

No. 768,490.

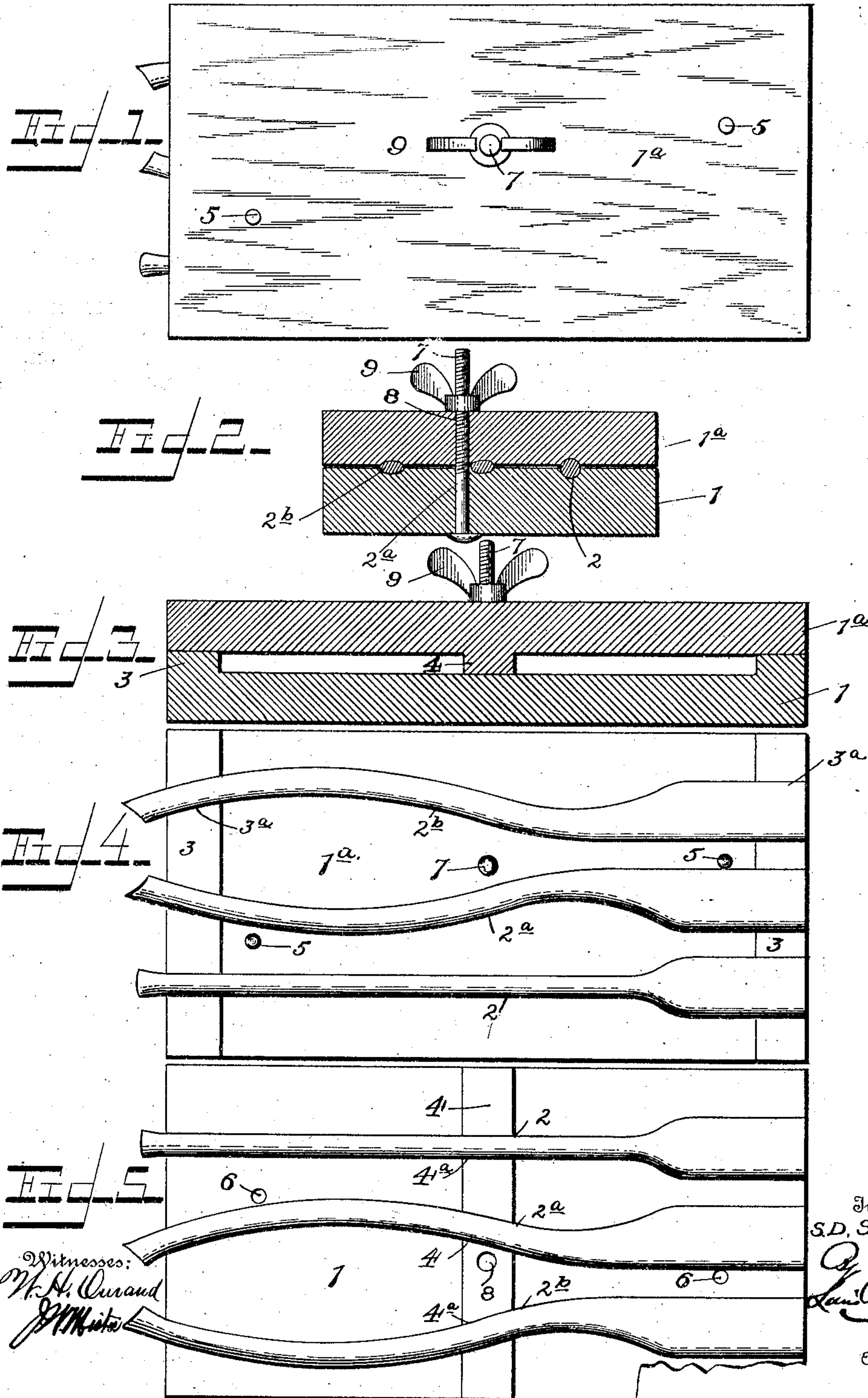
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S. D. SULLIVAN.

APPARATUS FOR STRAIGHTENING AX HANDLES.

APPLICATION FILED APR. 18, 1904.

NO MODEL.



Witnesses:  
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# UNITED STATES PATENT OFFICE.

STEPHEN DUNKLING SULLIVAN, OF CARTWRIGHT, TEXAS.

## APPARATUS FOR STRAIGHTENING AX-HANDLES.

SPECIFICATION forming part of Letters Patent No. 768,490, dated August 23, 1904.

Application filed April 18, 1904. Serial No. 203,787. (No model.)

*To all whom it may concern:*

Be it known that I, STEPHEN DUNKLING SULLIVAN, a citizen of the United States, residing at Cartwright, in the county of Wood and State of Texas, have invented new and useful Improvements in Apparatus for Straightening Ax-Handles, of which the following is a specification.

My invention pertains to improvements in what may be termed "wood-bending" machines or presses, more particularly designed for straightening or restoring to their normal or original outline distorted or warped ax-handles.

It has for its object, as implied, to obviate the loss or rendering unsalable this class of goods should they become crooked or warped, as has occurred from the changes or action of the temperature thereon, especially if not previously properly seasoned, as when stored or kept in stock for sale, and to secure the aforesaid object in an effective and ready way.

Said invention consists of the combination of certain parts including their construction and arrangement, substantially as hereinafter more fully disclosed, and particularly pointed out by the claims.

In the accompanying drawings, illustrating the preferred embodiment of my invention, Figure 1 is a plan view thereof. Fig. 2 is a cross-section, and Fig. 3 is a longitudinal section, of the same. Figs. 4 and 5 are views disclosing the principal parts or members of the invention disassembled and viewed from their normally upper and lower or inner surfaces, respectively.

In the practicing of my invention I provide principally two parts or members 1 1<sup>a</sup>, produced or formed either of wood or metal, as may be thought more practicable. Said members or parts, preferably in their general outline rectangular, are provided in their inner or facing surfaces with longitudinal grooves or channels 2 2<sup>a</sup> 2<sup>b</sup>, presumably of a depth jointly equal to the cross-section of a handle and in general contour corresponding to that of the latter for the reception thereof, as presently seen. One of these grooves, 2, is mainly straight throughout, while the others,

2<sup>a</sup> 2<sup>b</sup>, are of a recurved contour, one, however, being the reversal of the other, the purpose of which will appear later.

The base member or part 1 has extending transversely thereof at its ends bearings or upraised portions or ledges 3, with continuations of said grooves or channels 3<sup>a</sup> formed therein, conforming to the terminals of the ax-handles, as shown, and about the transverse center of the opposite member or part is a depending portion or ledge or bearing 4, having, of course, therethrough continuations 4<sup>a</sup> of the grooves or channels therein.

The base member or part 1 has extending vertically upward therefrom guide or bracing studs or pins 5, one arranged at or near each end of said member engaging or entering coincident apertures 6, produced in the other or top member 1<sup>a</sup>, which apertures, however, need not extend wholly through the latter, said pins or studs aiding to prevent lateral displacement of the top member in offering the requisite resistance tending to such displacement, as in effecting the compressing or straightening operation, as will later appear. Also upstanding from the base member, about centrally thereof, is a screw-bolt 7, adapted to pass through a corresponding aperture 8 in the top member or part, said screw-bolt being fitted or equipped above the latter with a thumb-nut 9, whereby pressure may be exerted upon said latter member.

In operation a handle of the straight type—such, for instance, as used in a double-bladed ax—which may have become warped or distorted is initially placed by hand in the general plane of the groove 2 in the bottom member 1, while other handles as their treatment may require may be disposed in like manner with relation to the grooves 2<sup>a</sup> 2<sup>b</sup> of said member. The top member 1<sup>a</sup> is put into proper position upon the bottom member, with the screw 7 passing therethrough and the thumb-nut 9 placed upon said bolt. By suitably turning said nut to the required extent the requisite pressure is transmitted via said top member to said handles to force the latter into said grooves, or in the direction of least resistance, thus restoring them to normal con-



dition. The pressure thus applied is maintained until the required stressing of the handles has been secured, the practicalness of which I have demonstrated.

5 This invention will be found to be very serviceable and of value in the execution of its intended purpose.

Latitude is allowed as to details herein, as they may be changed as circumstances suggest without departing from the spirit of my invention and the latter still be protected.

I claim—

1. A device of the character described consisting of two members having facing longitudinal grooves or channels therein, and means  
15 adjunctive to said members, respectively, to hold the same apart a suitable distance immediately of their ends and center and yet having contact one with the other at said ends  
20 and center, and one of said members having upstanding guide or bracing studs and a screw-bolt, passing through the companion member

with a nut applied to said screw-bolt outside of the latter member.

2. A device of the character described, consisting of two members having longitudinal channels or grooves therein, one of said members having end transverse upraised ledges or portions and the other member having a central transverse depending portion, the first-referred-to member also having upstanding studs or pins engaging apertures in the last-referred-to member, and an upstanding screw-bolt passing through an aperture in the latter member and having applied thereto a thumb-nut. 25 30 35

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

STEPHEN DUNKLING SULLIVAN.

Witnesses:

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