(No Model.)

A. LECK.

ATTACHMENT FOR LATHES.

No. 439,531. Patented Oct. 28, 1890.

Fig. 1.

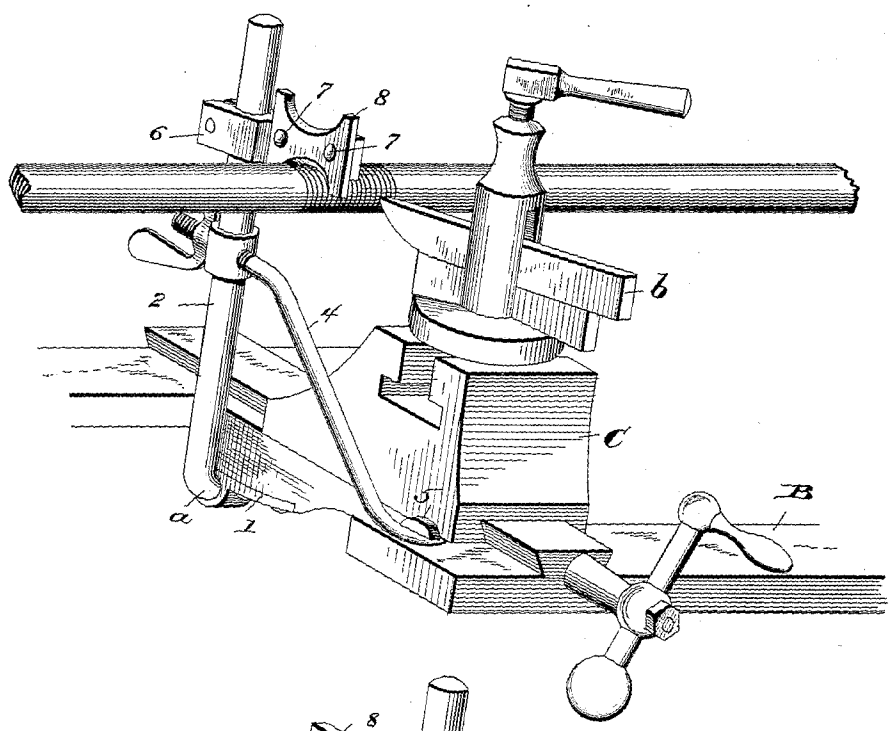
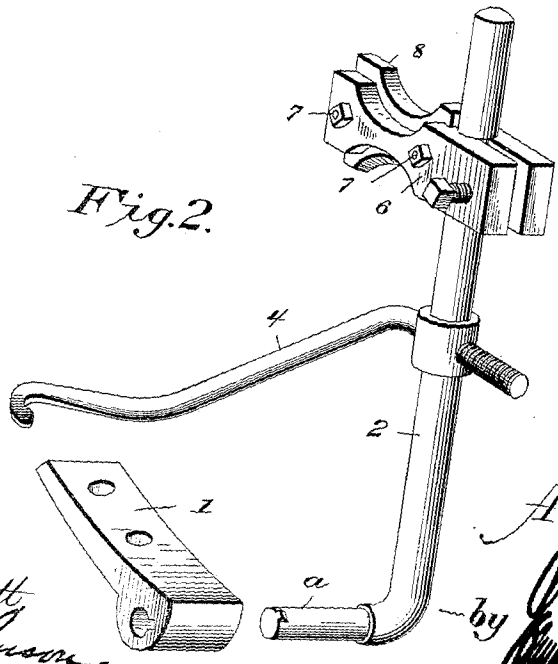


Fig. 2.



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ADAM LECK, OF NEW BETHLEHEM, PENNSYLVANIA.

ATTACHMENT FOR LATHES.

SPECIFICATION forming part of Letters Patent No. 439,531, dated October 28, 1890.

Application filed April 24, 1890. Serial No. 349,355. (No model.)

To all whom it may concern:

Be it known that I, ADAM LECK, a citizen of the United States of America, residing at New Bethlehem, in the county of Clarion and State of Pennsylvania, have invented certain new and useful Improvements in 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.

This invention relates to certain new and useful improvements in attachments for lathes, the object being to provide a work-holder which is adapted to be attached to the slide-rest and carried thereby to prevent the work moving or springing adjacent to the cutting-tool carried by the slide-rest; and it consists in providing the slide-rest of a lathe with a standard to which is adjustably attached a block so shaped as to fit over the work adjacent to the cutting-tool.

My invention further consists in the construction and combination of the parts, as will be hereinafter fully set forth, and particularly pointed out in the claims.

In the accompanying drawings, Figure 1 is a perspective view of a slide-rest, showing my improvement applied thereto; and Fig. 2 is a detail view of the work-holder.

My invention is adapted to be applied more especially to screw-cutting lathes, and is adapted to take the place of the rest which is usually carried upon the bed of the lathe, it being understood that the slide-rest carries the cutter.

The bed of the slide-rest B is of the construction usually employed in connection with screw-threading lathes, and the tool *b* is adjustably attached thereto. This bed below the head C has connected thereto a plate 1, which may be adjustably secured to the under side of said plate or provided with a series of perforations, in which the bent end of the standard 2 is secured. The bent end *a* of the standard 2 has formed thereon a lug which passes through a recess in one of the perforations of the plate 1, so that when placed therein and turned it will be held against outward displacement. At a suitable distance above its lower end the standard 2 is enlarged and is provided with a perforation through which passes a rod 4, which may be bent, as shown, the upper end thereof being screw-threaded and provided with a nut, while its lower end is hooked or bent to engage with a pin 5, carried by the bed B. It will be obvious that by turning or loosening the nut the angle of the standard 2 can be varied and said standard adjusted to meet the requirements of the work to be performed. A casting 6, having an opening through which the upper end of the standard 2 passes, is provided, said casting being secured to the standard by means of a set-screw, which when turned can either bear against the standard to hold the casting immovable thereon or said casting may have a slotted opening, the set-screw passing through the bifurcated portions of said opening to clamp the same securely in position. The portion of the casting which projects toward the cutting-tool is recessed on one side, and the upper and lower edges of this projecting portion are concave, and it is also provided at suitable points with perforations through which pass bolts 7 for holding thereon a plate 8. This plate has one side concaved and rounded, while the other side is concaved and sharpened or provided with beveled edges, so that it will lie within the threads of a bar when the threads are being cut therein. The plate 8 is removable, and such shaped plates may be applied as may be required by the nature of the work.

From the foregoing description the construction of my invention will be readily understood.

In use when it is desired to screw-thread a long bar said bar is secured in the lathe in the usual manner. The standard is then adjusted on the slide-rest, and the casting 6 lowered, the smoothed concaved side of the plate 8 being placed to rest upon the rod. When the lathe is started, the slide-rest will travel upon the bar, and while the cutting or smoothing of said bar is being performed by a suitable tool the plate H will prevent the springing of the bar against the tool or cutter. After the bar has been sufficiently

smoothed or turned the first impression or cutting of the thread is made, the rounded portion of the plate still being in contact with the bar. After the threading tool or cutter has been passed over the surface of the rod one or more times the plate 8 is reversed, so that the beveled or sharp edges will contact with the partially-cut thread, and as the thread is cut deeper by the repeated operations the nut on the screw-threaded end of the bar 4 may be turned to move the standard upon its pivot and bring the edges of the plate in contact with the partially-cut threads.

The device hereinbefore described is simple and can be quickly operated, and it is not only useful in cutting threads upon bars, but all other classes of work performed upon lathes where a work-rest is desired.

I am aware that prior to my invention it has been common to employ in connection with lathes work-rests which rested upon the bed-plate of the lathe or were carried by a slide-rest; but such work-rests that have come to my knowledge were cumbersome and required several adjustments to throw them out of contact with the work being operated upon.

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

1. In combination with the slide-rest of a lathe, a standard carried by the slide-rest, a bar for adjusting said standard to and from the cutting-tool of the slide-rest, and an adjustable plate carried by said standard to engage with the work, substantially as set forth.

2. In combination with a slide-rest for lathes, of a work-holder consisting of a pivotally-supported standard, a bar adjustably secured to the standard and removably secured to the bed-plate of the slide-rest, and a casting clamped upon the standard and provided with a reversible plate, substantially as shown, whereby the standard can be adjusted upon its pivot and the plate thrown in and out of contact with the work with which the cutter of the slide-rest engages, for the purpose set forth.

3. In combination with a slide-rest, a standard 2, pivotally and removably secured thereto, a brace and adjusting bar 4, adapted to pass through the standard, a nut for adjusting the same, the lower end of the brace-bar having a hook which engages with a pin carried by the slide-rest, an adjustable arm or casting 6, and a plate 7, removably secured thereto, substantially as set forth.

4. In combination with a slide-rest, a movable standard carried thereby, a rod for supporting and adjusting said standard, an arm or casting secured to the upper end of said standard to be adjustable vertically and horizontally, the projecting portion of said arm having concaved portions, and a plate 7, secured to the projecting portion of the arm, substantially as set forth.

In testimony whereof I affix my signature in presence of two witnesses.

ADAM LECK.

Witnesses:
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