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W. E. DILLARD.

SAW HANDLE.

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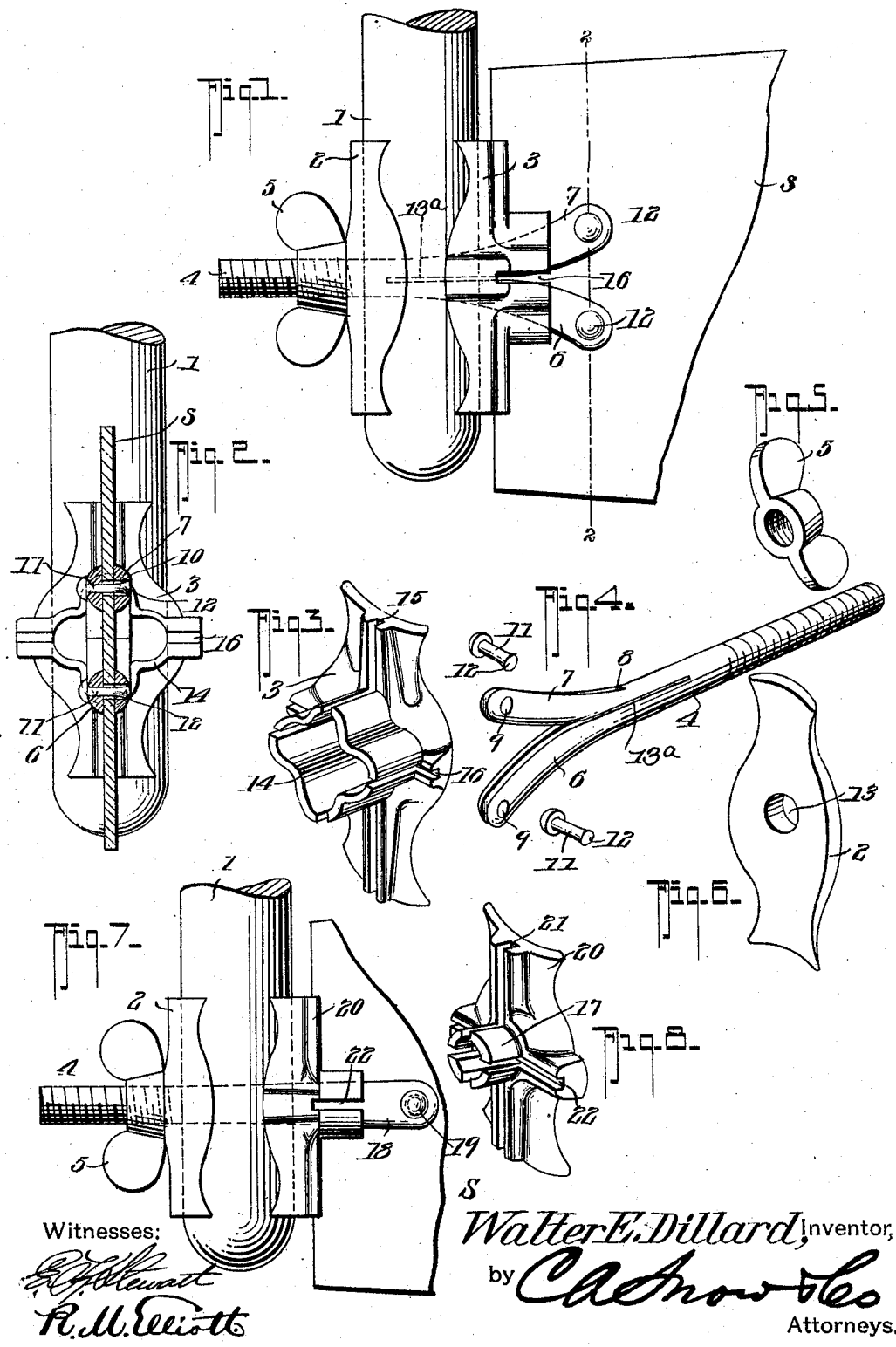

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UNITED STATES PATENT OFFICE.

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SAW-HANDLE.

No. 806,328. Specification of Letters Patent. Patented Dec. 5, 1905.

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To all whom it may concern:

Be it known that I, WALTER E. DILLARD, a citizen of the United States, residing at Petersburg, in the county of Dinwiddie and State of Virginia, have invented a new and useful Saw-Handle, of which the following is a specification.

This invention relates generally to saw-handles, and more particularly to one adapted for use in connection with crosscut-saws.

The object of the invention is to improve the construction of the hand clamping members in such manner as to cause one of them to act as an effective reinforcer for the bolt to prevent its saw-engaging arm or arms from opening, and thus releasing the saw should the handle be subjected to violent lateral strain or twisting action.

A further object is to improve the manner of combining the saw-holding pin with the bolt, whereby it will be positively held from accidental separation therefrom when the handle is removed from the saw-blade.

A further object is to render the saw-clamping members capable of universal application—that is to say, to hold the saw-handle in parallelism with the blade or at right angles thereto, thereby to adapt the saw for cutting either standing or fallen timbers.

With the above and other objects in view, as will appear as the nature of the invention is better understood, the same consists in the novel construction and combination of parts of a saw-handle, as will be hereinafter fully described and claimed.

In the accompanying drawings, forming a part of this specification, and in which like characters of reference indicate corresponding parts, Figure 1 is a view in side elevation, exhibiting one form of the handle combined with the saw-blade. Fig. 2 is a vertical transverse sectional view taken on the line 2 2, Fig. 1, and looking in the direction of the arrow thereon. Figs. 3, 4, 5, and 6 are fragmentary detail views of the different parts of the saw-handle shown in Figs. 1 and 2. Fig. 7 is a view in side elevation of a slightly-modified form of saw-handle. Fig. 8 is a view in perspective of one of the saw-clamping members shown in Fig. 7.

Referring to the drawings, and to Figs. 1 to 6 thereof, S designates a section of a saw, which may be of any preferred type of crosscut-saw, and as this forms no part of the present invention detailed description thereof is deemed unnecessary.

Combined with the saw is the handle, which embodies a handhold 1, a pair of clamping members 2 and 3, a bolt 4, and a winged nut 5 for effecting proper clamping actions between the parts.

The handhold 1, as usual, is made of a plain cylindrical piece of wood and is provided with a transverse orifice to receive the bolt.

The gist of the present invention resides in the novel form of construction of the bolt and of one of the clamping members, whereby the former is positively braced against any tendency to yield laterally, and thus permit its disconnection from the saw-blade. The bolt (designated generally 4) is provided at one end with threads to be engaged by the winged nut 5 and its opposite end with two divergent longitudinally-bifurcated arms 6 and 7, the bifurcation of the arms being extended into the bolt, as shown at 8, in order that a part of the strain may be transmitted directly thereto and not all be borne by the arms. Each arm is provided with a transverse orifice 9, that extends through both members thereof, and the orifice in one member is of greater diameter than that of the other, as clearly shown at 10 in Fig. 2, the object of this arrangement being to prevent accidental separation of the arms from the saw-holding pins 11. This effect is secured by upsetting the end of each of the pins, as shown at 12, forming thereby a head which will be of a size to pass freely through the larger orifices of the arms, but will be prevented from passing through the smaller ones thereof, so that it will be seen that any possibility of accidental loss of the pins when the saw is disconnected from the handle will positively be precluded.

Where the bolt is provided with two arms, as above described, in some cases the pin-orifices of the saw might not register with those in the bolt-arms, and in order to permit these to be flexed inward or outward to meet such an emergency the bolt from the crotch of the arms is longitudinally slitted or divided, as at 13^a, by which arrangement it will be seen that the arms may be moved either to or from each other a sufficient distance to compensate for any misregistering of the pins with the pin-holes in the saw.

The clamping member 2 is an approximately rectangular structure bowed in cross-section to conform to the shape of the handhold and provided with an orifice 13 intermediate of its ends to receive the bolt 4. The clamping member 3 is also bowed in cross-

section and is provided on its convex side with a tubular extension 14, which, as shown in Fig. 1, is adapted to embrace the saw-engaging arms 6 and 7 to a point close to the pins, thereby positively to brace these parts against any tendency to yield or open when violent lateral or twisting strains are applied to the handle. As above stated, the handle is adapted for universal adjustment—that is to say, to allow the handhold to occupy a position parallel with the width of the blade, as shown in Fig. 1, when the saw is used for cutting fallen timber, or to occupy a position at right angles to the width of the blade when used for felling standing timber. In order to permit of these adjustments, the bolt-reinforce 14 is, as shown in Fig. 3, quatrefoil in cross-section, and by thus constructing the element it will be seen that it will be caused to impinge and inclose the arms in either position to which the handle may be moved.

In order to prevent any wabbling movement of the saw relatively to the member 3, the latter is provided with two saw-seats 15 and 16, which are disposed at right angles to each other and extend through the reinforce, thus to permit the saw to engage the seats, as will be obvious.

When the parts are positioned as shown in Fig. 1 and the nut 5 is tightened, the reinforce 14 will be forced up against the arms 6 and 7, and thereby positively brace them transversely, so that any tendency to open, as from strains or twists, will be positively precluded.

In the form of the invention shown in Figs. 7 and 8 the quatrefoil-shaped reinforce is dispensed with and a tubular reinforce 17 is employed in lieu of it, this form being adapted for use in connection with a bolt 18, carrying only a single saw-engaging pin 19. With this exception the construction and operation are precisely the same as that above described, it being seen the clamping member 20 is provided with vertical and transverse saw-seats 21 and 22, which operate in the same manner as the seats 15 and 16 in the form of the invention shown in Fig. 1.

It will be seen from the foregoing description that although the improvements herein defined are simple in character they will in a practical and positive manner secure the results designed and, further, will obviate a serious objection heretofore present in saw-handles of this character, wherein it frequently happens that the arms of the bolt spread from strains, and thus permit the handle to become detached therefrom.

Having thus described the invention, what is claimed is—

1. A saw-handle embodying clamping members, one of which is provided with a bolt-reinforce slotted to admit the saw and permit the reinforce to engage and sustain the bolt beyond the end of the saw.

2. A saw embodying clamping members one of which is provided with an outstanding quatrefoil-shaped bolt-reinforce slotted to admit the saw and permit the reinforce to engage and sustain the bolt beyond the end of the saw.

3. A saw-handle embodying clamping members, one of which is provided with an outstanding quatrefoil-shaped bolt-reinforce slotted to admit the saw and permit the reinforce to engage and sustain the bolt beyond the end of the saw, the said member having saw-seats into which the slots merge.

4. A saw-handle embodying clamping members one of which is provided with a quatrefoil-shaped bolt-reinforce, and means for assembling the bolt with the handhold, the reinforce being slotted to admit the saw and permit the reinforce to engage and sustain the bolt beyond the end of the saw.

5. As a new article of manufacture, a bolt for saw-handles comprising a shank and a pair of outward-diverging arms each bifurcated to straddle the saw, the dividing of the arms being continued into the body of the bolt beyond the crotch, thereby to permit different degrees of spreading by flexing the arms.

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

WALTER E. DILLARD.

Witnesses:
J. H. JOCHUM, Jr.,
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