and useful Improvements in Polishing Attachments for Lathes; 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, reference being had to the accompanying drawings, and to letters or figures of reference marked thereon, which form a part of this specification.

My invention consists in a novel attachment for lathes, by means of which broom-handles and other like objects can be polished at the same time that they are being turned in the lathe, all as will be more fully hereinafter described and claimed.

In the drawings, Figure 1 is a top plan view of an ordinary lathe with my improved polishing attachment shown in connection therewith. Fig. 2 is a detached outside end view of my polishing attachment. Fig. 3 is an under side view of the same, showing the manner of securing it to one part of the lathe. Fig. 4 is an inside perspective view of the same; and Fig. 5 shows the polishing-block detached. Fig. 6 is an enlarged perspective view of Fig. 1.

Referring to the drawings, *a* is the framework upon which the lathe mechanism is mounted.

*a' a'* are the shouldered ways upon which the frames carrying the cutting-tool and polishing attachment slide.

*b* is the cutting-tool, which is secured in a frame of which *c*, Fig. 1, is the upper portion and *c'*, Figs. 3 and 4, is the lower portion.

*d* is the piece of wood, which is being turned to form the broom-handle. It is secured at one end to the stationary chuck *d'*, and at the other end to the revolving chuck *d''*, upon which are the pulleys *d'''* for the driving-belt.

*e e* are the rods, sliding in the bearings *e'*, to the front end of which is secured the cross-head *f*, having the center portion, *f'*, surrounding the broom-handle. When the frame *c c'* carrying the cutting-tool reaches the cross-head *f f'*, it throws it forward, releasing the broom-handle from the chuck *d''*.

The mechanism just described is an ordinary form of lathe, and will fully serve to illustrate the application of my improved polishing attachment, which is constructed and applied substantially as follows:

Referring particularly to Figs. 2, 3, and 4, *g* is a frame, preferably of hard wood, having the downwardly-bowed central portion, *g'*, faced with the metallic shoe *g''* for the purpose of stability. This frame *g g'* is secured upon its under side to the frame *c c'*, carrying the cutting-tool, by the metal cross-piece *h*. This cross-piece *h* has the turned-up end *h'*, which is secured by the screw-bolt *h''* to the frame *c'*, and underneath the frame *c'* the curved wings *h''' h'''* of the cross-piece *h* are similarly secured by the bolts *h'' h''*. The two frames, *c'* and *g*, are additionally secured at the side by the screw-threaded bolt *g''* and nut *g'''*. The other end, *h''*, of the cross-piece *h* serves as a pivotal bearing for the two arms *k k*, the lower ends of which encircle the end *h''* of the cross-piece *h*, and are held in place by the nuts *k' k'*, the upper ends being connected by the bowed spring *k''*, which serves to press the arms *k k* tightly together. Upon the inner faces of these spring-arms *k k* are seated the steel blocks *l l*, having their inner faces provided with the curved and rounded surfaces *l' l'*, which are polished and form the burnishing-surfaces which come in contact with the broom-handle immediately in the rear of the cutting-tool.

*m* is a metal brace, which is secured to the frame *g* on both sides of the bowed portion *g'*, and serves to brace the arms *k k* in their upright positions. At the top of the arms *k k* are loosely pivoted the upright rollers *n n*. These rollers are adapted for engagement with the wedge *o*, (see Fig. 1,) which, when the polishing attachment reaches the end of the broom-handle, enters between the rollers and separates the spring-arms *k k*, thereby releasing the broom-handle from contact with the polishing-blocks *l l* at the same time that the handle is released from the chuck *d''*.

It will be seen from the foregoing description that my improved polishing attachment performs its work simultaneously with the turning of the broom-handle, and gives to its surface a finish which enables it to be at once utilized without further manipulation, thus

saving the expense of varnishing to which it is now subjected. The handles so turned and polished, whether for brooms, hoes, rakes, or the like, form a finished article of manufacture.

5 It is apparent that my polishing attachment is adapted for use in connection with the simultaneous turning and polishing of all articles analogous to broom-handles, although I have  
10 herein shown it to be especially adapted for the latter purpose.

I claim—

15 1. A polishing attachment for lathes, located behind the cutting-tool, consisting, essentially, of a pair of pivoted spring-arms having curved polished surfaces on their inner faces adapted for contact with the article being turned, substantially as shown and described.

2. A polishing attachment for lathes, located behind the cutting-tool, consisting of a pair 20 of spring-arms having curved polished surfaces on their inner faces adapted for contact with the article being turned, and friction-rollers at their upper ends, to engage with a separate wedge for releasing the article from 25 contact with the spring arms, substantially as shown and described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

CLIFFORD A. ARTMAN.

Witnesses:

GEORGE E. SCOTT,  
JOHN ARTMAN.