(No Model.)

G. C. MALONE.

LATHE ATTACHMENT.

No. 599,510. Patented Feb. 22, 1898.

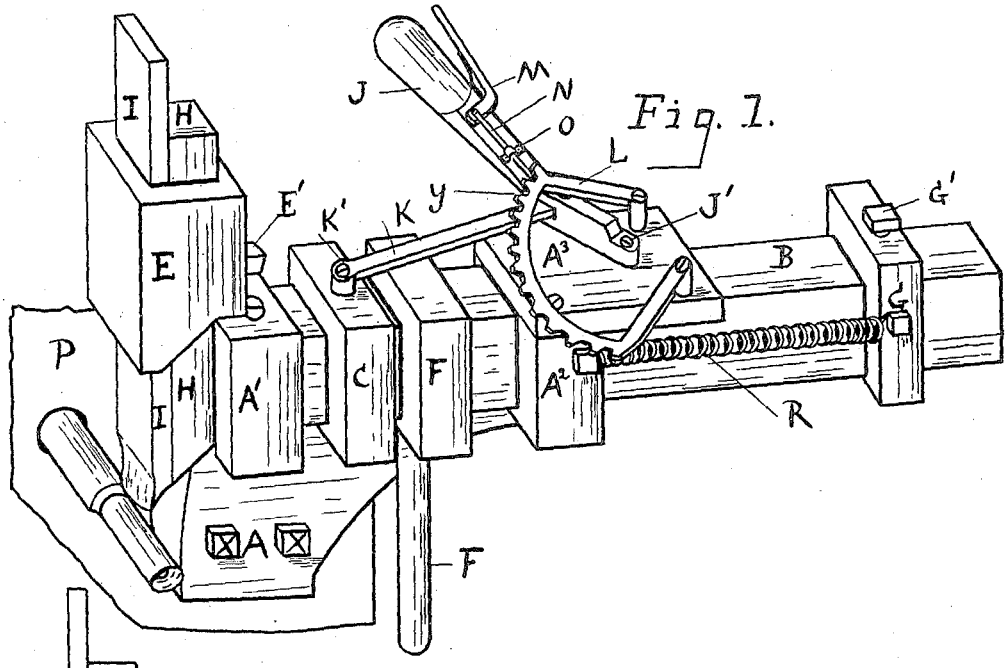

Fig. 1.

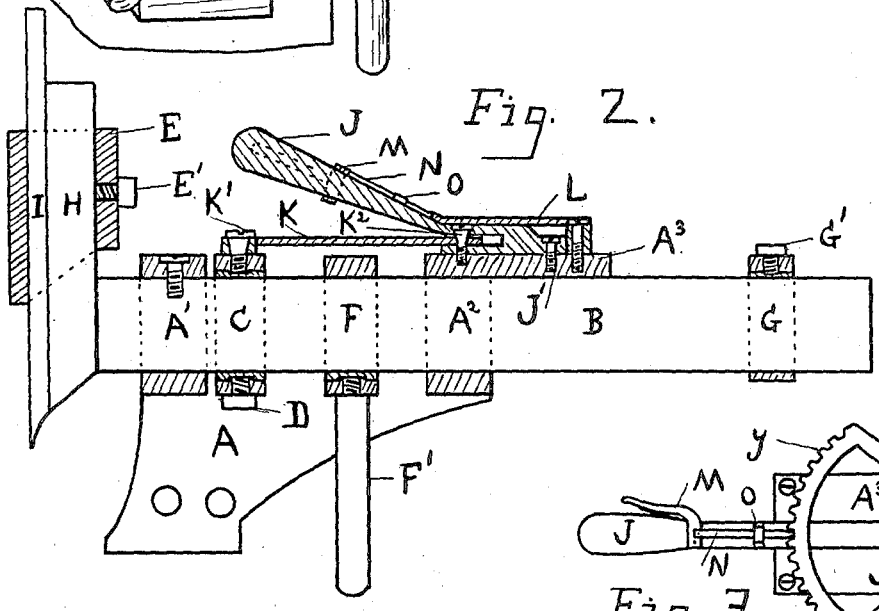

Fig. 2.

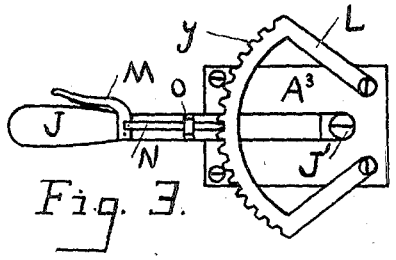

Fig. 3.

Witnesses
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by
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UNITED STATES PATENT OFFICE.

GLENN C. MALONE, OF BINGHAMTON, NEW YORK, ASSIGNOR OF ONE-HALF TO FRANK E. VAN WORMER, OF SAME PLACE.

LATHE ATTACHMENT.

SPECIFICATION forming part of Letters Patent No. 599,510, dated February 22, 1898.

Application filed February 18, 1897. Serial No. 623,971. (No model.)

To all whom it may concern:

Be it known that I, GLENN C. MALONE, a citizen of the United States, residing at Binghamton, in the county of Broome and State of New York, have invented certain new and useful Improvements in Lathe Attachments; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, forming part thereof.

My invention relates to improvements in lathe attachments; and the object of my iments is to provide a knife attachment to take the place of a back knife and do work not possible with a back knife. I attain this object by means of the mechanism illustrated in the accompanying drawings, in which—

Figure 1 is a perspective view of my attachment. Fig. 2 is a vertical sectional view of my attachment. Fig. 3 is a plan view of a part of my attachment.

Similar letters indicate the various parts in the different figures of the drawings.

My attachment is designed to take the place of a back knife, doing the same work more accurately and doing work not to be done by a back knife. It is composed of the body A, having the parts A′ and A^2, pierced by square openings, through which the bar B slides when not held rigid by set-screws, with which these parts are provided. To the forward end of this bar B is secured the knife-yoke E, having a vertical opening, through which the knife I is pressed against the bar-head H and secured with the screw E′. The table A^3 is the top of the part A^2, and upon it is bolted movably the lever J at J′. To this lever is movably attached one end of the rod K, the other end being movably attached to the yoke C. Over the lever J is secured the segment L, provided with the teeth Y, so as to engage the bolt N, guided by keeper O, and this holds the knife I at any required distance from the wood to be operated upon. This bolt is operated by the small lever M and can be locked or unlocked by a pressure of the hand while operating the lever J. The gage-yoke F is used when a pattern is to be followed by connecting the gage F′ with the pattern. The spiral spring R, which is connected to yoke G, the yoke G being secured to the bar B by set-screw G′, holds the knife up to its work when the gage F′ is used.

The attachment is bolted to the movable lathe-head by the bolts X at right angles to the length of the lathe and the knife adjusted to the center of the back of the stick. The lathe is then started and the operator, holding the lever J, can by turning it move the knife backward and forward, thus cutting any desired pattern and cutting the stick down to a needle thickness without breaking it, if necessary. This can be done at once, as the pressure of the knife is against the length of the uncut wood instead of against the cross-section—that is to say, the cutting edge of the knife presses against the stick of wood in a longitudinal direction—the forward end of the wood being left loose without a bearing or in a loose bearing, the other end only being held rigid.

What I claim as my invention, and desire Letters Patent for, is—

In a lathe attachment, the combination with a lathe of the attachment having the body composed of the parts A, A′, A^2, and A^3 through which moves the sliding bar B, to one end of which is secured the knife-yoke E containing the knife I, in combination with the adjusting mechanism composed of the lever J secured to the yoke A^3, and connected with the yoke C by the rod K, engaging the teeth of the lever-gage L by means of the lock-lever M and bolt N; as described and specified.

GLENN C. MALONE.

Witnesses:

FRANK E. VAN WORMER,

J. E. BOOKSTAVER.