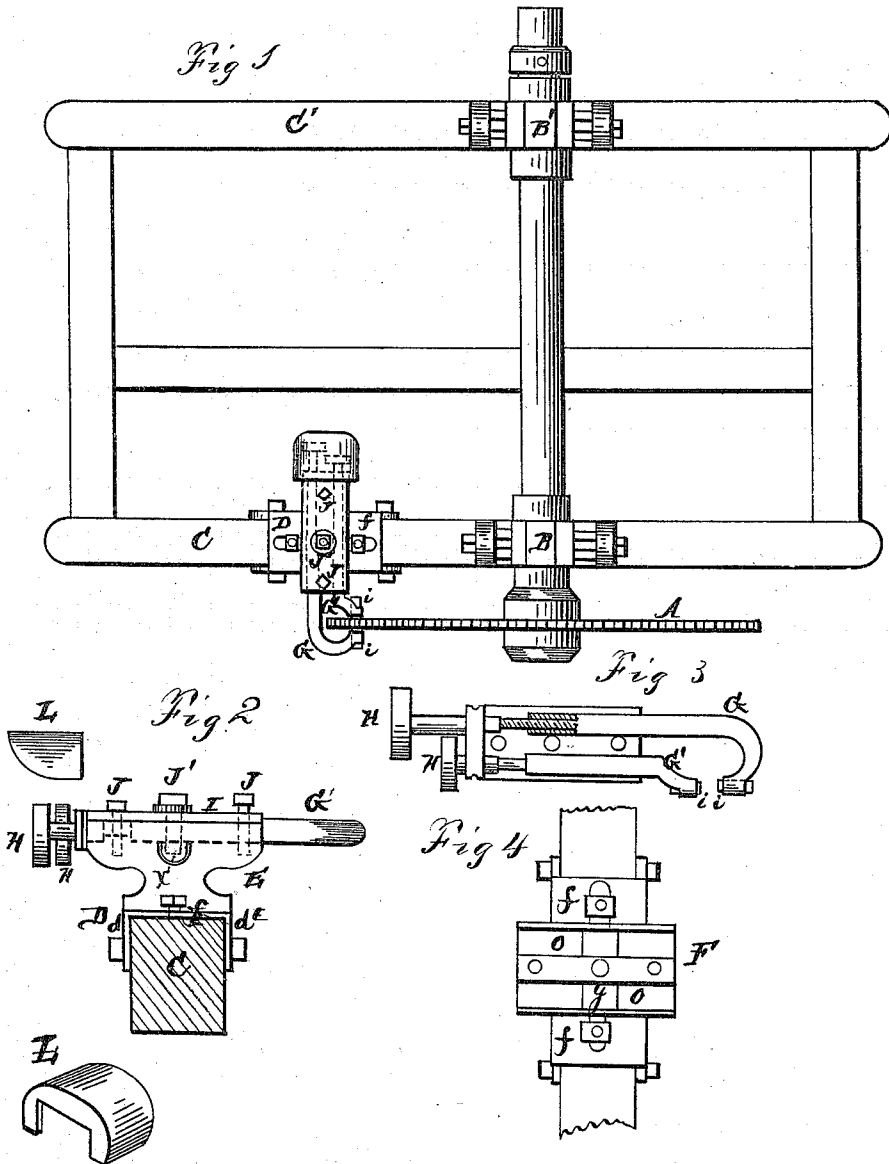


F. H. PALMER.
Adjustable Saw-Guides.

No. 140,157.

Patented June 24, 1873.



Witnesses:
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UNITED STATES PATENT OFFICE.

FRANCIS H. PALMER, OF WHITEFIELD, NEW HAMPSHIRE.

IMPROVEMENT IN ADJUSTABLE SAW-GUIDES.

Specification forming part of Letters Patent No. **140,157**, dated June 24, 1873; application filed April 3, 1873.

To all whom it may concern:

Be it known that I, FRANCIS H. PALMER, of Whitefield, county of Coos, State of New Hampshire, have invented certain Improvements in Adjustable Saw-Guides, of which the following is a specification:

The object of my invention is to provide for an adjustable saw-guide for the purpose of guiding the cut of a circular saw accurately when running, and also to hold the saw firmly when it is desired or found necessary that the saw should be gummed or sharpened. It is made adjustable as well for directing the cut with the greatest nicety as to conform itself to the diameters of different saws. The nature of my invention, therefore, consists in the construction and arrangement of the parts as hereinafter more fully set forth and claimed.

In order to more fully describe my invention I refer to the accompanying drawing, forming a part of this specification.

Figure 1 represents a plan view of a saw-carrying frame, with arbor, saw, and adjustable saw-guide attached. Fig. 2 represents an end view of the adjustable saw-guide with the screw-covering shield detached and shown separately. Fig. 3 represents a bottom view of the two clamping arms and the screws which adjust them. Fig. 4 represents a view showing the grooved casing upon which the clamping-arms move.

A is a circular saw placed in the journals B B', fastened to the bench sides C C'. D is the guide carriage to the bottom of which are fastened or cast two flanges, *a a'*, into each of which are cut slots. Through these slots are placed bolts with nuts *e e* on their ends. In the top plate *f* of the carriage D are also cut two slots, through which screws provided with nuts are screwed into the wood beneath. E is a support for the casing F, into which the two slots *o o* are cut. G G' are two arms

fitting into the slots *o o*. The end of the arm G is curved so as to give room for the teeth of the saw and press against the outer side of the same. The end of the arm G' is curved so as to press against the inner side of the saw, opposite where the end of the arm G presses against the same. In the under part of the casing F, at the center thereof, and at right angles to the grooves *o o*, is a slot, *y*, (Fig. 4,) within which is passed a long nut, *x*, (Fig. 2.) Passing through the top plate and casing is a screw, J', which takes into the long nut *x*.

It will be seen that this nut bears against the under part of both of the clamping-arms G G', so that whenever they are to be moved out or in the screw J' should be slightly loosened to allow such movement; and whenever these arms are properly adjusted the screw is tightened, and thereby draws the nut close up against the arms and holds them rigidly in the desired position. In the ends of the arms G G' are inserted pieces of wood *i i*. The arms G G' are moved back or forward, as required, by aid of set-screws H H. I is a cover for the casing F, held to the same by screws J J. L is an adjustable shield placed over the set-screws H H, to prevent saw-dust from entering the threads of the same.

Having thus fully described my invention, I desire to claim—

1. In combination with the arms G G and their adjusting screws H H, the long nut *x*, and clamping-screw, J', as and for the purposes set forth.

2. In combination with the adjusting-screws, the removable shield L, for the purposes set forth.

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Witnesses:

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