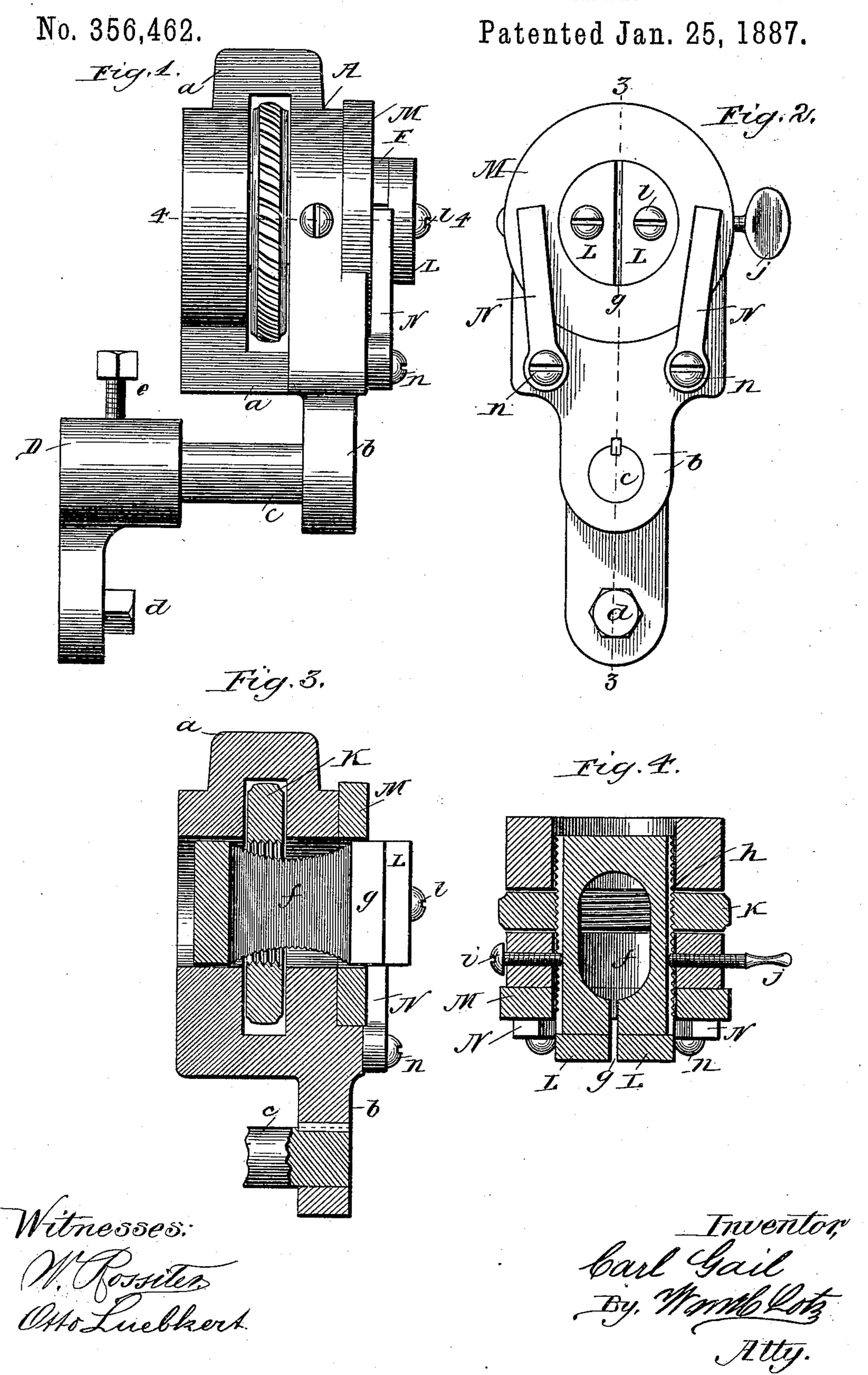
C. GAIL.

ADJUSTABLE GUIDE FOR BAND SAWS.



United States Patent Office.

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ADJUSTABLE GUIDE FOR BAND-SAWS.

SPECIFICATION forming part of Letters Patent No. 356,462, dated January 25, 1887.

Application filed July 23, 1886. Serial No. 208,887. (No model.)

To all whom it may concern:

Be it known that I, Carl Gail, a subject of the Emperor of Germany, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Adjustable Guides for Band-Saws, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention has for its object to provide a guide for band-saws that is adjustable to accommodate different saws; and for that purpose my invention consists of the novel devices and combinations of devices, hereinafter de-

15 scribed, and specifically claimed.

In the accompanying drawings, Figure 1 represents an edge view, and Fig. 2 a face view, of the saw-guide; Fig. 3, a longitudinal vertical section on line 3 3 in Fig. 2, and Fig. 20 4 a horizontal section on line 4 4 in Fig. 1.

Corresponding letters in the several figures

of the drawings designate like parts.

A denotes the guide-plug holder, being a casting bored out longitudinally for inserting 25 the cylindrical guide-plug F, and being slotted transversely for receiving the disk-shaped nut K, the serrated rim of which nut projects sufficiently from the sides of the holder for turning it in either direction, for which purpose 30 the parts of the holder A front and rear of such nut K are rigidly connected at top and bottom by bridge parts a. The bottom of the forward portion of holder A is provided with a lug, b, into which is rigidly secured, by screw-35 ing or otherwise, a stud, c, that enters the hub of a bracket, D, fixed by a screw, d, against the frame of the band-saw, below the table thereof. By means of a set-screw, e, the holder A is adjustably secured.

The saw-guide F is a screw-threaded cylindrical plug, having an oval slot, f, through its middle portion, with a slit, g, from its front end to this slot, in such a manner that like a spring-clamp the two halves of the plug are connected only at their rear ends. This plug F is fitted

only at their rear ends. This plug F is fitted snugly into the bore of holder A to move longitudinally therein, and is held from turning by having cut a longitudinal groove, h, in each side, which grooves engage with the points of

50 screws i and j, tapped through the sides of holder A. One of these screws, j, is a thumbscrew for rigidly securing the plug without the use of a wrench after being adjusted, and for compressing the plug F to decrease the width of slit g. The nut K engaging the screw-

threads of the plug, its turning in one direction or another will move the guide-plug to project more or less, as may be required for saws of varying width.

Against the slotted end of plug F are se- 60 cured, by screws l, two semicircular steel plates, L, between which the saw moves, and that form

the saw-guide proper.

The front face of holder A is provided with an arc-shaped shoulder at its bottom, and 65 against this face and shoulder is fitted a ring-shaped steel plate, M, surrounding plug F, and forming the guide shoulder for the rear edge of the band-saw. This plate M being subjected to considerable wearing from the 72 friction of the saw-plate, it is so arranged that it can be turned from time to time a part of a revolution, so as to present a new surface, and that it can be reversed after one side is too much worn, and for that purpose such plate is ad-75 justably clamped in its position by two bars, N, adjustably and removably secured to the lower part of the face of holder A by screws n.

It will be readily seen that by the above arrangement the saw-guide plug can not only be 80 readily adjusted to project more or less beyond plate M to accommodate a saw-plate of more or less width in such a manner that its saw-teeth only are exterior of such guide, but that the guide-slit can also be narrowed for 85

different thicknesses of saw-plates.

What I claim is—

1. A saw-guide consisting of guide-holder A, screw-threaded and grooved guide-plug F, having compressible jaws, screws *i j*, bearing 90 in grooves in the plug, and the adjusting-nut K, surrounding the plug, and operated as described.

2. A saw-guide consisting of guide-holder A, screw-threaded and grooved guide-plug F, 95 having compressible jaws, screws *i* and *j*, and adjusting-nut K, surrounding the plug and extending beyond the circumference of the holder A, as set forth.

3. In a saw-guide, the combination of the 100 holder A, the movable wearing plate or ring M, and clamps N with the guide-plug F and means for adjusting it, substantially as described.

In testimony whereof I affix my signature 105 in presence of two witnesses.

CARL GAIL.

Witnesses:

OTTO LUEBKERT, HARRIS W. HUEHL.