

(No Model.)

E. F. W. HORN.
BAND SAW GUIDE.

No. 492,511.

Patented Feb. 28, 1893.

Fig. 1.

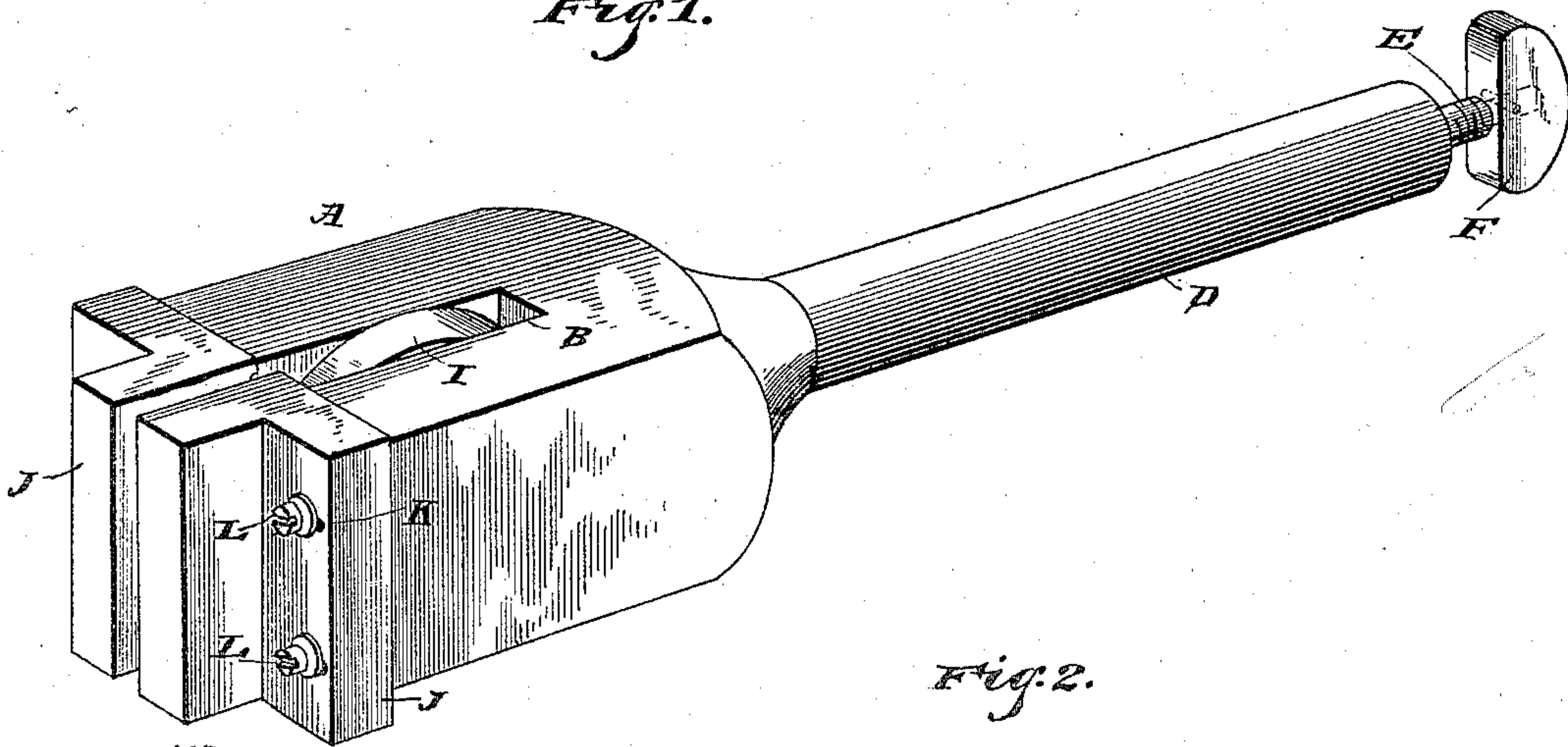


Fig. 2.

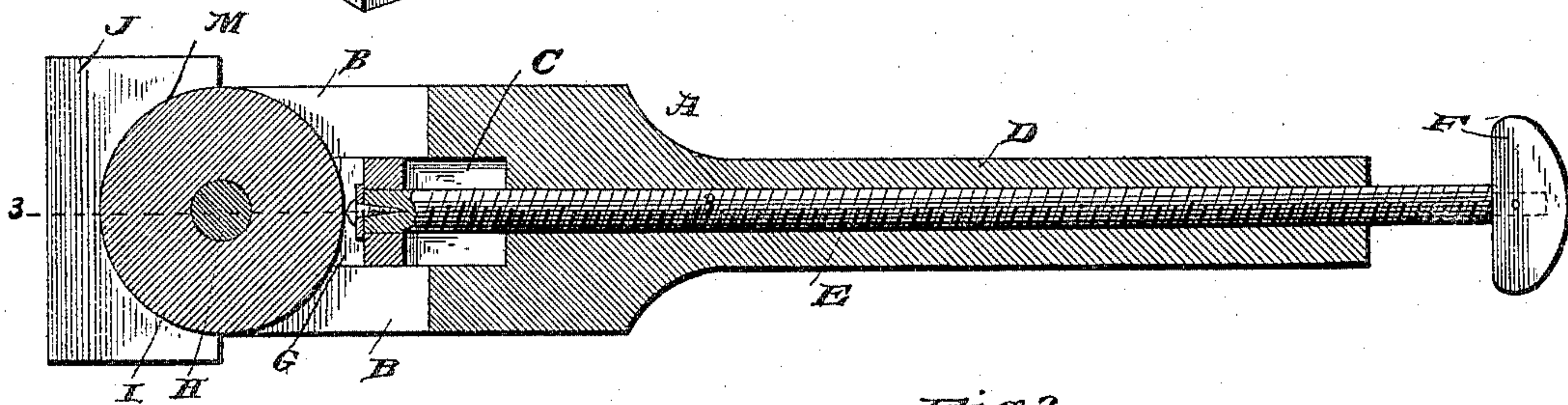


Fig. 3.

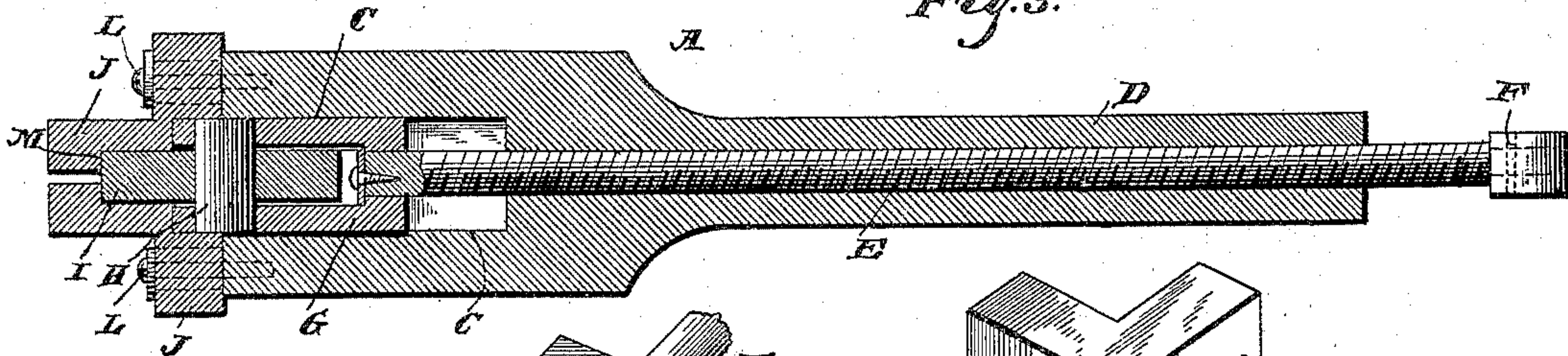


Fig. 4.

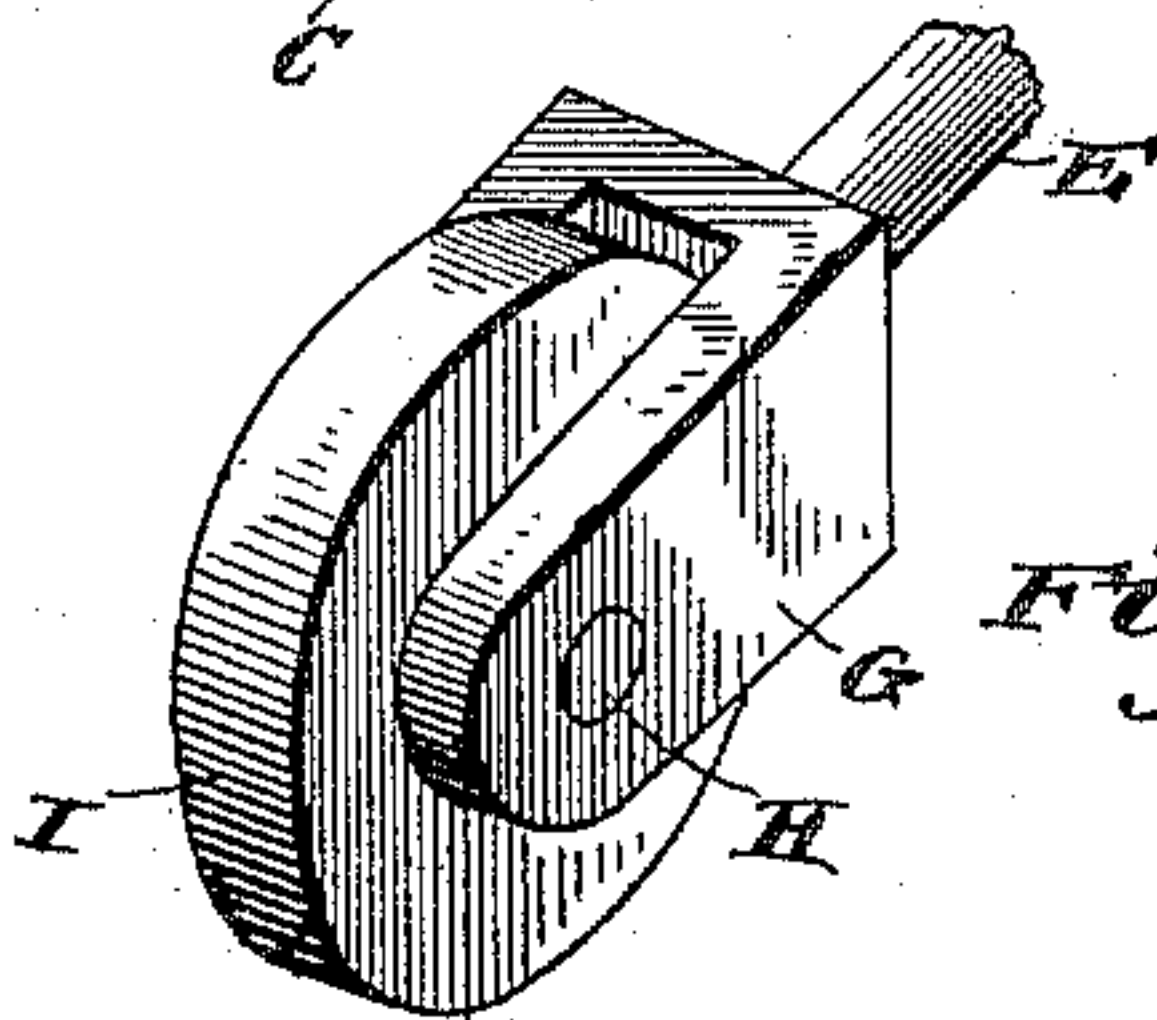
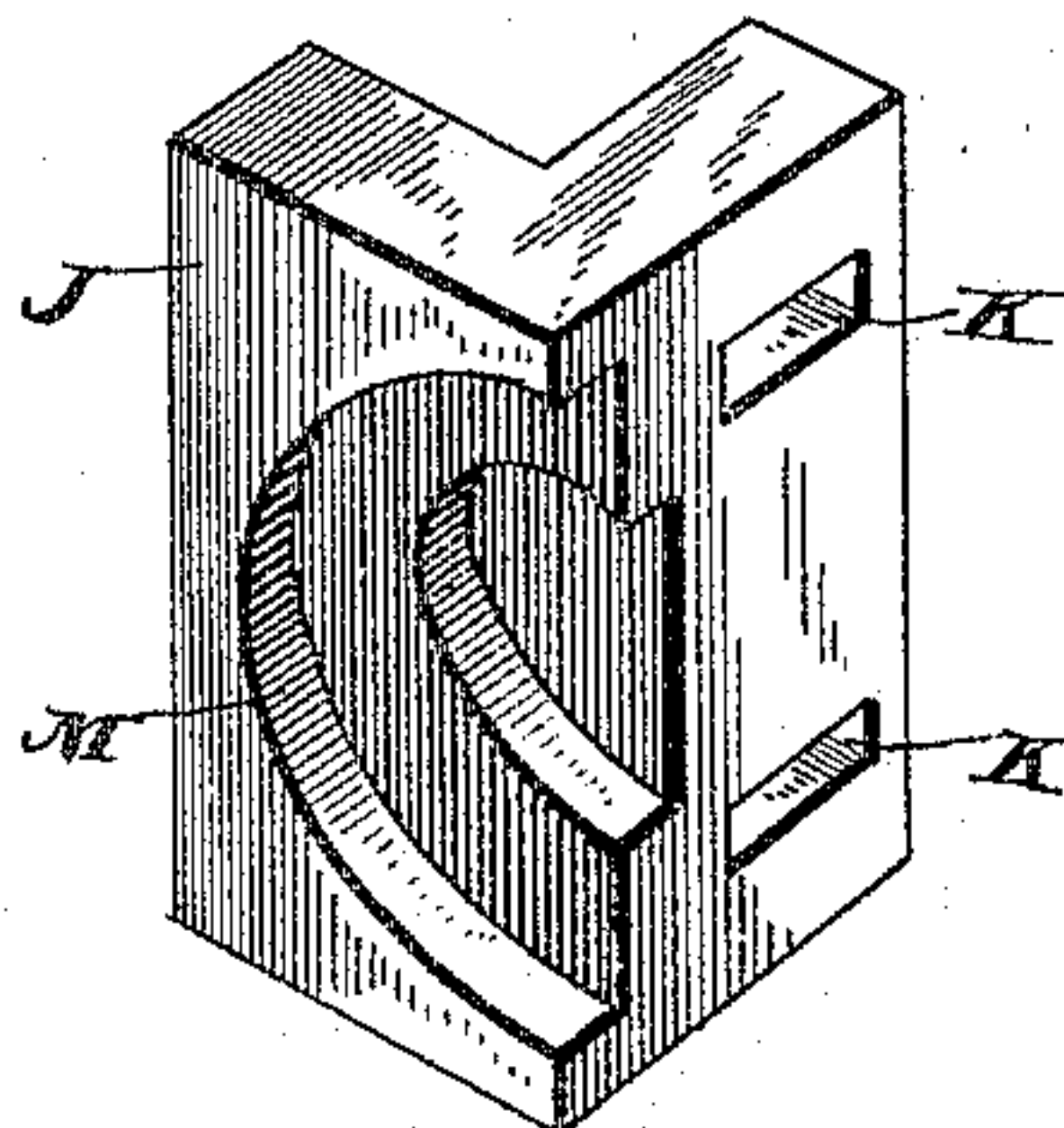


Fig. 5.



Witnesses

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UNITED STATES PATENT OFFICE.

ERNEST F. W. HORN, OF ANTIGO, WISCONSIN.

BAND-SAW GUIDE.

SPECIFICATION forming part of Letters Patent No. 492,511, dated February 28, 1893.

Application filed August 23, 1892. Serial No. 443,874. (No model.)

To all whom it may concern:

Be it known that I, ERNEST F. W. HORN, a citizen of the United States, residing at Antigo, in the county of Langlade and State of Wisconsin, have invented a new and useful Band-Saw Guide, of which the following is a specification.

This invention relates to saw guides; and it has for its object to provide an improved guide adapted to be used in connection with band saws, and to provide such a guide which, while, avoiding undue friction of the saw therein, while passing through the same, at the same time provides means whereby various sizes of saws are accommodated by certain adjustments, and thereby dispensing with the necessity of changing guides when different sized saws are employed.

With these and many other objects in view which will readily appear as the nature of the invention is better understood, the same consists in the novel construction, combination and arrangement of parts hereinafter more fully described, illustrated and claimed.

In the accompanying drawings;—Figure 1 is a perspective view of a band saw guide constructed in accordance with this invention. Fig. 2 is a vertical longitudinal sectional view of the same. Fig. 3 is a horizontal sectional view on the line 3—3 of Fig. 2. Fig. 4 is a detail in perspective of the bearing yoke and roller therein. Fig. 5 is a similar view of one of the guide plates.

Referring to the accompanying drawings;—A represents the guide head having at its outer end the vertical slot B, and the interior guide grooves or ways C, formed in opposite faces of said slot and within the head. Extending from the other end of the head A is the hollow interiorly threaded guide stem D, which is adapted to be secured to any suitable support for holding the guide in the proper position to receive the edge of the band saw passing therethrough, and said hollow interiorly threaded stem D is adapted to receive the threaded rod or screw E. The screw E is provided at its outer end with the thumb piece F, by means of which the same is manipulated, and is swiveled at its inner end within the guide head A, to the U-shaped

bearing yoke G, sliding within said head, and having its opposite sides moving within the opposite guide grooves, in opposite faces of the vertical slot. The bearing yoke G carries at its outer end the steel journal pin H upon which and within the yoke is mounted the loose anti-friction steel roller I, against which the edge of the saw contacts and which freely revolves with the motion of the saw so as to prevent any friction thereof within the guides.

Adjustably secured to the outer ends of the head A on opposite sides of the roller I are the flanged guide plates J. The said guide plates are provided with the adjustment slots K, which receive the adjustment screws L passing therethrough and into the head A, so that the said plates may be adjusted to and from each other to accommodate different thicknesses of saws, and said plates are further provided upon their inner opposing faces with the circular recesses M, which accommodate the roller and the outer ends of the bearing yoke and allow the same to be freely adjusted.

It will be readily seen that by manipulating the screw E, the bearing yoke and the roller carried thereby are adjusted in from and toward the outer edges of the guide plates in order to adjust the device to the width of saw employed.

The thumb piece F is detachably secured to the screw E by means of a removable pin or key and the end of the screw is reduced to fit in a socket thumb piece.

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

In a band-saw guide, the combination of a hollow interiorly threaded stem terminating at one end in an integral guide head, said guide head being provided with a vertical slot in its outer end and opposite interior guide grooves formed in opposite inner faces of said slot, a U-shaped bearing yoke mounted to slide in said interior grooves, an adjusting screw engaging the interior threads of said stem and projecting beyond the ends of the same, said screw being swiveled to the U-shaped sliding yoke at its inner end, a thumb piece removably attached to the outer end of

said screw, a roller journaled in said U-shaped yoke and working in said vertical slot, said roller being adjustable with the yoke and recessed laterally adjustable flanged guide plates adjustably secured to the outer ends of said guide head and embracing the outer ends of the bearing yoke and the opposite sides of said roller, substantially as set forth.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

ERNEST F. W. HORN.

Witnesses:

C. WERDER ICOM,
FRED HAYSSEN.