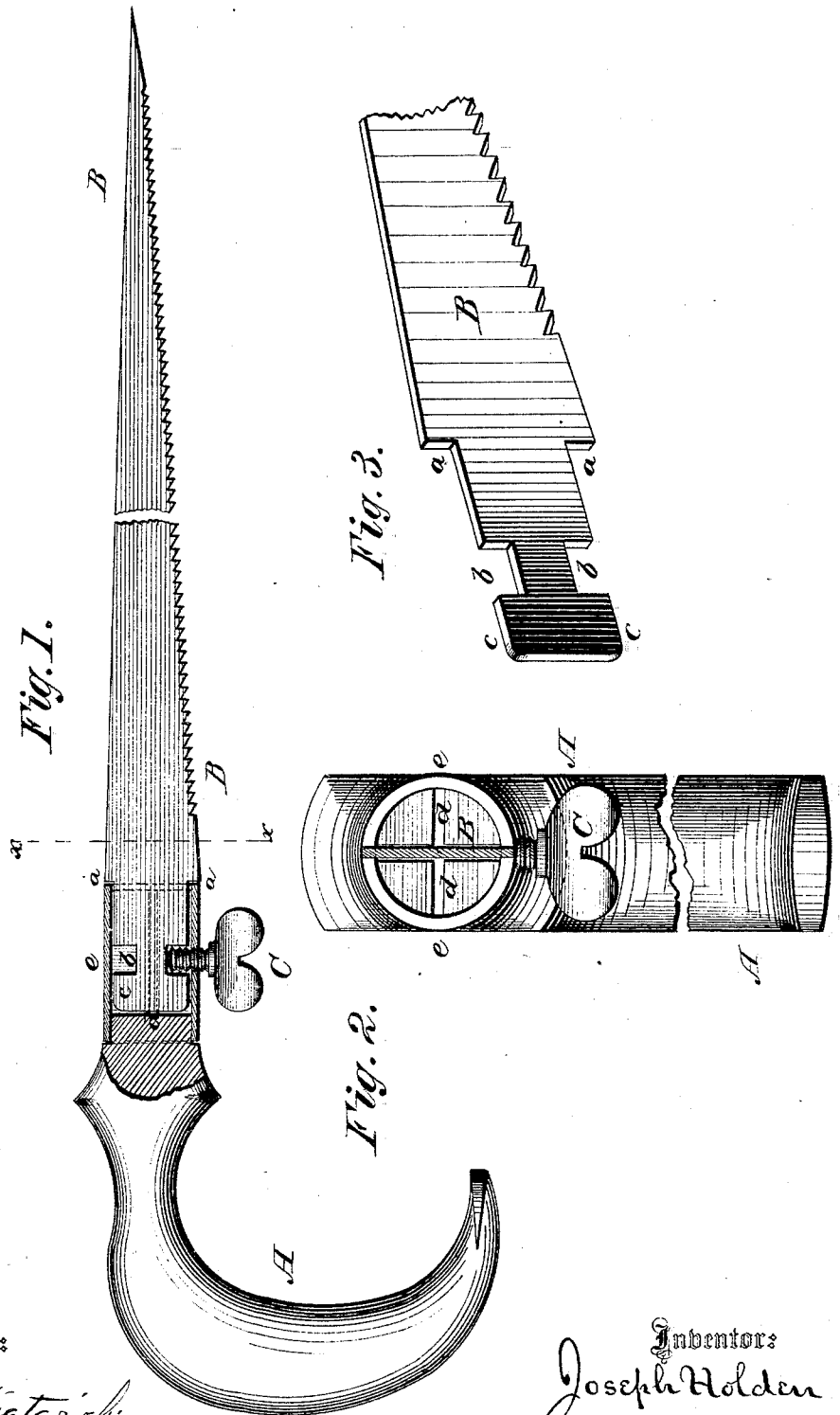


J. HOLDEN.

METHOD OF ATTACHING SAWS TO HANDLES.

No. 183,805.

Patented Oct. 31, 1876.



Witnesses:
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Inventor:
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Per: *C. H. Watson* Attorneys.

UNITED STATES PATENT OFFICE.

JOSEPH HOLDEN, OF MIDDLETOWN, NEW YORK, ASSIGNOR TO WHEELER,
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IMPROVEMENT IN METHODS OF ATTACHING SAWS TO HANDLES.

Specification forming part of Letters Patent No. **183,805**, dated October 31, 1876; application filed
September 29, 1876.

To all whom it may concern:

Be it known that I, JOSEPH HOLDEN, of Middletown, in the county of Orange and State of New York, have invented certain new and useful Improvements in Method of Attaching Saws to Handles; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

This invention relates to saws, having for its object to increase the facility in removing and changing the saws of different kinds, and to adjust the angle of the saw in relation to the handle, and at the same time to furnish a device which is simple in construction, efficient in operation, and not liable to get out of repair; and it consists in providing the handle with a number of grooves or slots, radiating from the center of the handle, and means for securing the saw-blade in position when in the handle, and whereby the blade may be readily released, and also in the construction of the heel of the blade, as will be hereinafter more fully described.

Referring to the annexed drawings, Figure 1 represents a side view, partly in section. Fig. 2 represents an enlarged transverse section upon line *x x* of Fig. 1, and Fig. 3 represents a perspective view of a part of a saw-blade and its heel.

In the drawing, A represents the handle, provided with a ferrule, *e*. The end of the handle which receives the saw is provided with slots *d*, any one of which is capable of receiving the heel of the blade B, said slots being at any different desired angle to the handle, so that the saw-blade may be placed at any desired angle in relation to the handle. This is desirable in compass-saws, as it is often impossible to place the hand in the desired position where the saw cannot be changed; but by this invention the saw can be changed to accommodate the position of the hand. The heel of the saw is provided with shoulders *a*, opening *b*, and enlargement *c*, which fits either of the grooves or slots *d* in the handle. C represents a set-screw, passing through the ferrule *e* and to the center of the handle, by which means the saw is held and secured in position when in use.

Having thus fully described my invention, what I claim, and desire to secure by Letters Patent, is—

The combination of the saw-blade B, the handle A, having slots *d*, and means for holding the blade, substantially as and for the purpose set forth.

In testimony that I claim the foregoing as my own I affix my signature in presence of two witnesses.

JOSEPH HOLDEN.

Witnesses:

CHAS. I. HUMPHREY,
WM. MILLSAUGH.