

Robinson & Silver.

Saw-Filing Mach.

Nº 90,125.

Patented May 18, 1869.

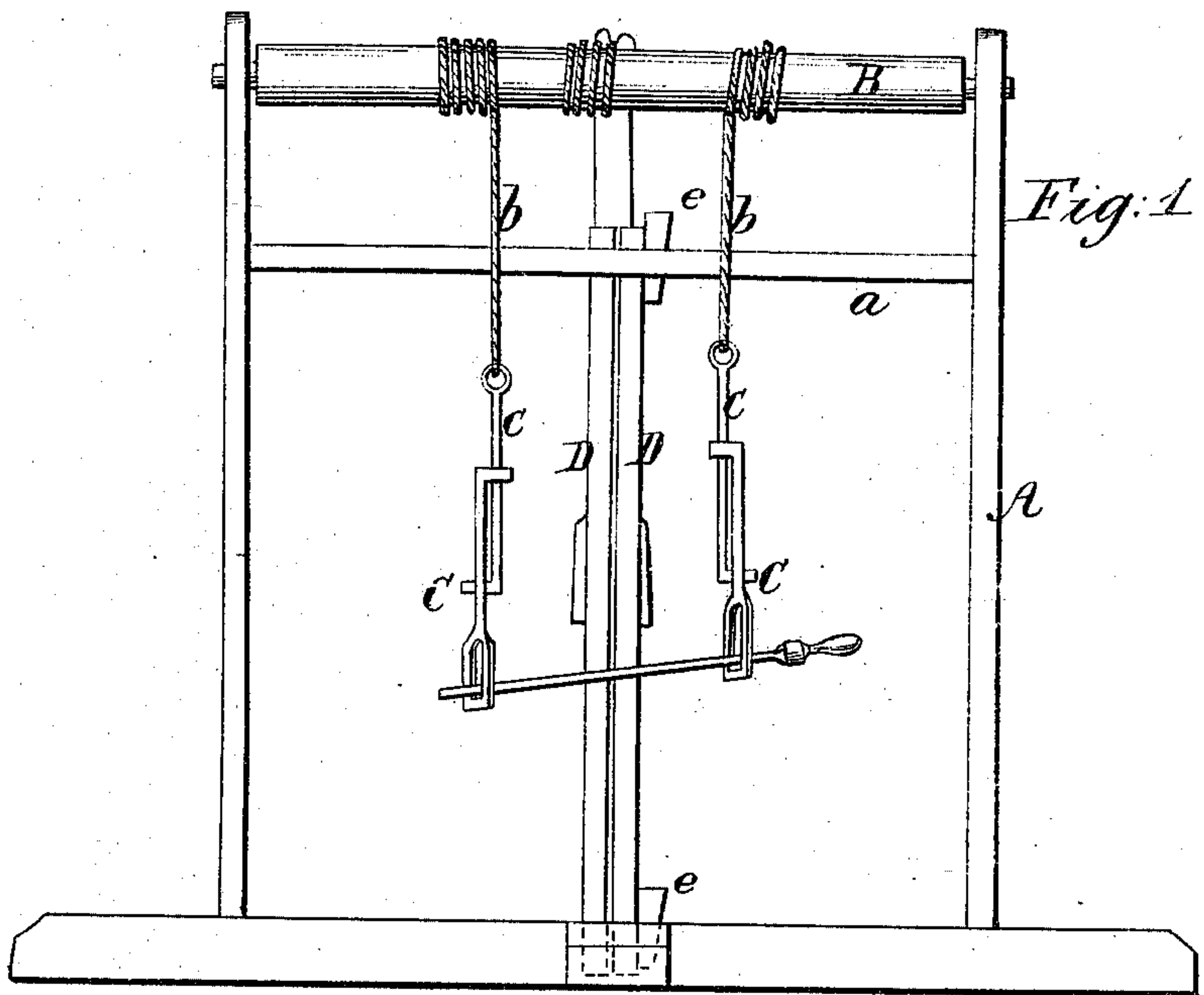


Fig. 1.

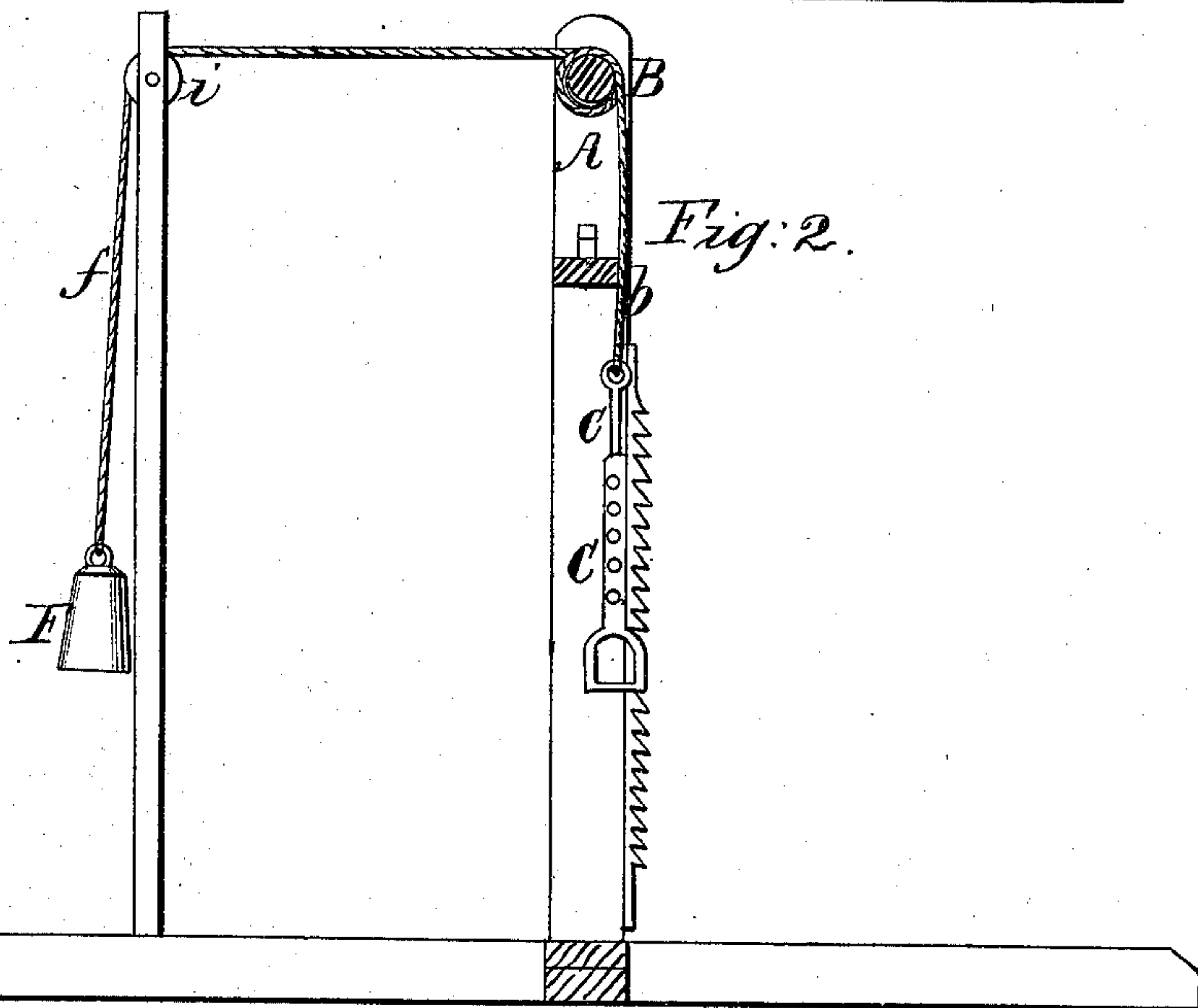


Fig. 2.

Witnesses:
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United States Patent Office.

GEORGE ROBINSON AND HARVEY O. SILVER, OF SODUS, NEW YORK.

Letters Patent No. 90,125, dated May 18, 1869.

IMPROVEMENT IN SAW-FILING MACHINE.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that we, GEORGE ROBINSON and HARVEY O. SILVER, of Sodus, in the county of Wayne, and State of New York, have invented a new and useful Improvement in Saw-Filing Apparatus; and we do hereby declare that the following is a full, clear, and exact description thereof, which will enable those skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a front view, and

Figure 2 is a sectional side view.

Similar letters of reference indicate like parts.

This invention relates to an improved apparatus for holding the file, in filing large saws, wherein the file is suspended in a pair of swinging stirrups, and is held against its work by means of a weight and cords passing over a suspending roller; and

The invention consists in combining with said appliances a pair of clamping-jaws, for securing the saw, and in a novel and convenient method of adjusting the stirrups on the ends of the suspending-cords, as hereinafter more fully explained.

In the accompanying drawings—

The uprights A A support a roller, B, from which depend two cords, *b b*, (Figure 1,) for suspending the file-stirrups C C.

The lower end of each suspending-cord terminates in a rod, *c*, which passes through a guide in the upper part of its stirrup, and terminates in a hook, the said hook engaging with one of a series of holes in the shank of the stirrup, (see shank, provided with a series of holes, at C, Figure 2,) thus affording a ready means for changing the angle of the file.

In the centre of the frame-work is a pair of vertical clamping-jaws, D D, for holding the saw.

F is a weight, which, by means of cord *f* and pulley *i*, connects with roller B, and tends to turn said roller, so that the file is pressed upward against the teeth of the saw.

Its operation is as follows:

The saw is clamped in the jaws D D by driving in

the keys, or wedges *e e*, fig. 1, and the file is then suspended in the stirrups C, at an angle slightly inclined from the horizontal, as shown, by adjusting the hooked point of one of the rods *c* in the shank of its stirrup C, as each alternate tooth is filed. The angle of the file is then reversed, and the teeth, having a different set, are filed with a bevel opposite to the first.

Heretofore, the angle of the file could not be varied from the horizontal without much inconvenience, but in this manner its angle is readily controlled, so as to give the best cutting-edges to the teeth, and to also give the file clearance on the return-stroke, by which the files are not worn out so rapidly.

Circular saws can also be suspended in this apparatus by a mandrel, so as to be rotated and clamped as the work progresses.

By these means the apparatus is made more efficient and convenient than heretofore.

We do not claim suspending the stirrups, which support the file, from a weighted roller, as this is shown in the patent granted to John Sheffield, dated June 6, 1854, for saw-filing apparatus; but having thus described our invention,

What we claim as new, and desire to secure by Letters Patent, is—

1. The adjustable two-part stirrups C *c*, C *c*, constructed as described, and suspended from the weighted roller B, for altering the inclination of the file, as and for the purpose set forth.

2. The saw-filing apparatus, composed of the vertical clamps D D and keys *e e*, for holding the saw, and the two-part adjustable stirrups C *c* suspended from the weighted roller B, for supporting the file in different positions and at various inclinations, all constructed substantially as described, and arranged within a suitable frame, to operate as set forth.

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Witnesses:

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