No. 715,135. Patented Dec. 2, 1902.

R. PARKES.

HANDLE FOR SPADES OR OTHER TOOLS.

(Application filed May 13, 1902.)

(No Model.) 2 Sheets—Sheet 1.

Fig. 1.

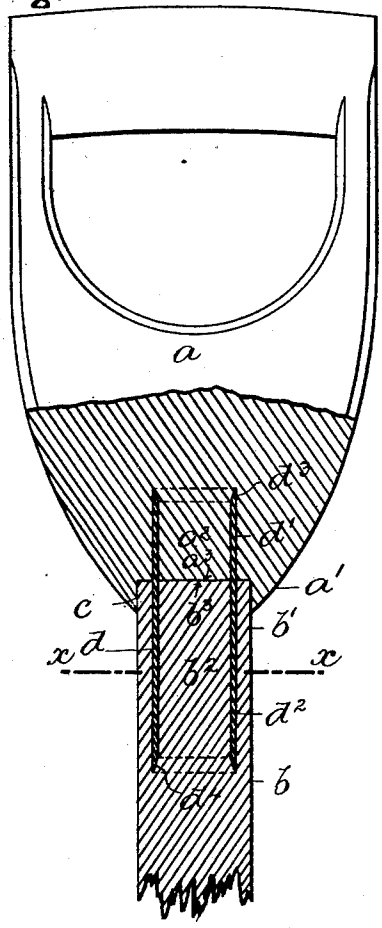


Fig. 2.

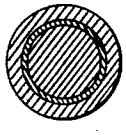


Fig. 3.

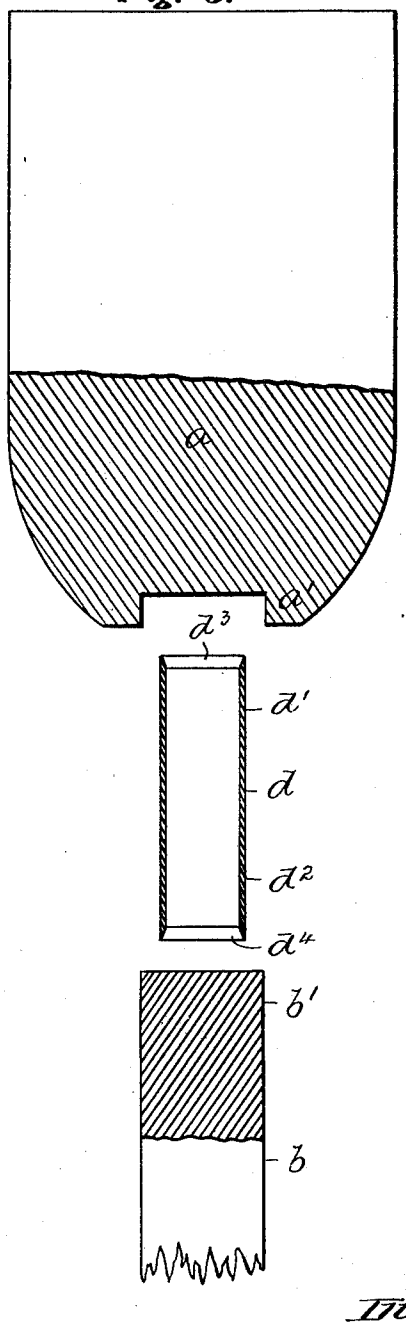
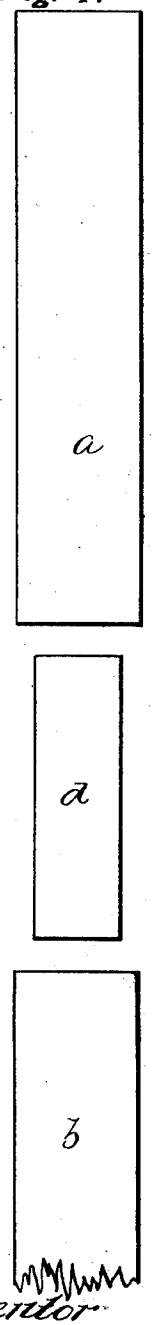


Fig. 4.



WITNESSES

J. B. Keeler

Dennis Sumby.

Inventor

Richard Parkes

By James L. Norris

Atty.

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

No. 715,135. Patented Dec. 2, 1902.

R. PARKES.

HANDLE FOR SPADES OR OTHER TOOLS.

(Application filed May 13, 1902.)

(No Model.) 2 Sheets—Sheet 2.

Fig. 5.

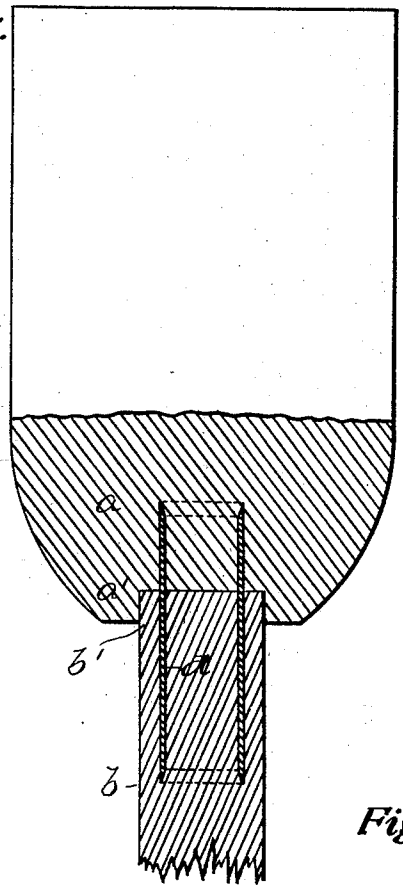


Fig. 6.

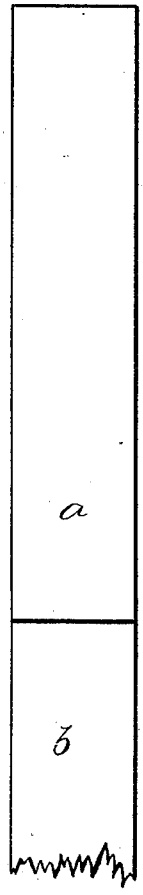


Fig. 7.

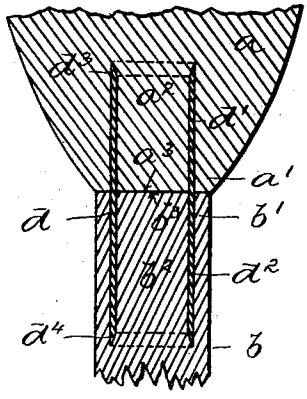
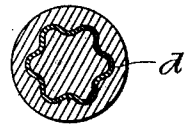


Fig. 8.



WITNESSES

Dennis Sumby.

Inventor
Richard Parkes
By James L. Norris.
Atty.

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

RICHARD PARKES, OF BIRMINGHAM, ENGLAND.

HANDLE FOR SPADES OR OTHER TOOLS.

SPECIFICATION forming part of Letters Patent No. 715,135, dated December 2, 1902.

Application filed May 13, 1902. Serial No. 107,136. (No model.)

To all whom it may concern:

Be it known that I, RICHARD PARKES, a managing director of A. and F. Parkes and Company, Limited, edge-tool manufacturers, a subject of the King of Great Britain, residing at Dartmouth street, Birmingham, England, have invented certain new and useful Improvements in Handles for Spades or other Tools, of which the following is a specification.

This invention has relation to the handles of spades, shovels, forks, and analogous tools and implements, and particularly to handles of that type in which a D-shaped or like bow is provided to form a handhold. Usually these handles with their bows are cut out solid from one piece of wood, so that the handhold is integral with the stem; but this method entails considerable waste of wood and is consequently expensive.

The object of the present invention is to reduce the cost of producing such handles, and this I propose to effect by building the same up from two separate pieces of wood and reinforcing the joints or junctions between the two component parts or sections by a simple metallic bond driven into the meeting ends of the two parts to be joined or connected.

Figure 1 of the accompanying drawings represents, partly in section and partly in elevation, the handhold or grip and a portion of the stem of a built-up and reinforced handle for spades and the like constructed in accordance with this invention. Fig. 2 is a cross-section of the stem upon the dotted line *x*, Fig. 1. Fig. 3 shows, partly in section and partly in elevation, the wood blank from which the handhold is fashioned, the metallic bond or reinforcement, and a portion of the stem separately. Fig. 4 shows in edge view the same separated parts as are represented in Fig. 3. Fig. 5 is a view, partly in section and partly in elevation, showing how the component parts are assembled together before the handhold-blank is finally shaped. Fig. 6 is an edge view of Fig. 5. Fig. 7 represents in section part of a modified form of built-up and reinforced handle. Fig. 8 is a transverse sectional view showing a modified form of metallic reinforcing-bond.

According to the said invention as applied to the construction of the form of spade-handle as shown in Figs. 1 to 6 it is proposed to make or fashion the handhold or gripping end *a* and the stem of a handle *b* from two different and separate pieces of wood and connect the end *b'* of the stem to the bottom *a'* of the handhold-bow by a dovetail, tenoned, tongued, or other suitable joint, such as shown at *c* in Fig. 1. To reinforce this joint or connection, it is proposed to employ a metallic bond consisting of a short length of open-jointed or solid tubing *d*, which is driven or forced into solid wood at the meeting parts of stem and bow, respectively, so that its opposite ends d' d^2 extend, respectively, into the material of both the said parts *a* and *b*. Thus the interior of the driven-in bond is filled with two-part core of wood a^2 b^2, the parts of which are respectively solid or integral with the wood of bow and stem, and the ends of the two sections of this core abut at a^3 b^3 within the interior of the bond. The driving in of the tubular bond is preferably performed before the handle-bow blank *a* is finally shaped, although, if necessary or desirable, this blank may be shaped before the parts are assembled.

To facilitate the driving of the opposite ends of bonding-tube into the solid wood of the bow and stem sections, the said ends may be beveled or otherwise sharpened to form cutting edges at d^3 d^4, which will readily cleave or enter the wood.

The lengths of tubing employed to form the bonds may be corrugated, as shown at *d* in Fig. 8, or they may be made of any irregular section or be provided with one or more longitudinal ribs or depressions, so as to prevent rotation after they have been driven home, and in cases where the wood is too hard to admit of being easily penetrated by the bonding tie or tube circular cuts may be made in the meeting or abutting surfaces of the wood sections for the reception of the respective ends of the tube.

Instead of tenoning or dovetailing the end of the handle shank or stem into the handle-bow, as shown in Figs. 1 to 6, the meeting parts may simply abut against one another, as shown in the sectional view, Fig. 7, the several parts of which are marked with the same letters of reference as the corresponding parts in Figs. 1 to 6. With such a con-

struction it is sometimes desirable to expand or flare the ends of the bonding-tube to prevent its inadvertent displacement and the disconnection of the bonded parts after the tube has been driven home. In such cases the edges of the tube may be split a short distance inwardly and coned washers, rings, or equivalents may be dropped into the bottoms of the circular cuts in the wood. Then when the bonding-tube is driven in its split edge impinges against and is forced over the conical ring and is expanded outward, so as to force the split parts into the wood.

Having fully described my invention, what I desire to claim and secure by Letters Patent is—

1. A handle for tools and implements, consisting of a gripping end provided with a recess, a stem engaging in said recess, and a bond extending into that portion of the gripping end above the recess and into the upper portion of the stem for connecting the latter to the gripping end.

2. A handle for tools and implements consisting of a gripping end provided with a recess, a stem engaging in said recess, and a hollow bond extending into that portion of the gripping end above the recess and into the upper portion of the stem for connecting the latter to the gripping end.

3. A handle for tools and implements consisting of a gripping end provided with a recess, a stem engaging in said recess, and a hollow bond with sharpened edges extending into that portion of the gripping end above the recess and into the upper portion of the stem for connecting the latter to the gripping end.

4. A handle for tools and implements consisting of a gripping end provided with a recess, a stem engaging in said recess, and a corrugated hollow bond with sharpened edges extending into that portion of the gripping end above the recess and into the upper portion of the stem for connecting the latter to the gripping end.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

RICHARD PARKES.

Witnesses:
HENRY SKERRETT,
ARTHUR T. SADLER.