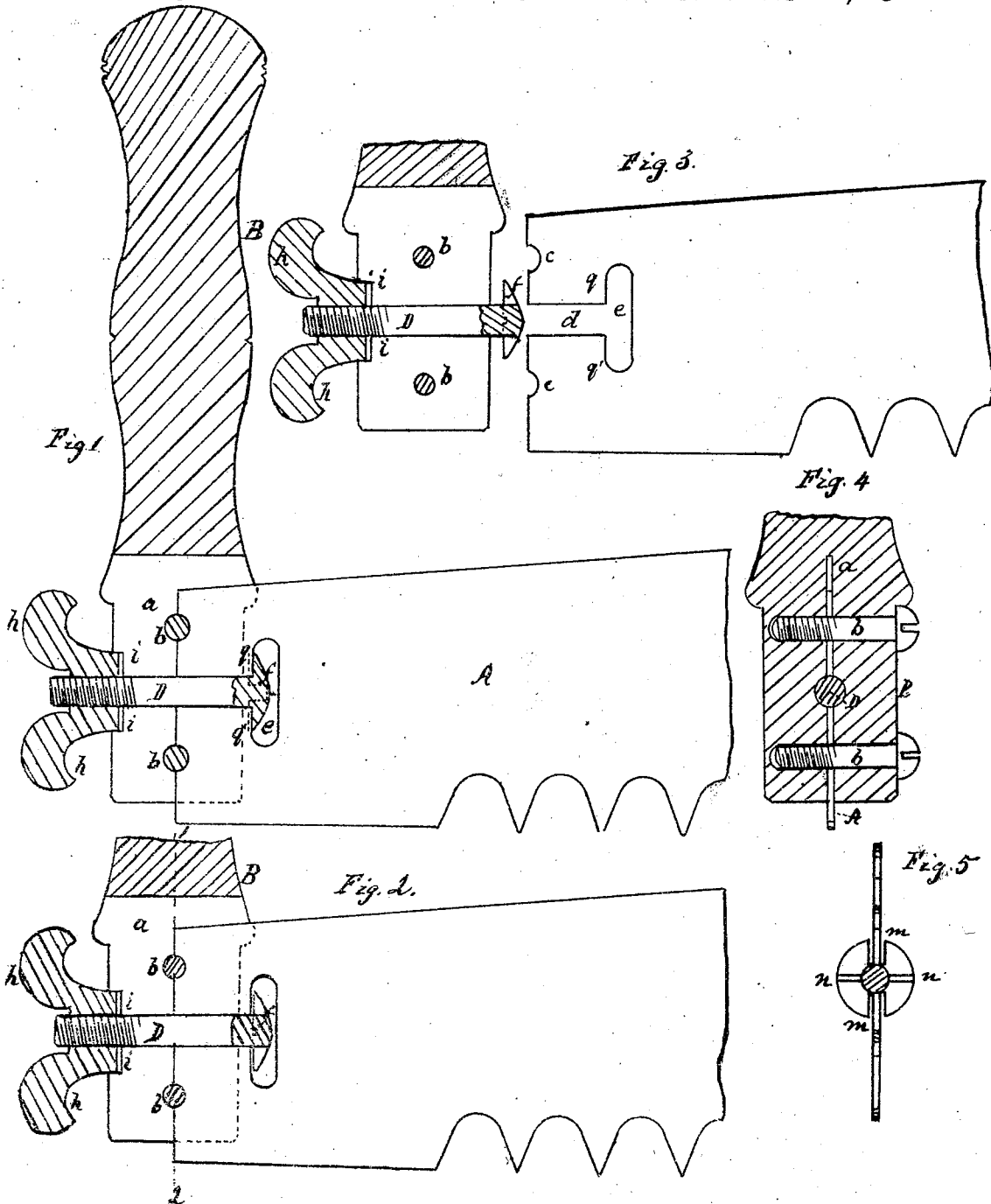


T. S. Disston.

Cross-Cut Saw.

N^o 73516

Patented Jan. 21, 1868.



Witnesses.
 Wm. Albert Steel
 John Parker

Inventor.
 T. S. Disston
 By his Atty
 H. Rowson

United States Patent Office.

THOMAS S. DISSTON, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR TO
HENRY DISSTON, OF THE SAME PLACE.

Letters Patent No. 73,516, dated January 21, 1868.

IMPROVEMENT IN CROSS-CUT SAWS.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, THOMAS S. DISSTON, of Philadelphia, Pennsylvania, have invented a Device for Securing Handles to Cross-Cut Saws; and I do hereby declare the following to be a full, clear, and exact description of the same.

My invention consists of a device, fully described hereafter, whereby the handles can be readily secured to, and as readily detached from the blades of cross-cut saws.

In order to enable others skilled in the art to make and apply my invention, I will now proceed to describe its construction and operation, reference being had to the accompanying drawing, which forms a part of this specification, and in which—

Figures 1 and 2 are sections of the handle and part of the blade of a cross-cut saw with my improvement.

Figure 3, the same, showing the blade detached from the handle.

Figure 4, a vertical section on the line 1 2, fig. 2; and

Figure 5, a view of the end of the blade and bolt-head.

Similar letters refer to similar parts throughout the several views.

A represents part of the blade of a cross-cut saw, and B one of the handles, at the lower end of which is cut a vertical slot, *a*, for the reception of the blade, the end of the latter having two notches, adapted to set-screws *b b*, which penetrate the handle, as shown in fig. 4. In the blade, near the end of the same, is cut a horizontal opening, *d*, meeting and communicating with a vertical opening, *e*, the latter receiving the head *f*, and the former the stem of a bolt, D, the outer end of which is provided with a thumb-nut, *h*, bearing against a washer, *i*, adapted to the handle B.

The head, *f*, of the bolt D has two slots, *m m*, as wide as or somewhat wider than the saw is thick, so that, in pushing the handle towards the blade, or the blade towards the handle, (fig. 3,) the head of the bolt at once finds its way to the opening, *e*, of the blade, the stem of the bolt fitting in the opening *d*, and the screws *b b* into the notches in the end of the blade.

The bolt is now turned one-quarter round, or until grooves *n n*, formed in the inner face of the head, coincide with the shoulders *q q*, formed in the blade at the junction of the two openings, *d* and *e*. The nut *h* is now tightened, and the handle thereby effectually secured to the blade.

When the handle has to be detached, all that is necessary is to loosen the nut to the limited extent required for withdrawing the grooves, *n n*, of the head of the bolt from the shoulders, *q q*, of the blade, and then turn the bolt until the slots, *m m*, of the head coincide with the said shoulders, after which the blade can be drawn away from the handle, as shown in fig. 3.

The grooves *n n*, in the head, *f*, of the bolt, are not indispensable, although I prefer them as a means of preventing the bolt from being turned after the handle has been secured to the blade.

I do not claim broadly securing a handle to a saw-blade by bolts passing through the handle and into openings in the blade, from which openings the bolts may be withdrawn without disconnecting them from the handle; but

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

A bolt, D, with a slotted head, *f*, in combination with a handle, B, slotted for the reception of one end of a saw-blade, and having screws *b*, or other equivalent bearings, for the end of the said blade, when the latter has openings *d e*, adapted for the reception of the head and end of the bolt, all substantially as described.

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

THOS. S. DISSTON.

Witnesses:

JOHN WHITE,

W. J. R. DELANY.