

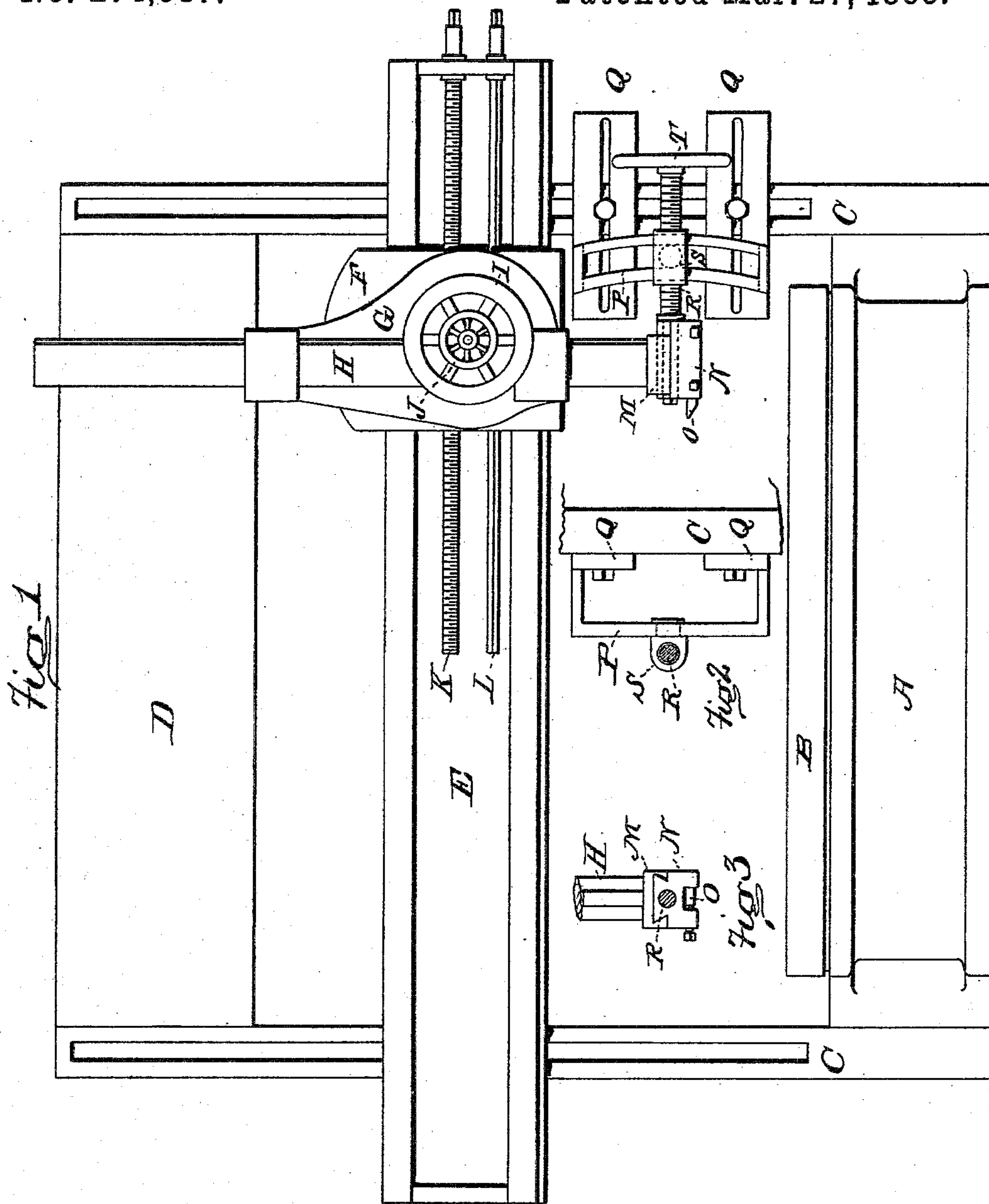
(No Model.)

G. T. REISS.

BORING MILL ATTACHMENT.

No. 274,517.

Patented Mar. 27, 1883.



WITNESSES:

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GEORGE T. REISS, OF HAMILTON, OHIO, ASSIGNOR TO THE NILES TOOL WORKS, OF SAME PLACE.

BORING-MILL ATTACHMENT.

SPECIFICATION forming part of Letters Patent No. 274,517, dated March 27, 1883.

Application filed September 23, 1882. (No model.)

To all whom it may concern:

Be it known that I, GEORGE T. REISS, of Hamilton, Butler county, Ohio, have invented certain new and useful Improvements in Boring-Mills, of which the following is a specification.

This invention relates to a device to be attached to boring and turning mills to cause the cutting tool to travel in a curved path in order to produce a circular crown upon belt-pulleys; and it consists of a fixed former combined with a sliding tool-holder upon the end of the tool-bar, and a bar connecting them, as hereinafter set forth.

In the drawings, Figure 1 is a front view of a boring-mill embodying my improvement. Fig. 2 is a side view of the former as it would appear if viewed from the right-hand side of the boring-mill shown in Fig. 1. Fig. 3 is the sliding tool-holder viewed in the same manner with former removed.

A is the bed of the boring-mill; B, the table; C C, the housings; D, the top brace; E, the cross-rail; F, the saddle; G, the swing; H, the tool-bar; I, the hand-wheel for operating the tool by hand; J, the hand-wheel for throwing into action the power-feed for the tool-bar; K, the screw for traversing the saddle, and L the rod for transmitting the power-feed to the tool-bar, all constructed in the usual manner.

The cutting-tool is generally held in the end of bar H, and is fed downward or upward in right lines.

M is a head on the lower end of the tool-bar; N, a tool-holder dovetailed to slide horizontally in head M; O, the cutting-tool; P, an arc-shaped former; Q Q, slides attached to former P and bolted to housing of mill; R, a threaded bar journaled in tool-holder N; S, a nut on bar R, engaging with former P, and T a hand-wheel on bar R.

As the tool-bar feeds downward, the nut S, partaking of the same vertical motion, is guided by the former P, and serves to guide the tool-holder N in a vertical path as defined by the former.

The hand-wheel T serves to adjust the tool to proper depth of cut. For pulleys of different sizes the saddle, &c., are adjusted into proper position along the rail, as usual, and the slides Q permit the former P to be adjusted into a position close to the tool-bar, as shown.

To guide the tool by formers is not new in turning, and I make no broad claim to such method, nor, broadly, to means for executing such method.

I claim as my invention—

1. In a boring-mill attachment, the combination, with the boring-mill, of a tool-holder fitted to slide across the lower end of the tool-bar of the boring-mill, a former attached to the frame of the boring-mill in a position substantially parallel with said tool-bar, and a bar attached to said tool-holder, projecting in the direction of its sliding motion and engaging said former, substantially as shown and described.

2. In a boring-mill attachment, the combination, substantially as set forth, of tool-bar H, sliding tool-holder N, former P, slides Q Q, threaded bar R, nut S, and hand-wheel T, substantially as shown and described.

3. In a boring-mill attachment, the combination, substantially as set forth, of tool-bar H, sliding tool-holder N, former P, threaded bar R, nut S, and hand-wheel T, substantially as shown and described.

GEORGE T. REISS.

Witnesses:

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