H. DISSTON.

Hand-Saw.

No. 167,996. Patented Sept. 21, 1875.

FIG. 1.

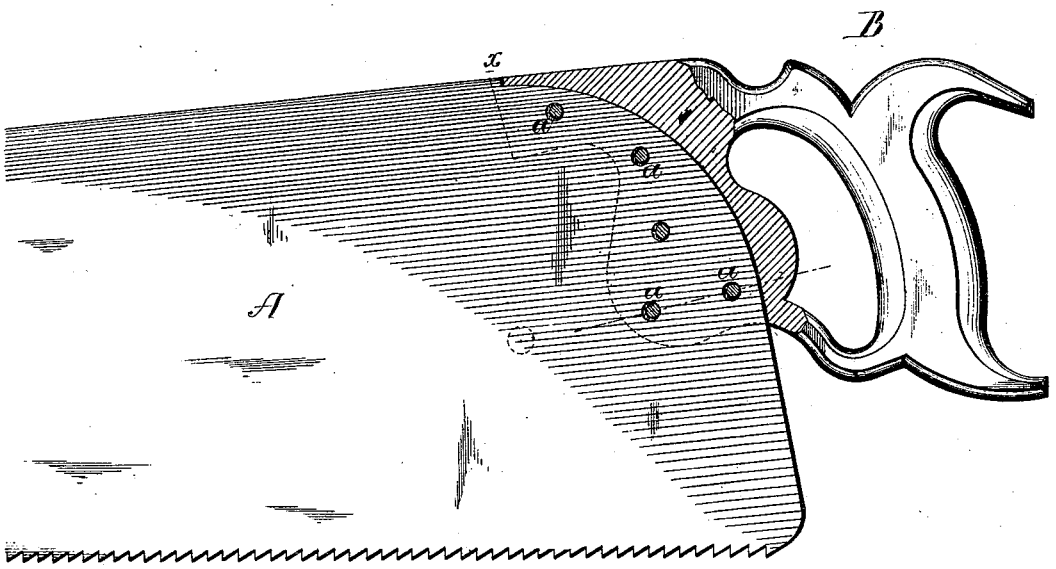
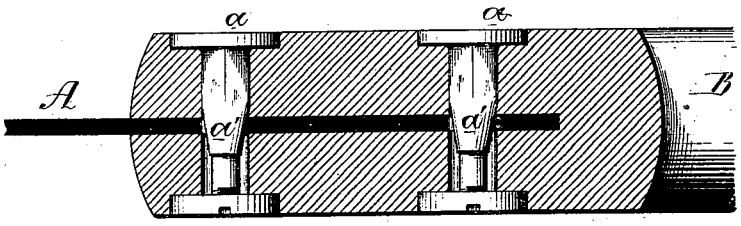


FIG. 2.



Witnesses, Harry Smith
Thomas McIlvain

Henry Disston
by his Attys.
Howson and Son

N. PETERS, PHOTO-LITHOGRAPHER, WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

HENRY DISSTON, OF PHILADELPHIA, PENNSYLVANIA.

IMPROVEMENT IN HANDSAWS.

Specification forming part of Letters Patent No. **167,996**, dated September 21, 1875; application filed December 30, 1874.

To all whom it may concern:

Be it known that I, HENRY DISSTON, of Philadelphia, Pennsylvania, have invented certain Improvements in Handsaws, of which the following is a specification:

The object of my invention is to secure the handle of a handsaw to the blade in such a manner as to insure the firm attachment of the two together, a neater junction of the blade with the handle, and increased strength of the handle itself where it is secured to the blade. These objects I attain in the manner which I will now proceed to describe, reference being had to the accompanying drawing, in which—

Figure 1 represents a side view of a portion of a handsaw, the handle being partly in section; and Fig. 2 a section of part of the handle and blade, drawn to an enlarged scale.

A represents the blade, and B the handle, the latter being, as regards its external appearance, similar to those of ordinary saws. The blade, instead of being cut straight at the butt, as usual, is formed in the arc of a circle, where it fits in the handle, and the latter is slotted with a circular saw of the same, or nearly the same, diameter as the circle of which the rounded end of the blade forms the arc; hence, when the blade is fitted to the handle, the rounded edge of the former must have a snug bearing throughout on the end of the slot in the handle.

The bolts *a* should be made with such a taper at *a'*, and the holes in the blade for receiving the bolts should be so arranged in respect to the holes in the handle that, on driving the bolts to their places, they will have a tendency to force the rounded portion of the blade tight against the end of the slot in the handle, thereby insuring a most secure attachment of the latter to the blade. A slot of the character described moreover insures a greater strength of the handle where it is secured to the blade than when the latter has the usual straight slot, for the wood is not wounded by cutting into it to a greater extent than the rounded portion of the blade demands; moreover, the restricted slot will not permit the sides of the handle to warp so readily as the usual straight slot.

A small shoulder is formed on the blade at *x*, and against this shoulder fits the handle, so as to present a junction much neater in appearance than in saws which exhibit at the upper edge a vacancy composed of so much of the slot as is not filled by the blade.

I do not claim, broadly, making the butt of the blade in the arc of a circle adapted to a corresponding slot in the handle; but

I claim—

The saw-blade A, its curved butt and shoulder *x*, and the handle B, adapted to the blade and shoulder, in combination with the transverse bolts, whereby the handle is caused to gripe the blade, and is forced against the butt, all substantially as specified.

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

HENRY DISSTON.

Witnesses:

WM. H. WRIGHT,

A. H. SHOEMAKER.