(No Model.)

T. S. DISSTON.

SAW.

No. 367,605. Patented Aug. 2, 1887.

FIG. 1.

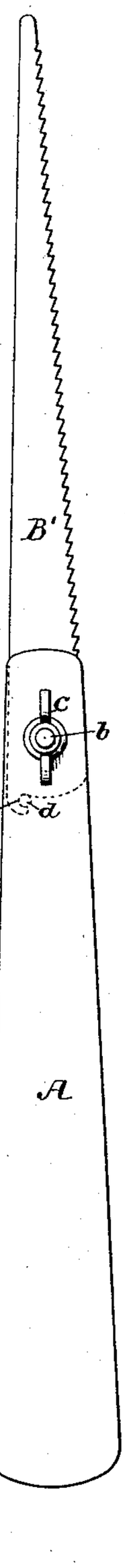


FIG. 2.

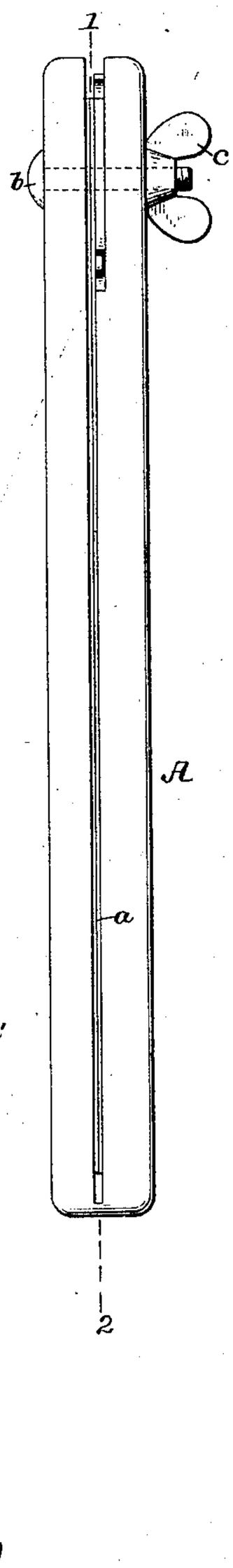


FIG. 3.

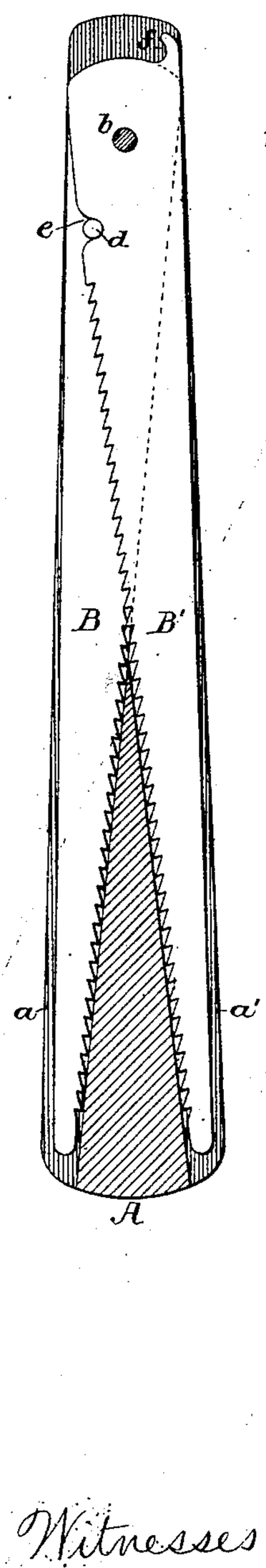


FIG. 4.

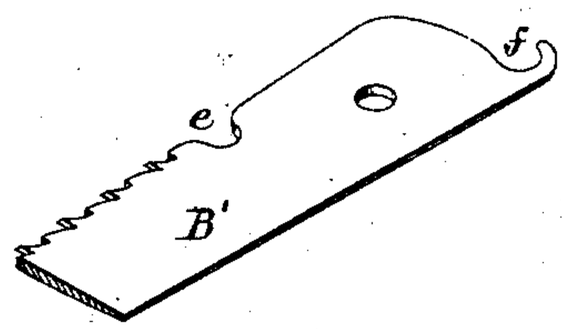


FIG. 5.

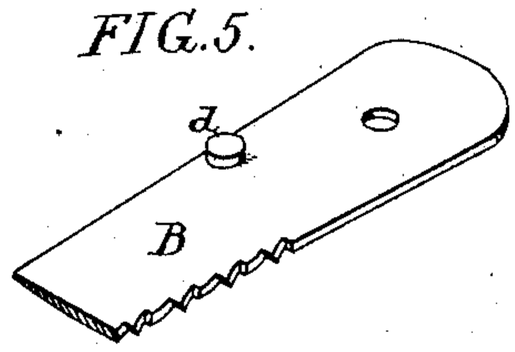


FIG. 6.

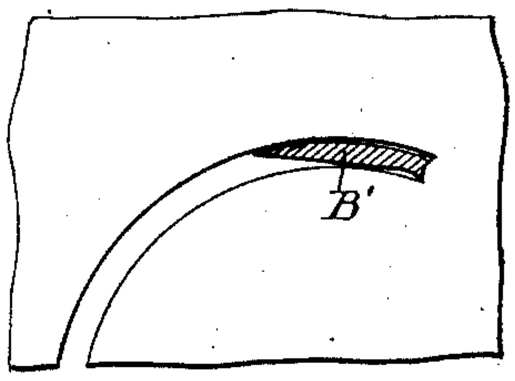


FIG. 7.

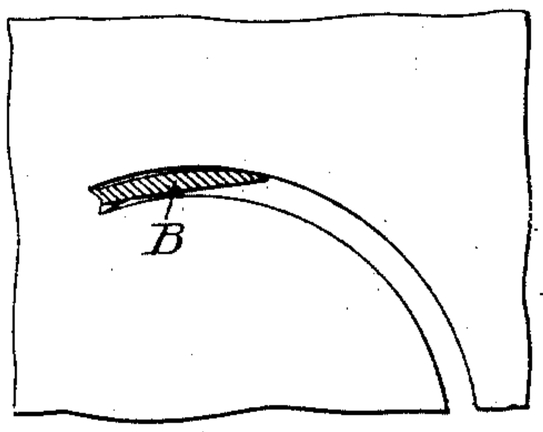
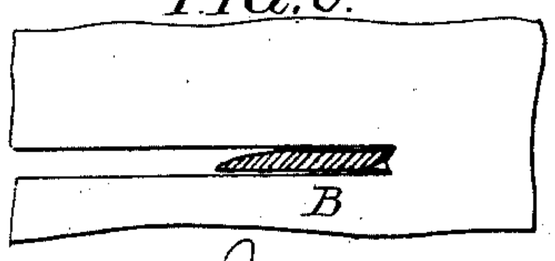


FIG. 8.



Witnesses
William D. Bonner.
Harry Smith

Inventor
Thomas S. Disston
by his Attorneys
Howson & Sons

UNITED STATES PATENT OFFICE.

THOMAS S. DISSTON, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR TO HAMILTON DISSTON, HORACE C. DISSTON, WILLIAM DISSTON, AND JACOB S. DISSTON, ALL OF SAME PLACE.

SAW.

SPECIFICATION forming part of Letters Patent No. 367,605, dated August 2, 1887.

Application filed December 14, 1886. Serial No. 221,554. (No model.)

To all whom it may concern:

Be it known that I, THOMAS S. DISSTON, a citizen of the United States, residing in Philadelphia, Pennsylvania, have invented certain Improvements in Saws, of which the following is a specification.

One object of my invention is to so make a combined right and left handed compass-saw that the blades can be compactly folded into the handle, a further object being to so construct the blade of the saw that it will cut in a straight line as well as in a curve.

In the accompanying drawings, Figure 1 is a side view of my improved compass-saw with one of the blades extended. Fig. 2 is a rear view with the blades folded in the handle. Fig. 3 is a section on the line 1 2, Fig. 2. Figs. 4 and 5 are detached perspective views of the butt-ends of the two blades; and Figs. 6, 7, and 8 are diagrams illustrating the different cuts which can be made with the saw.

The ordinary flat-sided compass-saw is not well adapted for cutting short curves, and this known defect has led to the devising of a saw having a blade tapering from the center toward each end and concavo-convex in cross-section, except at the central portion, where it is secured to the handle, one half of the blade being constructed to cut a right-hand curve and the other half to cut a left-hand curve. One-half of the length of the saw in this case always projected beyond the handle, and rendered the implement inconvenient to carry in the pocket; but a more serious objection to this construction was that, owing to the concavo-convex cross-sectional form of the two portions of the blade, it was impossible to cut in a straight line with the saw. I overcome these objections by constructing the saw in the manner shown in the drawings.

A is the handle, grooved at *a a'*, as shown in Figs. 2 and 3, for the reception of the saw-blades B B', which are pivoted to the upper portion of the handle by a bolt, *b*, provided with a suitable thumb-nut, *c*. The grooves *a a'* are tapered, leaving a tapered portion or fillet, a^2, against which the saw-blades rest when folded into the handle.

The saw-blades are so pivoted that the teeth will be on the inside when the saw-blades are folded into the handle, a stop, *d*, on the blade B, fitting into a recess, *e*, in the blade B', to limit the inward movement of both blades, and said stop *d* entering a recess, *f*, near the end of the blade B', Figs. 3 and 4, so as to limit the outward movement of the blades and act with the bolt *b* and fillet a^2 to provide a double support for the saw when cutting.

Each of the blades B B' is flat on one side and convex on the opposite side, the convex side of the saw guiding the same in cutting curves, as shown in Figs. 6 and 7, and the flat side serving as the guide in cutting in a straight line, as in Fig. 8. The blades are the opposites of each other, as regards their flat and convex sides, so that one blade is adapted for cutting right-hand curves while the other is adapted to cut left-hand curves, either blade being available for cutting in a straight line, as shown.

I claim as my invention—

1. The combination of the handle A, recessed to form a tapering fillet, a^2, with two saw-blades pivoted to the handle, one having a stop to bear against the other blade when either is extended, whereby the extended blade will have a firm bearing in the handle, substantially as set forth.

2. The combination of the recessed handle and the two saw-blades pivoted thereto, one blade having a stop lug or pin and the other blade having two recesses, one of which receives the pin when the blades are folded down into the handle, the other recess receiving said pin when either of the blades is extended, all substantially as specified.

3. A compass-saw blade having one side flat and the other side convex, all substantially as specified.

4. The combination of a recessed handle with two saw-blades pivoted thereto and each having one side flat and the other side convex, the saws being the reverse of each other as regards their flat and convex sides, all substantially as specified.

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

THOS. S. DISSTON.

Witnesses:

WILLIAM D. CONNER,

HARRY SMITH.