(No Model.)

C. S. McINTIRE.

SHOVEL HANDLE.

No. 599,514. Patented Feb. 22, 1898.

Fig. 1.

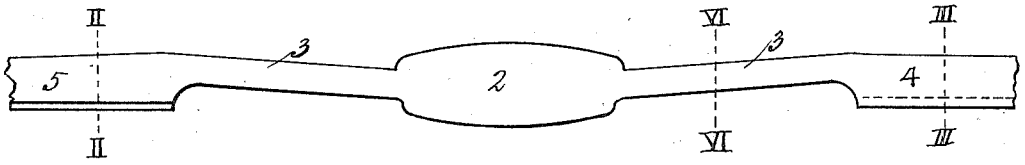


Fig. 2.

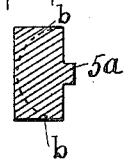


Fig. 3.

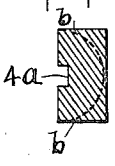


Fig. 6.

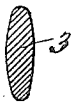


Fig. 4.

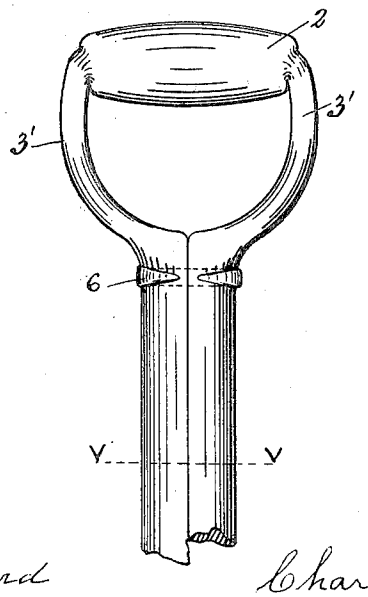
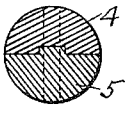


Fig. 5.



Witnesses:
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UNITED STATES PATENT OFFICE.

CHARLES S. McINTIRE, OF ALLEGHENY, PENNSYLVANIA, ASSIGNOR OF TWO-THIRDS TO J. B. ZIMMERMAN AND WALTER C. BERINGER, OF PITTSBURG, PENNSYLVANIA.

SHOVEL-HANDLE.

SPECIFICATION forming part of Letters Patent No. 599,514, dated February 22, 1898.

Application filed February 26, 1897. Serial No. 625,114. (No model.)

To all whom it may concern:

Be it known that I, CHARLES S. McINTIRE, a citizen of the United States, residing at Allegheny, in the county of Allegheny and State of Pennsylvania, have invented or discovered new and useful Improvements in the Manufacture of Shovel and other Handles, of which the following is a specification.

In the accompanying drawings, which make part of this specification, Figure 1 is a side elevation broken off of the blank from which I make the handle. Figs. 2 and 3 are sections on lines 2 2 and 3 3, respectively, of Fig. 1. Fig. 4 is an elevation broken off showing handle completed; Fig. 5, a section on line 5 5 of Fig. 4. Fig. 6 is a section on line 6 6 of Fig. 1.

The ordinary working spade, shovel, and like handles are cut out of the solid by special machinery, which forms the D-shaped hand-grasp.

I propose to manufacture a wooden handle whose blank can be made on any common shaper and the blank subsequently bent together and the handle proper rounded and the two parts thereof secured together, as hereinafter described. This handle is very cheap and as strong and durable as if made from the solid, while it requires only the most familiar tools to construct the same.

In the several views which make part of this specification the blank shown in Fig. 1 is preferably of hickory or other tough wood which can be subsequently bent. In said blank 2 is a central swell which finally constitutes the cross-bar of the hand-grasp. On each side of said swell are the portions 3 3, preferably oval in cross-section, which become the side bars of the hand-grasp. At the right-hand end of the blank is the portion 4, preferably rectangular in cross-section and provided with a groove 4^a on its lower edge, as seen in Fig. 3. On the left-hand end of the blank is the portion 5, preferably rectangular in cross-section and provided with a tongue 5^a on its lower edge, as seen in Fig. 2. The dotted curved lines *b b* in Figs. 2 and 3 indicate the shape to which the handle is finally dressed; but I prefer to reserve this shaping until the two halves are bent together, as the wood can be more satisfactorily worked in that position.

The blank of Fig. 1 having been made in any suitable shaper, the sides of the hand-grasp 3 3 are bent under the action of steam or otherwise until they assume the curves seen at 3′ 3′, Fig. 4. This brings the longitudinal halves of the handle together, and the tongue 5^a is neatly fitted into the groove 4^a. The handle is then rounded in any suitable shaper and the parts 4 and 5 permanently fastened together by any sufficient number of straps 6 or in any other convenient way. If desired, a dowel construction may be substituted for the tongue and groove, and this latter construction of pins and sockets would be slightly cheaper.

Having described my invention, I claim—

1. An integral blank for shovel and other handles, consisting of a central swell for the cross-bar of the hand-grasp; side bars for the hand-grasp on each side of said swell, and half-handle portions beyond said side bars, provided respectively with a tongue and groove on their corresponding edges.

2. In shovel or other handles, the combination of a hand-grasp having a cross-bar and side bars and integral extensions from said side bars forming each a half of the handle and provided with a tongue, and groove on their meeting edges.

3. In shovel or other handles, the combination of a hand-grasp having a cross-bar and side bars; integral extensions from said side bars forming each a half of the handle and provided with a tongue and groove on their meeting edges and means for securing said half-handles together.

In testimony whereof I have hereunto set my hand this 25th day of February, A. D. 1897.

CHARLES S. McINTIRE.

Witnesses:
WM. L. PIERCE,
M. K. COSTER.