C. Disston,

Saw Handle,

No. 45,980, Patented Jan. 24, 1865.

Fig: 1

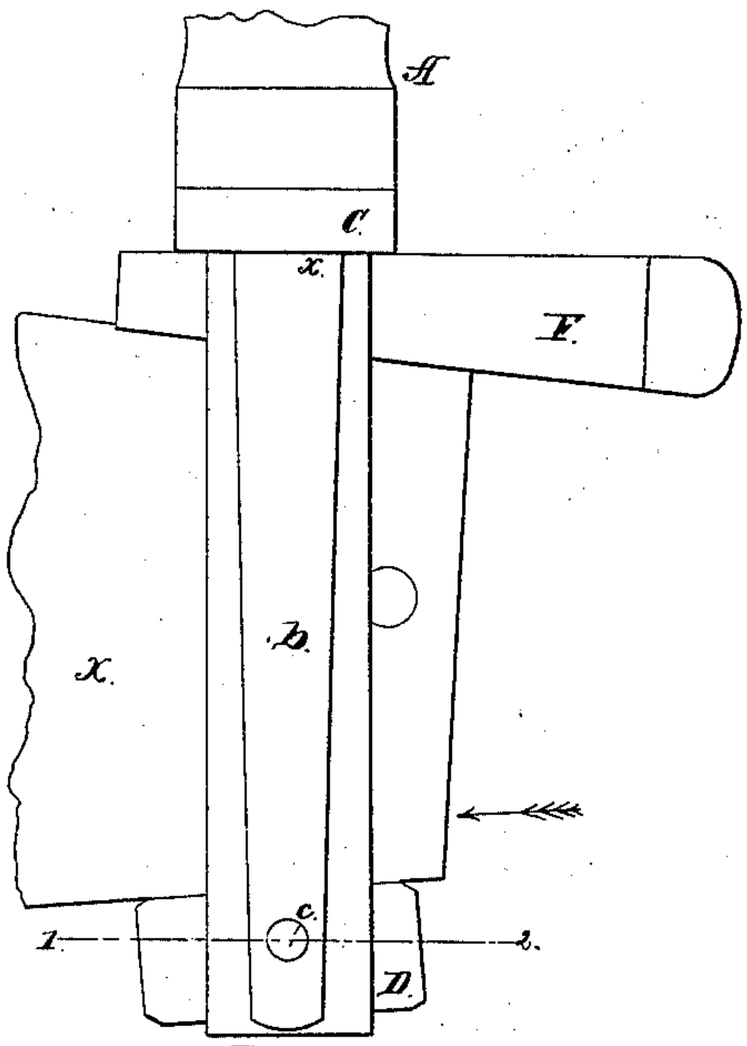


Fig: 2

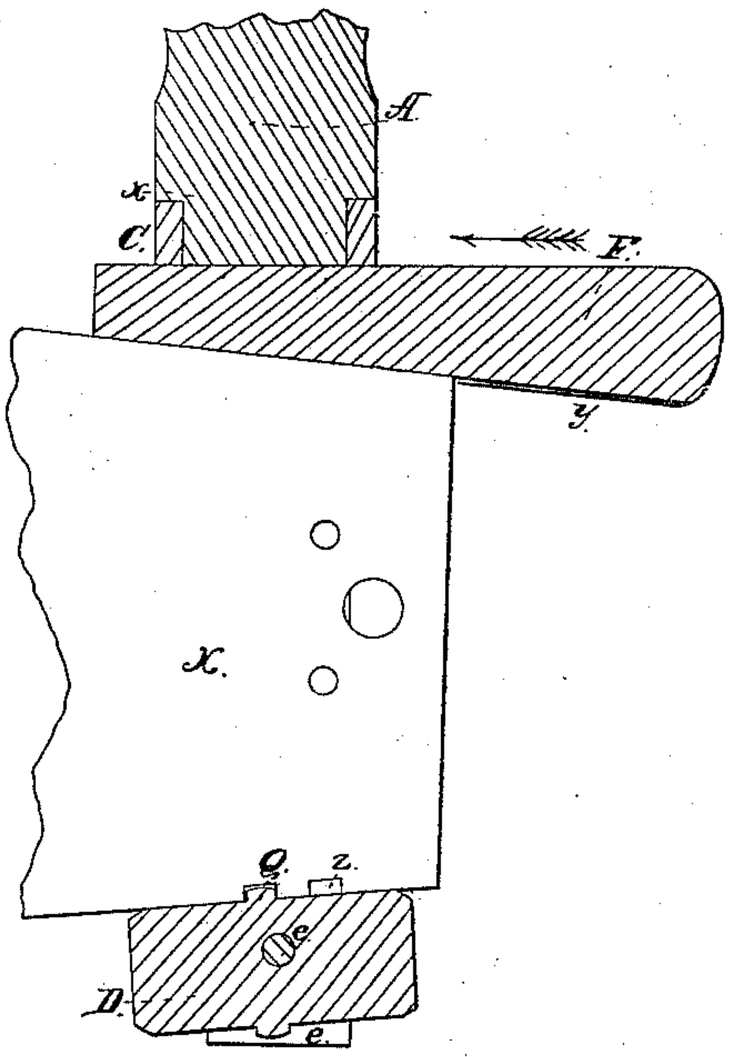


Fig: 3

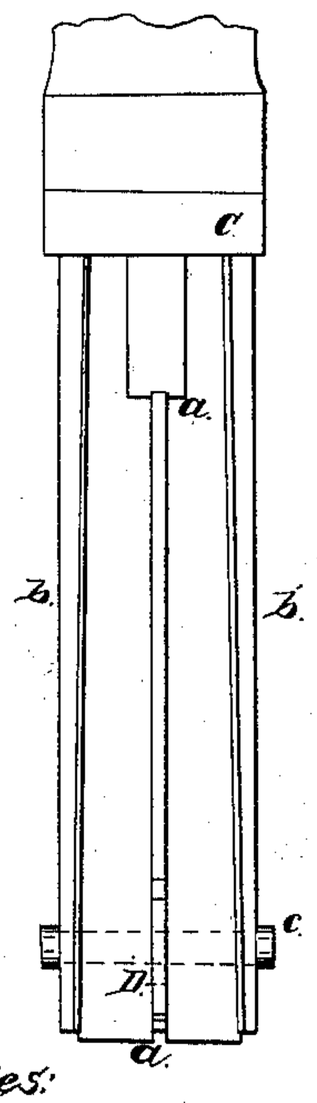
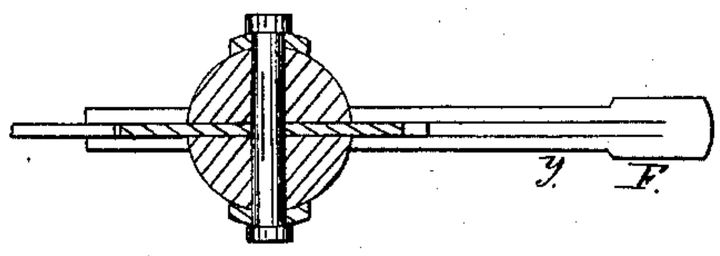


Fig: 4



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UNITED STATES PATENT OFFICE.

CHARLES DISSTON, OF PHILADELPHIA, PENNSYLVANIA.

IMPROVEMENT IN METHODS OF ATTACHING HANDLES TO CROSSCUT-SAWS.

Specification forming part of Letters Patent No. **45,980,** dated January 24, 1865.

To all whom it may concern:

Be it known that I, CHARLES DISSTON, of Philadelphia, Pennsylvania, have invented an Improved Handle for 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, and to the letters of reference marked thereon.

My invention consists of a handle of the peculiar construction fully described hereafter, to be used in connection with a crosscut-saw, my improvement having been designed for the purpose of securing the handle more securely to the saw than the usual handles can be; also for the purpose of readily adapting the handle to saws of different widths.

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

On reference to the accompanying drawings, which form a part of this specification, Figure 1 is a side view of my improved handle for crosscut-saws, showing the same attached to the end of a saw; Fig. 2, a sectional view; Fig. 3, an end view, looking in the direction of the arrow, Fig. 1; and Fig. 4, a sectional plan on the line 1 2, Fig. 1.

Similar letters refer to similar parts throughout the several views.

A is a wooden handle, which is reduced in size near one end so as to form a shoulder at *x*, the reduced portion of the handle being divided longitudinally by a slot or opening, *a*. A metal ferrule, C, extends round the handle near the shoulder *x*, and to this ferrule are permanently secured two metal strips, *b b'*, the latter extending along the handle to nearly the end of the same, where a pin, *c*, passes through both strips, through the handle, and through a plate, D, which turns on the pin in the opening *a*, the pin passing through the said plate at a point nearer to one side of the same than to the other, and on each edge of the plate is a small projection, *e*, for a purpose described hereinafter.

A tapering key, F, passes through the opening *a*, and bears against the ferrule C, the opening being enlarged at this point for the reception of the key, in the lower edge of which is a longitudinal recess, *y*, as best seen in Figs. 3 and 4.

Near the end of the saw X, to which the handle has to be attached, are one or more recesses, *i*, as seen in Fig. 2.

When the handle has to be applied to the saw, the key F is removed and the end of the saw is introduced into the opening *a*, so that the projection *e* on the edge of the plate D shall enter one of the recesses in the edge of the saw. The key F is then introduced into the enlarged portion of the opening between the saw and the ferrule, and driven in the direction of its arrow, Fig. 2, until the handle is firmly secured to the end of the saw.

It will be seen that whatever may be the inclination of that edge of the saw which is next to the plate D, the latter will accommodate itself to the same, and that the projection *e* will prevent the saw from being withdrawn from the handle. It will also be seen that the handle is not subjected to any lateral strain during the operation of the saw, owing to the slot *y* in the wedge F, which receives the edge of the saw and retains the latter firmly in its position, so that it cannot bear hard against the sides of the opening *a*.

As both the ferrule C and plate D are connected to the strips *b*, the latter sustain the entire strain produced by wedging the end of the saw between the ferrule and plate, and the wooden handle is much less liable to be broken than in cases where the saw is secured directly to the same by bolts or other appliances which pass through the handle, and thereby weaken it.

The handle may be readily adapted to saws of greater or less width by merely turning the plate D, so as to present to the edge of the saw that edge of the plate which is nearest to or farthest from the pin *c*, as shown in Fig. 2.

I claim as my invention and desire to secure by Letters Patent—

1. The handle A, its ferrule C, and strips *b*, the key F, and self-adjusting plate D, the whole being constructed and arranged for attachment to the end of the saw substantially as described.

2. The self-adjusting plate D, hung to the strips *b*, and having projections *e e*, adapted to notches in the edge of the saw, all as set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

CHARLES DISSTON.

Witnesses:

CHARLES E. FOSTER,

CHAS. B. PRICE.