No. 648,704. Patented May 1, 1900.

M. OAKLAND.

SAW FRAME.

(Application filed Sept. 14, 1899.)

(No Model.)

Fig. 1.

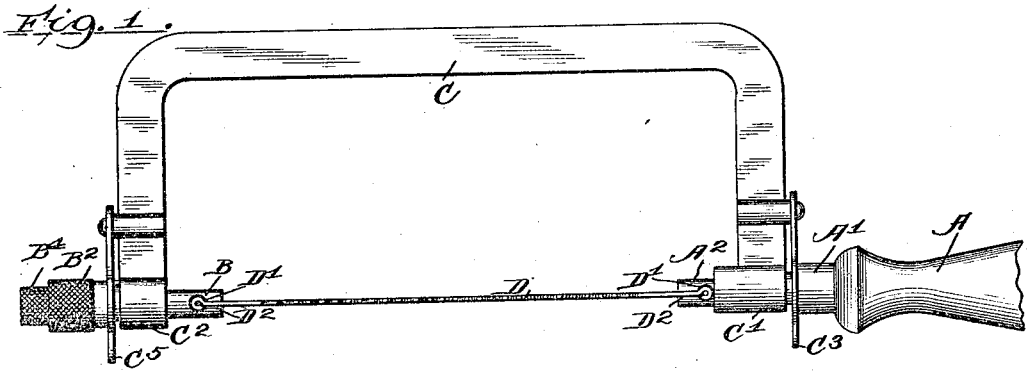

Fig. 2.

Fig. 3.

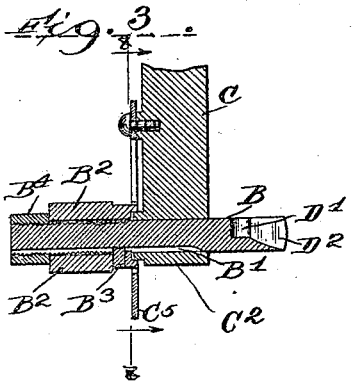

Fig. 4.

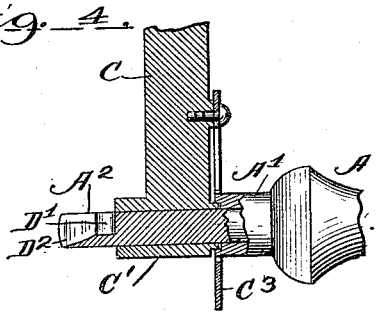

Fig. 5.

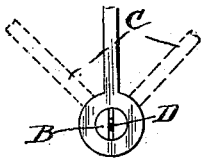

Fig. 6.

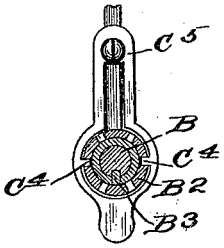

Fig. 7.

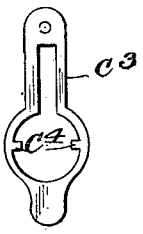

Fig. 8

Witnesses:
Harry R. White
R. White

Inventor:
Martin Oakland,
by Luther L. Miller
Attorney.

UNITED STATES PATENT OFFICE.

MARTIN OAKLAND, OF CHICAGO, ILLINOIS.

SAW-FRAME.

SPECIFICATION forming part of Letters Patent No. 648,704, dated May 1, 1900.

Application filed September 14, 1899. Serial No. 730,422. (No model.)

To all whom it may concern:

Be it known that I, MARTIN OAKLAND, a subject of the King of Sweden and Norway, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Saw-Frames, of which the following is a specification.

The object of this invention is to provide an improved means for holding the blade of a bracket or other similar saw at any desired angle of inclination to the frame, adapting the saw particularly to the sawing of curves and circles.

In the accompanying drawings, Figure 1 is a side elevation of this improved saw-frame. Fig. 2 is an enlarged fragmentary view of the outer extremity of the frame-body. Fig. 3 is a central vertical section through the outer end of the frame-body, showing the tightening and the holding means for the saw-blade. Fig. 4 is a central vertical section of the inner end of the frame-body, also showing the means for holding the inner end of the saw-blade. Fig. 5 is a fragmentary view showing in dotted lines two of the various positions assumed by the saw-frame relative to the blade. Fig. 6 is a transverse vertical section on dotted line x x of Fig. 3. Fig. 7 is a face view of the locking-spring for holding the blade from turning in the frame. Fig. 8 is an end view of the notched collar formed rigid with the saw-handle.

Like letters of reference indicate corresponding throughout the several views.

A is the saw-handle. A′ is a notched locking-collar fixed rigidly thereto, and A^2 a stem also fixed in the handle A, which stem provides the means of attachment for the inner end of the saw-blade. B is a similar stem adapted to receive the opposite end of the saw-blade. Both of the stems A^2 and B lie in suitable openings in the outer end of the frame-body. One end of the stem B is screw-threaded and is provided with a groove or key-seat B′.

B^2 is a collar adapted to slide freely upon the stem B, its forward end being radially notched, as shown in Fig. 6, and its outer surface milled or roughened. It is provided with a pin B^3 for engaging the key-seat B′.

B^4 is a milled nut screw-threaded to correspond with the screw-threads upon the stem B.

C is the frame-body, provided with the sleeve ends C′ and C^2 for receiving the stem A^2 of the handle A and the stem B, respectively.

C^3 is a locking-spring having two inwardly-extending lugs C^4 for engaging the radial notches on the collar A′. This locking-spring is rigidly secured at one of its ends to the frame-body C. C^5 is a like locking-spring for engaging the radial notches on the inner end of the collar B^2.

D is the saw-blade, provided with any suitable means of attachment to the stems A^2 and B. In this instance I have provided said stems with the recesses D′, extending inward from one side of said stems and having the narrow throat D^2 for receiving the saw-blade D, the enlarged ends of said blade lying within said recesses D′.

In use the saw-blade D is inserted in position in the saw-frame and suitable tension given to it by turning the milled nut B^4 on the screw-threads of the stem B. When it is desirable to change the angle of the blade, the locking-springs C^3 and C^5 are first pressed inward, releasing the stems A^2 and B, so that they and the saw-blade D may be turned at any desired angle with the frame. The springs are released, and their lugs C^4, engaging the radial notches on the collar A′ and the stem B, hold the saw-blade in the newly-assumed position.

In sawing circles or various curves the angle of inclination of the blade with the saw-frame may be changed at pleasure.

I claim as my invention—

1. In a saw-frame, in combination, a frame-body; two saw-holding stems rotatably mounted in the frame-body; a notched locking-collar for each stem; and a flat spring secured at one of its ends to each end of the saw-frame, a portion of each of said springs being in ring form, adapted to surround said locking-collars, and having an inwardly-extending projection for engaging the notches of said collars, the lower ends of said springs projecting downward to a point below the saw-frame.

2. In a saw-frame, in combination, a frame-

body; two saw-holding stems rotatably mounted in the frame-body; a notched locking-collar fixed with relation to one of said stems; a similar collar having a sliding engagement with the other one of said stems; a spring for each of said locking-collars; and a threaded nut for moving one of the stems longitudinally, for tightening the saw-blade.

3. In a saw-frame, in combination, a frame-body; two saw-holding stems rotatably mounted in the frame-body; a notched locking-collar fixed with relation to one of said stems, the other of said stems being provided with a screw-thread and a longitudinal groove; a notched locking-collar mounted on said last-mentioned stem, and having a lug for engaging said groove; a spring secured to each end of the frame-body, for engaging said notched locking-collars; and a nut on the thread of said last-mentioned stem, adapted to tighten the saw-blade.

MARTIN OAKLAND.

Witnesses:
L. L. MILLER,
GEO. L. CHINDAHL.