E. W. Tilton,

Cross Cut Saw Handle.

No. 112,094. Patented Feb. 21. 1871.

fig. 1.

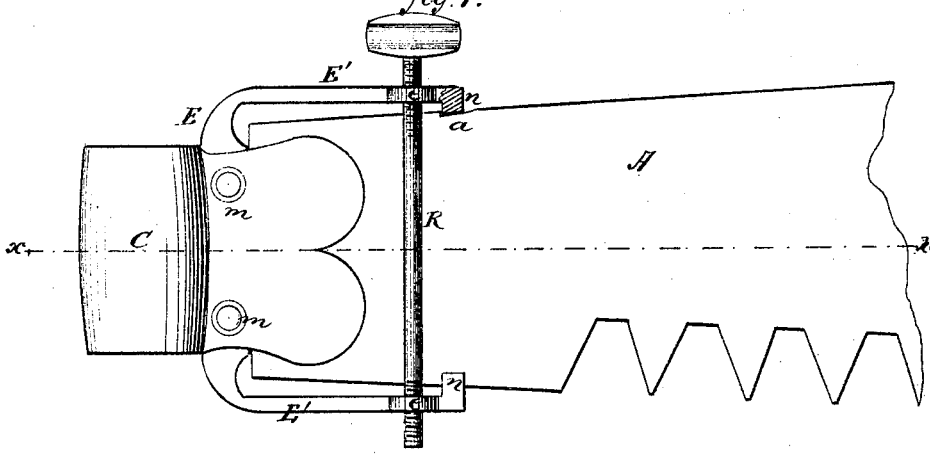
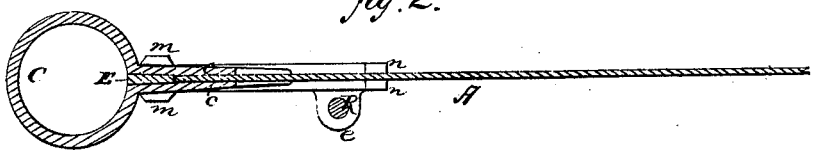


fig. 2.



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UNITED STATES PATENT OFFICE.

EDWARD W. TILTON, OF OSHKOSH, WISCONSIN.

IMPROVEMENT IN HANDLES FOR CROSSCUT-SAWS.

Specification forming part of Letters Patent No. **112,034**, dated February 21, 1871.

To all whom it may concern:

Be it known that I, EDWARD W. TILTON, of Oshkosh, in the county of Winnebago and State of Wisconsin, have invented certain new and useful Improvements in Attaching the Handles to Crosscut-Saws; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, making part of this specification, in which—

Figure 1 is a side elevation, and Fig. 2 a section, taken in the line *x x* of Fig. 1.

Similar letters of reference indicate corresponding parts in the several figures of the drawings.

The object of this invention is to improve the means for fastening crosscut-saws to their handles, so that they can be more readily attached and detached, and at the same time the blade of the saw will be more firmly held by the fastening than heretofore. This result is attained by the use of a spring-clasp and a screw-rod for operating it in connection with the saw-blade and the old-fashioned handle, as hereinafter set forth.

In the drawings, A is the saw-blade, and C is the old-fashioned socket for the handle, provided with lugs *c c*, which fit against the sides of the blade.

E is a bow-shaped spring-clasp, preferably made of steel, and fastened between the lugs of the socket at the end of the saw-blade by means of rivets *m m*. The middle part of the clasp is flattened and widened, so as to allow it to fit between the lugs *c c* without spreading them too much, and also to enable it to receive the rivets.

Immediately above and below the edges of the socket the ends of the clasp bend forward and extend along the edges of the saw-blade, forming spring-arms E′ E′ and terminating in little notched nibs *n n*, which project inward to grasp and hold firmly the edges of the blade. Lugs *e e* are formed upon the lateral edges of the arms E′ E′, and through them extends a screw-rod, R, which screws into one of the lugs and is provided with a shoulder at its opposite end, that bears against the other arm of the clasp, so that by turning the rod by means of a thumb-piece, *r*, the two arms may be forced toward each other or allowed to spring apart.

The operation of the device is as follows: Notches *a a* having been filed in the edges of the saw-blade at the proper points, the end of the blade is inserted between the lugs *c c* and made to abut firmly against the edge of the clasp. The thumb-screw is then turned so as to force the nibs *n n* toward each other and cause the edges of the blade, where it has been notched, to enter the notches in the face of the nibs. The screw is then tightened as much as possible, and the saw is ready for use. The whole operation of fastening or unfastening is the work of an instant, and requires no instrument except those already described.

The advantages of the device in practical operation are important. Besides the facility with which the handle can be attached or detached, the draft is brought at the center of the blade, the upper and lower edges of the blade are at the same time held firmly, and it is prevented from springing and warping.

It is not absolutely necessary that the clasp be made of spring-steel, nor that it be made separate from the socket, since malleable iron will probably possess sufficient elasticity for the purpose, and the clasp and socket may be made in a single piece, if preferred.

Having thus described my invention, what I claim as new is—

The device herein described, consisting of the spring-clasp E and screw-rod R, operating in combination with the socket C and saw-blade A, substantially as and for the purposes specified.

E. W. TILTON.

Witnesses:
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