

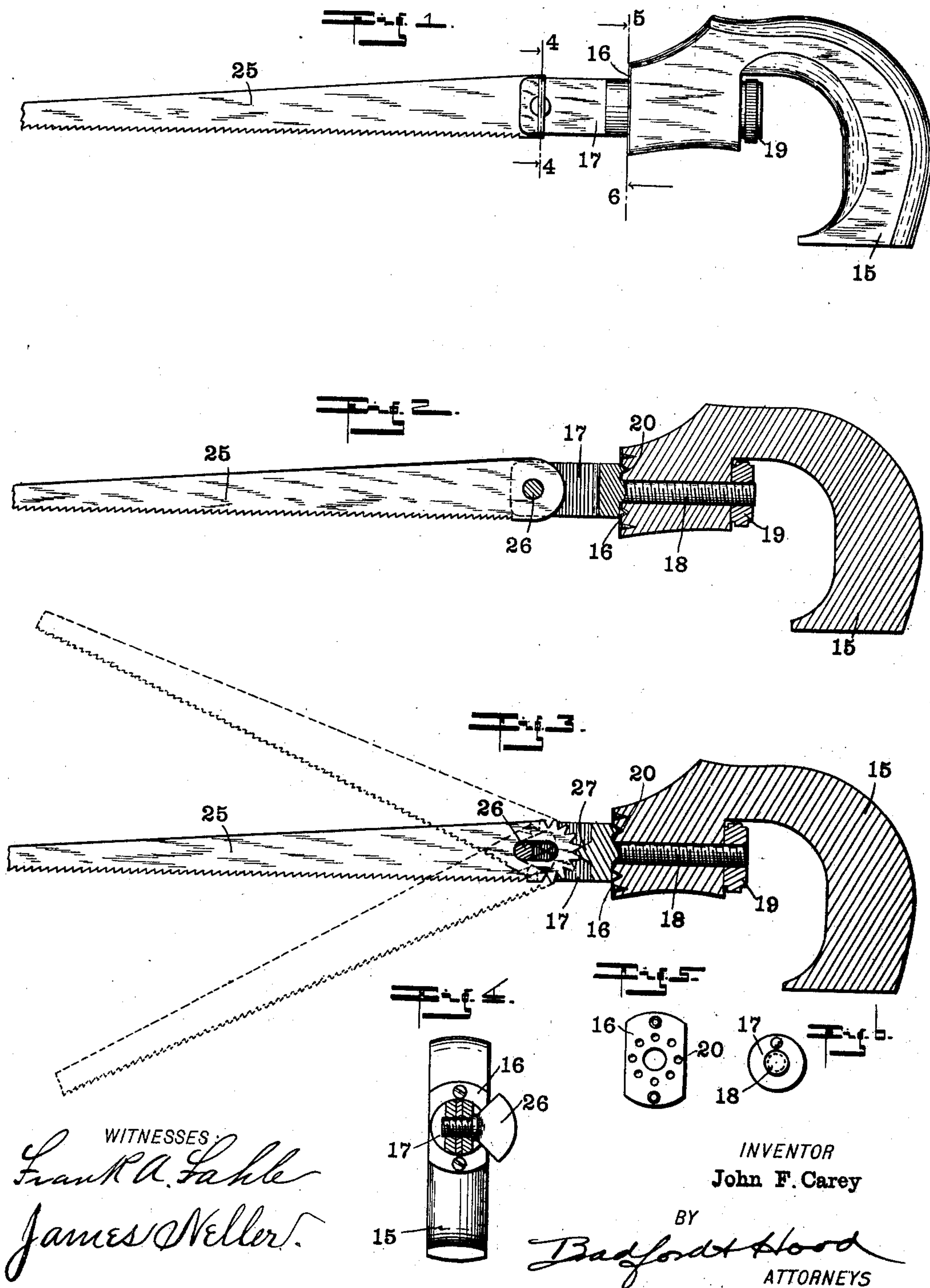
No. 703,334.

Patented June 24, 1902.

J. F. CAREY.
COMPASS SAW.

(Application filed Mar. 17, 1902.)

(No Model.)



WITNESSES
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COMPASS-SAW.

SPECIFICATION forming part of Letters Patent No. 703,334, dated June 24, 1902.

Application filed March 17, 1902. Serial No. 98,538. (No model.)

To all whom it may concern:

Be it known that I, JOHN F. CAREY, a citizen of the United States, residing at Madison, in the county of Dane and State of Wisconsin, have invented certain new and useful Improvements in Compass-Saws, of which the following is a specification.

The object of my invention is to produce a compass-saw the blade of which can be adjusted to extend in any desired direction from the handle and so revolved that the cutting edge will face in any desired direction and the parts at the same time when adjusted and ready for use be so securely held in place as to be in no danger of being shifted by any strain which is likely to come upon them, as will hereinafter be more particularly described and claimed.

Referring to the accompanying drawings, on which similar reference characters indicate similar parts, Figure 1 is a side elevation of a compass or keyhole saw embodying the invention in question; Fig. 2, a longitudinal sectional view through the handle and blade-holder, showing the blade in elevation; Fig. 3, a view similar to Fig. 2, showing a somewhat different form of the structure, whereby the saw-blade is held more rigidly to the position desired, and also showing by means of dotted lines other positions of said blade; Fig. 4, a transverse sectional view as seen when looking in the direction indicated by the arrows from the dotted line 4 4 in Fig. 1; Fig. 5, a face view of the detent-plate on the handle as seen when looking toward the handle from the dotted line 5 6 in Fig. 1, and Fig. 6 a view of the end of the saw-blade holder as seen when looking toward the same from said dotted line 5 6.

The saw-handle 15 is formed of wood and at the saw-holding end has a longitudinal perforation therein, as best shown in Figs. 2 and 3. Upon the end of this handle is a detent-plate 16, having a central perforation through which the shank of the blade-holder passes and also having a row of smaller perforations disposed annularly about the said central perforation. The blade-holder 17 has a slit, into which the rear end of the blade passes, and a shank 18, which passes through the perforation in the handle 15, and upon

the end of said shank is a nut 19. Upon that surface face of said blade-holder which comes against the plate 16 is a projection 20, which is adapted to engage with one of the or holes or notches in the plate 16. When, therefore, it is desired to revolve the saw-blade in respect to the handle, so that its cutting edge will face in a different direction, it is only necessary to loosen the nut 19 until the shank 18 may slip endwise in the perforation in the handle 15 sufficiently so that the projection 20 may escape from engagement with the hole with which it is at the time in engagement in the detent-plate 16, revolve the blade-holder and blade to the position desired, bringing the projection 20 into engagement with another of the holes in said plate 16, and retighten the nut 19, whereupon the blade will be held in its new position as strongly and rigidly as before.

The saw-blade 25 is secured to the blade-holder 17 by a suitable means, as by a thumb-bolt 26, which forces the two sides of said blade-holder firmly together, clamping the saw-blade strongly between them. This in many cases is sufficient to hold the blade as firmly as is necessary and is all the means shown for that purpose in Fig. 2. In Fig. 3, however, I show an additional and more certain means of securing these parts to the adjusted position. This I do by elongating the hole in the rear end of the saw-blade somewhat, cutting notches in its rear rounded end, and providing a projection 27 between the jaws of the blade-holder 17, which is adapted to engage with one of said notches. In making the adjustment in question when this construction is employed I loosen the thumb-bolt 27, slip the saw-blade outwardly slightly, (this being permitted by the elongated hole through which the thumb-bolt passes,) swing it to the position desired—as, for example, one of the positions indicated by the dotted lines in Fig. 3—slip it back until the appropriate other one of the notches in the end of the saw-blade engages with the projection 27, and retighten the thumb-bolt 26, with the result that the saw-blade is securely and rigidly held in its new position, as will be readily understood.

Having thus fully described my said inven-

tion, what I claim as new, and desire to secure by Letters Patent, is—

1. The combination, in a saw, of a saw-handle, a blade-holder divided by a slit into two jaws and having a point or projection within said slit, a saw-blade having a notched and rounded rear end the notches wherein are adapted to engage with said projection, and means (as a thumb-bolt) for clamping the blade-holder jaws upon the saw-blade at any point of its adjustment.

2. The combination, in a saw, of a saw-handle, a blade-holder secured thereto having a projection adapted to engage with a notch in the saw-blade, a saw-blade having a rounded and notched rear end and an elongated perforation, and a bolt or screw passing through said blade-holder and blade, substantially as and for the purpose set forth.

3. The combination in a saw, of a saw-handle having a longitudinal perforation in that portion next to the blade-holder and a row of

notches annularly disposed about said perforation, a blade-holder having a projection adapted to engage with one of said notches and a shank adapted to pass through said perforations, a nut on said shank, a saw-blade having a rounded and notched rear end and an elongated hole, the same being placed between the jaws of the blade-holder, said blade-holder being also provided with a projection adapted to engage with one of the notches in the saw-blade, and a bolt or screw passing through the blade-holder jaws and blade and clamping the same together, substantially as set forth.

In witness whereof I have hereunto set my hand and seal at Troy, New York, this 7th day of March, A. D. 1902.

JOHN F. CAREY. [L. S.]

Witnesses:

WM. T. GREER,
J. LE ROY PINE.