K. MÜLLER.

Turning Implement for Lathes.

No. 219,970. Patented Sept. 23, 1879.

Fig. 1.

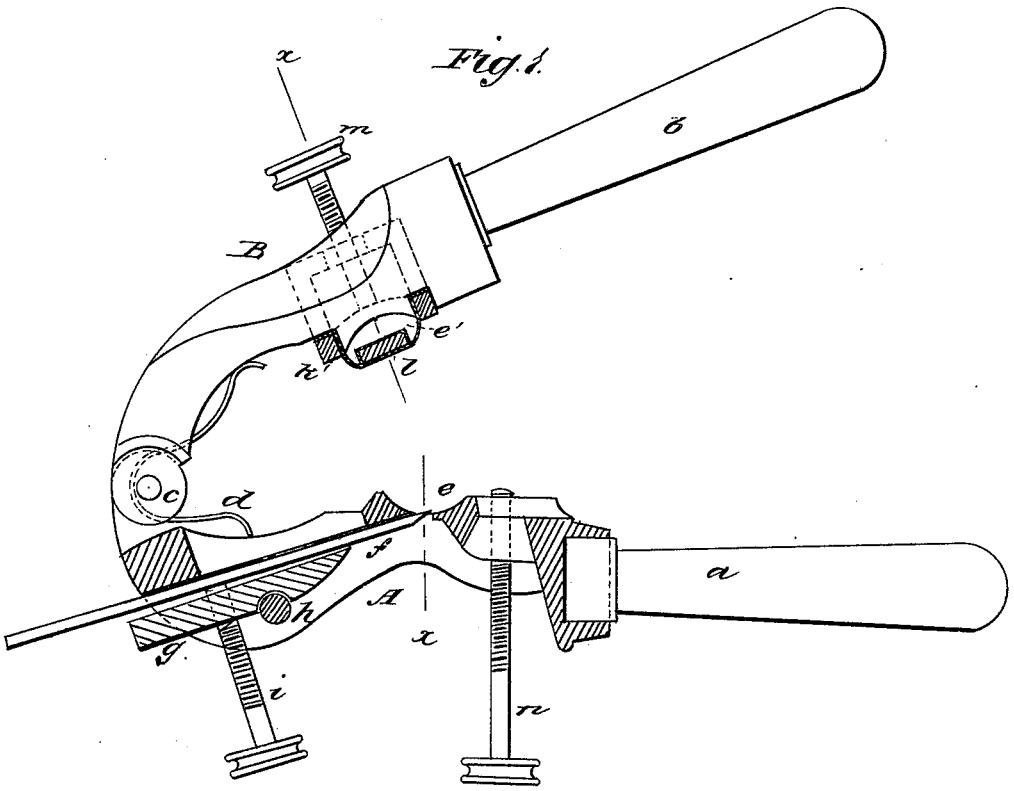
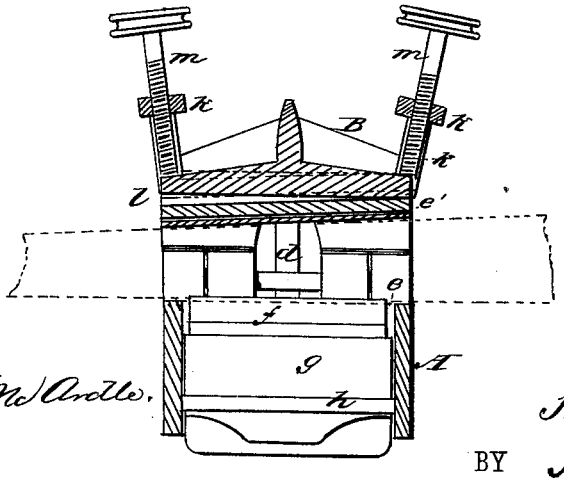


Fig. 2.



WITNESSES:

Francis McArdle.

C. Seligwick

INVENTOR:

K. Müller

BY Munn & Co

ATTORNEYS.

UNITED STATES PATENT OFFICE.

KARL MÜLLER, OF FORDHAM, (NEW YORK,) N. Y.

IMPROVEMENT IN TURNING IMPLEMENTS FOR LATHES.

Specification forming part of Letters Patent No. **219,970**, dated September 23, 1879; application filed July 3, 1879.

To all whom it may concern:

Be it known that I, KARL MÜLLER, of Fordham, (New York,) county of New York, and State of New York, have invented a new and Improved Turning Implement, of which the following is a specification.

My invention relates to tools or implements for use with lathes in turning articles with straight or tapered surfaces; and consists in certain novel features of construction, whereby the tool is especially adapted for small work, and for obtaining uniformity to a given pattern when the articles are produced in large quantities.

I will describe the invention in connection with the accompanying drawings, and point out the novel features in the claims.

In the drawings, Figure 1 is a side elevation and partial section of my improved implement. Fig. 2 is a cross-section of the same on line *x x* of Fig. 1.

Similar letters of reference indicate corresponding parts.

A B are metal heads or levers, hinged together at one end by a pin, *c*, and fitted respectively with handles *a b*, by which they are brought together or separated as required. *d* is a spring fitted between the levers or heads A B, and tending to separate them, so that pressure is required to keep the cutters upon the work, as hereinafter described.

Across the lower head, A, at its moving end, is a groove, *e*, that is shaped in cross-section in the arc of a circle, and receives through a slot in its bottom the end of a cutter, *f*, that is attached to the under side of head A. The cutter *f* is clamped removably and adjustably in the head A by a wedge-block, *g*, inserted between the fixed cross-bar *h* and the cutter, and by the screw *i*, that passes through *g*, with its end bearing upon the cutter, so that by loosening the screw *i* the cutter may be adjusted or entirely withdrawn.

The head B is formed also with a circular groove, *e'*, similar to groove *e* in head A, and in line therewith, so that when the heads A B are brought together the groove *e* is at the under side of the article, and *e'* forms a pressure-support at the upper side and opposite the cutter. The groove *e'* is formed in a projecting portion of head A, around which is fitted a frame, *k*, that clamps the edges of a pad, *l*, and retains the pad in place in the groove *e'*. The frame *k* is fitted with a screw, *m*, at each end for drawing it tightly to place, and by loosening one screw *m* and tightening the other the frame *k* and pad *l* are brought to an inclination according to the bevel required.

In the head A is fitted a screw, *n*, which forms a stop to limit the closing of the heads together and may be adjusted. This screw is used only when cylindrical articles with parallel sides are being turned, and with work of that kind the pad *l* will be removed.

In operation the tool is adapted for turning articles of diameter from the smallest up to the size represented by the circle of grooves *e e'*, and the screw *n* being once set, as required, the articles can be turned in succession to a uniform size.

For turning tapering or beveled articles the tool is to be manipulated as necessary to give the required shape. The pad *l* will be made use of, and by the adjustment before described the pad is allowed to give way at one end to the extent required for the taper.

By the use of the spring *d* the cutter is thrown off from the work as soon as the pressure is relieved, and the depth of cut will be in proportion to the pressure.

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

1. The combination of head B, having groove *e'*, the pad-frame *k*, and the screw *m*, as and for the purpose specified.

2. In combination with the head or lever A, fitted with the cutter *f*, the head or lever B, fitted with the adjustable frame *k* and pad *l*, substantially as and for the purposes specified.

KARL MÜLLER.

Witnesses:

C. SEDGWICK,

J. H. SCARBOROUGH.