Oliver Tyson.

Improved Gauge for Filing Saws.

98447

PATENTED DEC 28 1869

Fig. 1.

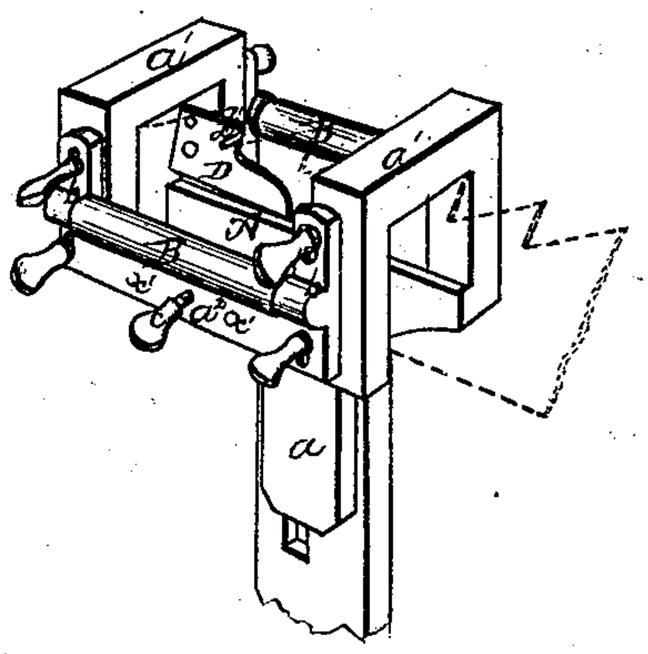
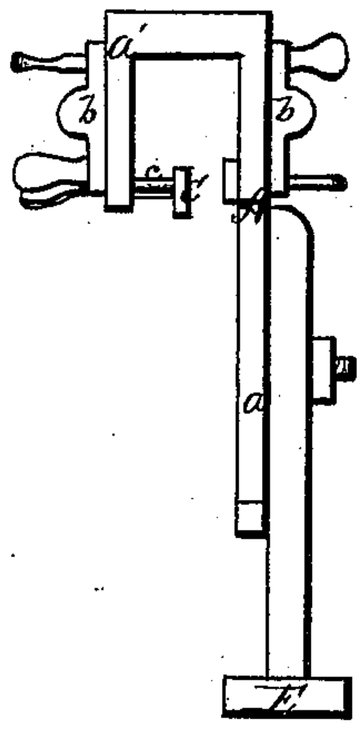


Fig. 2.



Witnesses.

C. F. Brown.

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United States Patent Office.

OLIVER TYSON, OF OTHO, IOWA.

Letters Patent No. 98,447, *dated December* 28, 1869.

IMPROVEMENT IN GAUGE FOR FILING SAWS.

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

To all whom it may concern:

Be it known that I, OLIVER TYSON, of Otho, in the county of Webster, and State of Iowa, have invented a new and improved Gauge for Filing Saws; and I do hereby declare that the following is a full and exact description of the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

This invention relates to an improved gauge for use in filing saws; and

It consists mainly in the employment of rollers, attached to a suitable frame, by means of which the operation of the file is limited to a certain point.

It further consists also in various details of construction, by means of which the rollers and other parts are adjusted to suit different saws.

The details of construction, and method of operation will be fully described hereinafter.

In the drawings—

Figure 1 is a perspective view of my invention, and

Figure 2 is a side elevation.

To enable others skilled in the art to make and use my invention, I will now proceed to describe fully its construction and operation.

A represents a casting, which consists essentially of the extension *a* and bent arms a^1, united by the bar a^2.

By the arrangement of parts shown, a frame is formed in which the saw is held during the operation of filing.

B B represent rollers turning in slotted bearings *b b*, upon each side of the frame A, as shown. These bearings are secured to the frame by means of thumb-screws, which pass through the slots and enter suitable orifices in the frame A.

To permit greater adjustment than would be possible by means of the slots in the bearings alone, I make other orifices in the frame at proper points, into which the thumb-screws may be shifted when desired.

C represents a bearing-bar, located upon the inside of the bar a^2, which is sustained in place by means of pins *c'*, extending through the bar a^2, and which is actuated in a parallel plane by means of the screw *c*, as shown.

D represents a latch, provided with the projection *d*, which is pivoted to the inside of one of the arms a^1, as shown.

The extension *a* is provided with a bolt and thumb-screw, by means of which it is secured to the slotted standard *e*, of base E.

The operation of my invention will be easily understood.

The base E is secured to the saw-frame or table in any suitable manner. The saw is enclosed by the frame, and the latter is adjusted on the standard at the required angle to suit the shape of the teeth. The bearing-bar C is then advanced by the screw *c*, until the saw is firmly clamped. The latch falls down over the teeth as soon as the saw is moved to the proper position for filing. The rollers should now be so adjusted that their upper edges shall be in line with the deepest point or line to be filed. It necessarily follows, therefore, that when this point is reached, the file will operate no longer, but will bear upon the rollers.

By this device all the teeth of a saw may be uniformly filed, it being, in fact, impossible to make a mistake. It is simple in all its parts, and yet is adapted for all classes of work.

Having thus fully described my invention,

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

1. The rollers B, slotted bearings *b*, and frame A, when combined in and for the purpose described.

2. The latch D, having the projection *d*, when combined with the frame A, as and for the purpose described.

3. The device described, consisting essentially of the frame A, rollers B, bearing-bar C, and latch D, when combined as and for the purpose described.

This specification signed and witnessed, this 5th day of August, 1869.

OLIVER TYSON.

Witnesses:

H. BEECHER,

THOMAS O. CONNELL.