(No Model.)

E. R. KUGLER.

TURNING LATHE.

No. 286,933. Patented Oct. 16, 1883.

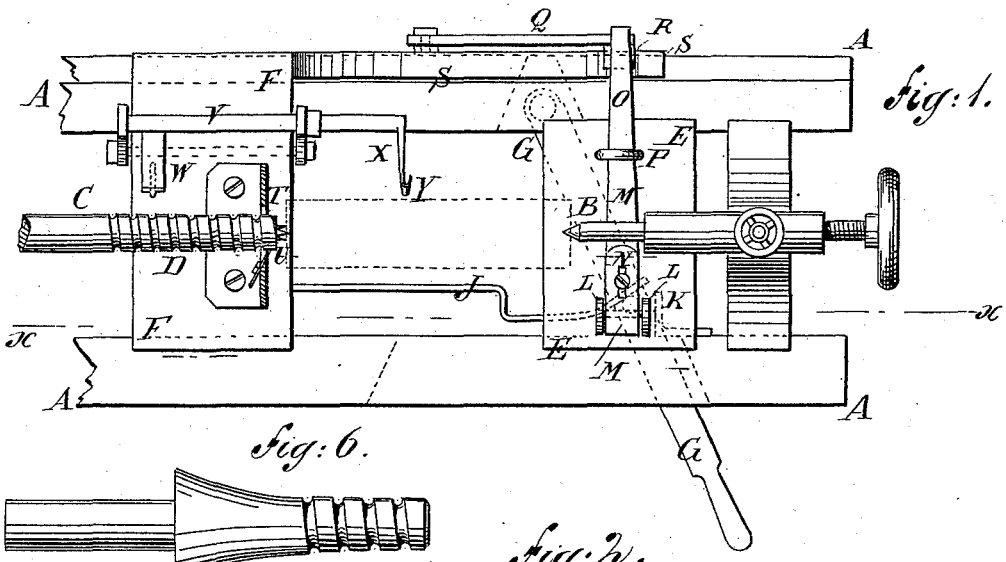

Fig: 1.

Fig: 6.

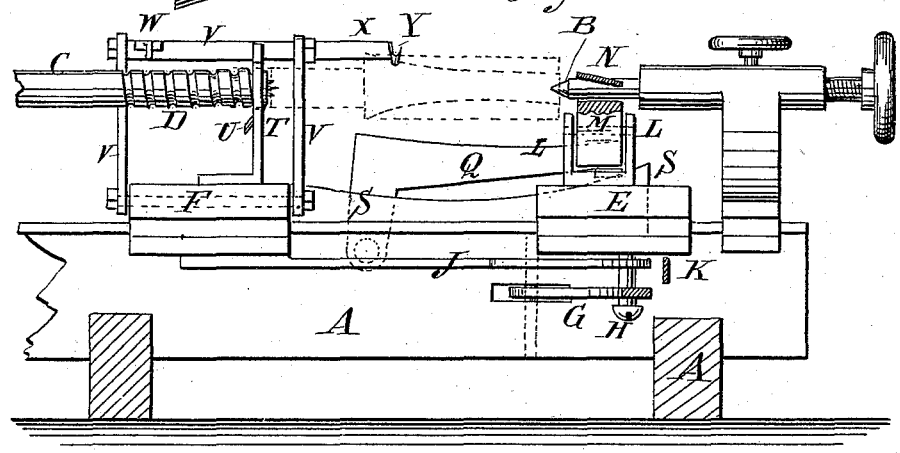

Fig: 2.

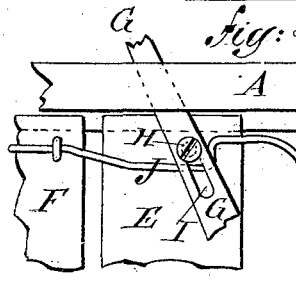

Fig: 4.

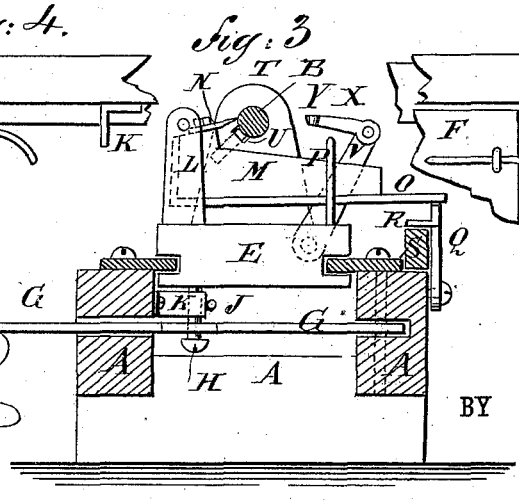

Fig: 3

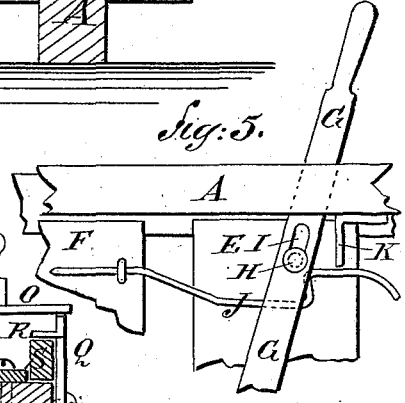

Fig: 5.

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EPHRAIM R. KUGLER, OF KINGWOOD, NEW JERSEY.

TURNING-LATHE.

SPECIFICATION forming part of Letters Patent No. 286,913, dated October 16, 1883.

Application filed February 8, 1883. (No model.)

To all whom it may concern:

Be it known that I, EPHRAIM R. KUGLER, of Kingwood, in the county of Hunterdon and State of New Jersey, have invented a new and useful Improvement in Machines for Making Telegraph Pins and Brackets, of which the following is a full, clear, and exact description.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a plan view of my improvement. Fig. 2 is a sectional side elevation of the same, taken through the line *x x*, Fig. 1. Fig. 3 is a sectional end elevation of the same. Fig. 4 is an under side view of a part of the same, showing the slide-operating lever, the spring-latch, and its trip-plate. Fig. 5 is the same view as Fig. 4, but showing the parts in another position. Fig. 6 represents a telegraph-pin.

The object of this invention is to facilitate the making of telegraph pins and brackets.

A represents the frame of a lathe. B is the stationary center, and C is the rotating center, which has a screw-thread, D, cut upon it to serve as a gage in cutting the screw-thread upon a telegraph pin or bracket.

Upon ways formed upon or attached to the top of the lathe-frame A are placed two sliding blocks, E F.

To the lower side of the forward slide, E, is pivoted by a pin or screw, H, a lever, G, which has a longitudinal slot, I, formed in it to receive the said pivoting-pin, so that the said slide can move in a straight line, while the free end of the lever moves through the arc of a circle. The rear end of the lever G is pivoted to the rear top bar of the frame A, and the forward part of the said lever passes through a slot or keeper formed in or attached to the front top bar of the lathe-frame A, so that the said slide can be moved back and forth by operating the said lever.

To the lower side of the slide F is attached a spring-latch, J, the shoulder or offset of which engages with the pin or screw H, attached to the slide E, so that the said slide E, in its forward movement, will carry the slide F with it. The free end of the latch J is curved inward, so that the said latch will engage automatically with the pin H, and will be disengaged from the said pin H by striking against a trip-plate, K, attached to the lathe-frame A.

To supports L, attached to the slide E, is hinged the knife-holder M, the knife N of which is designed to form the head of the telegraph pin or bracket.

Upon the forward end of the knife-holder M is formed, or to it is attached, an arm, O, which passes through a staple or other keeper, P, attached to the slide E. The outer end of the arm O rests upon a guide, Q, the rear end of which is hinged to the frame A.

Upon the inner side of the forward end of the guide Q is formed, or to it is attached, a projection, R, which rests upon the concaved upper side of a guide, S. The guide S rests and slides upon the rear top bar of the frame A, and is rigidly attached at its rear end to the slide F.

To the slide F is attached the flanged lower end of the upright plate T, which has a hole formed through it for the passage of the center C and the shank of the telegraph-pin.

To the plate T is attached a knife, U, for forming the shank and shoulder of a telegraph-pin.

To the rear part of the slide F is hinged the lower edge of a plate or frame, V, to the upper edge of which, or to a bar attached to the said upper edge, are secured two arms, W X. The outer end of the arm W, or a point formed upon the said outer end, enters the screw-thread D of the rotating lathe-center C, so that the slide F will be carried along its ways by the revolution of the said lathe-center C. The forward arm, X, serves as a holder to carry the knife Y, by which the screw-thread is cut upon the head of the telegraph pin or bracket.

In using the machine, the two slides E F are adjusted in the positions shown in Figs. 1 and 2, and the blank telegraph-pin is placed upon the lathe-centers B C, as shown in dotted lines in Figs. 1 and 2. The lever G is then operated to move the slide E inward, which causes the knife N to roughly shape the head of the telegraph-pin. As the slide E approaches the slide F, the latch J engages with the pin H, and the two slides E F are moved together

by moving the lever G in the other direction. As the slides E F move forward, the guide S moves forward beneath the projection R of the guide Q and allows the said guide Q to move downward along the curved upper edge of the guide S, so that the knife-holder M will be lowered to cause the knife N to give the desired curved and tapered shape to the head of the telegraph-pin. As the two slides E F approach the end of their forward movement, the trip-plate K raises the latch J off the pivot H, and at the same time the operator swings the hinged support V forward by taking hold of its upper edge with his hand, or by means of a lever attached to the said upper edge, which brings the knife Y of the arm X in contact with the head of the telegraph-pin, and the arm W into the thread D of the lathe-center C, so that the slide F will be moved back by the revolution of the said lathe-center C, and the knife Y will be made to cut a screw-thread of the desired depth and pitch upon the head of the telegraph pin or bracket.

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

1. A machine for making telegraph pins and brackets, constructed substantially as herein shown and described, and consisting of a lever-operated slide provided with a hinged knife-holder, a slide provided with a latch and a stationary knife-holder, guides for controlling the hinged knife-holder, and a hinged support provided with a guide-arm and a knife-carrying arm, as set forth.

2. In a machine for making telegraph pins and brackets, the combination, with the lathe-frame A, of the slides E F, the guides Q S, and the hinged knife-holder M, substantially as herein shown and described, whereby the head of the telegraph pin or bracket will be formed by the rearward movement of the forward slide and the forward movement of the two slides, as set forth.

3. The combination, with the slides E F, the former carrying the supports L and keeper P, of the knife-holder M, hinged to said supports, the arm O, the guide Q, hinged to frame A and having the projection R, and the upwardly-concaved guide S, sliding upon the frame top bar and attached at its rear end to slide F, as and for the purpose specified.

4. The shank and shoulder forming knife V, in combination with the center C and the plate T, the latter having a flanged lower end attached to the slide F, and a hole for the passage of the center and telegraph-pin, as shown and described.

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Witnesses:

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