No. 887,708. PATENTED MAY 12, 1908.

S. H. STEARNS.

BIT BRACE HANDLE.

APPLICATION FILED MAR. 21, 1908.

Fig. 1.

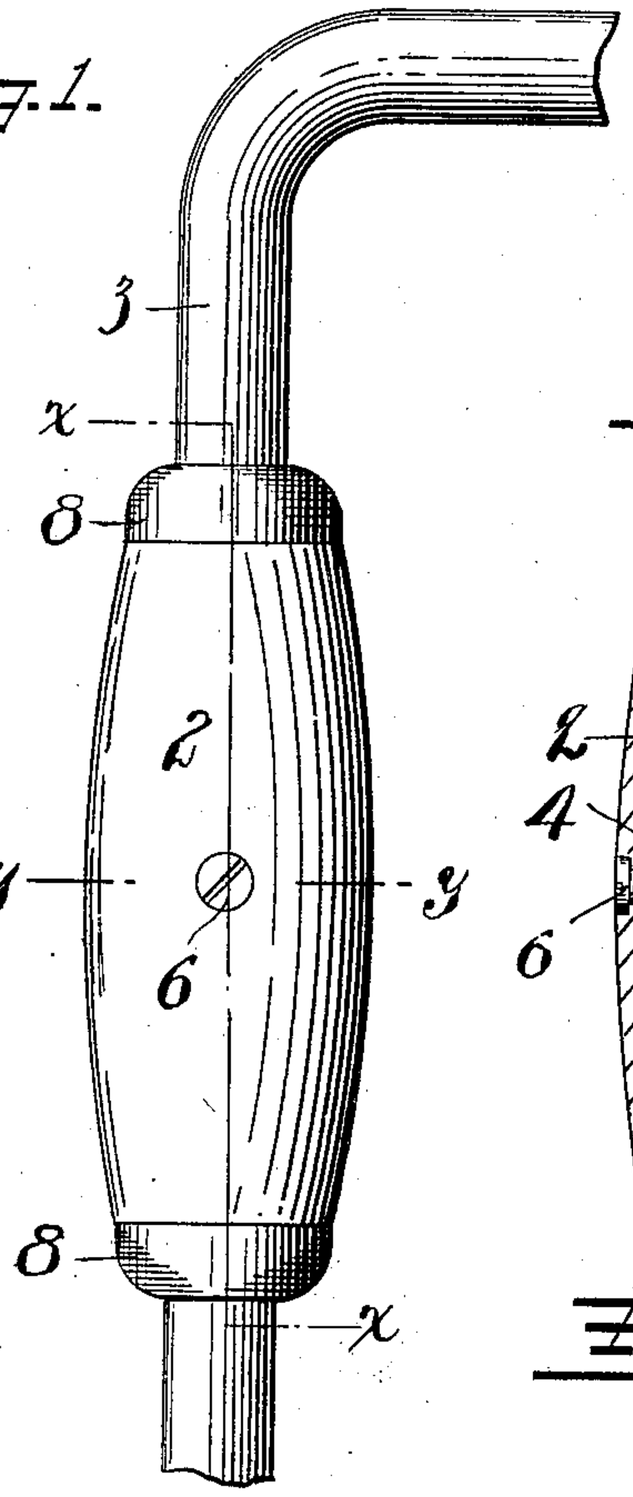


Fig. 2.

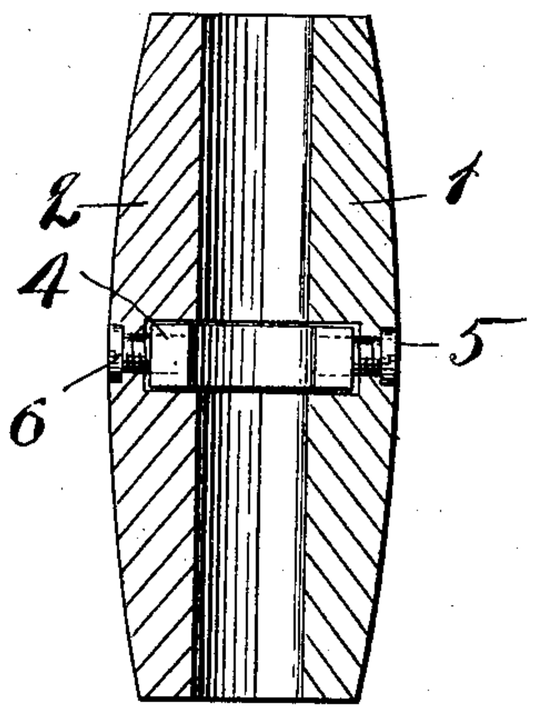


Fig. 3.

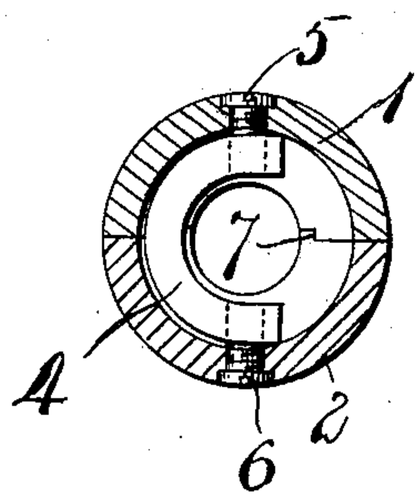


Fig. 4.

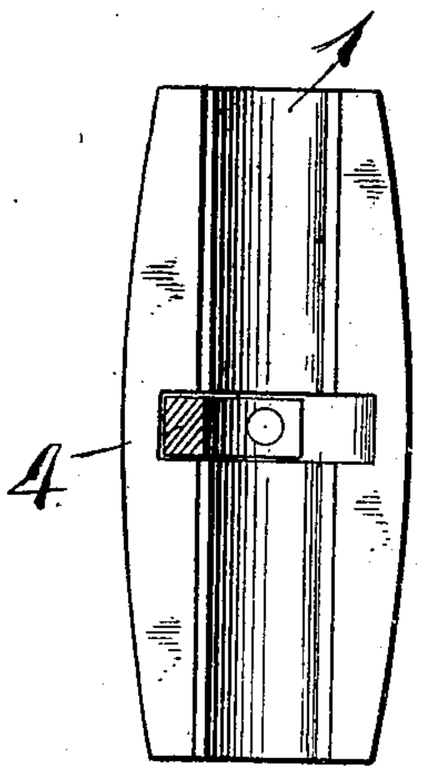
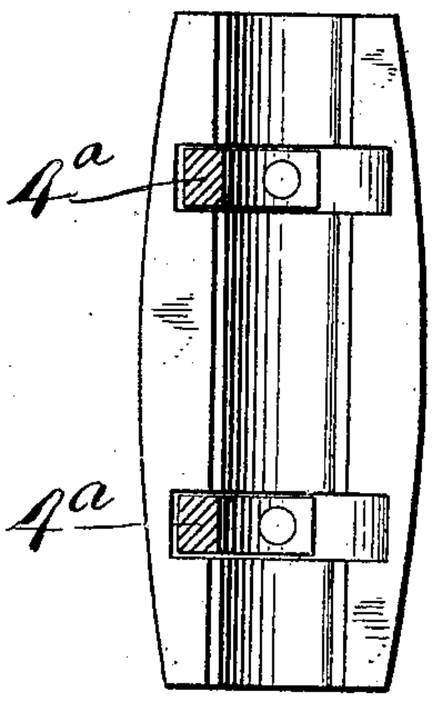


Fig. 5.



Witnesses:
Chas. A. Peard
Fred'k. Dannenfelser.

Inventor
S. H. STEARNS
By his Attorneys
Parker Burnett & Parker.

UNITED STATES PATENT OFFICE.

SAMUEL H. STEARNS, OF NEW BRITAIN, CONNECTICUT, ASSIGNOR TO STANLEY RULE & LEVEL COMPANY, OF NEW BRITAIN, CONNECTICUT, A CORPORATION OF CONNECTICUT.

BIT-BRACE HANDLE.

No. 887,708. Specification of Letters Patent. Patented May 12, 1908.

Application filed March 21, 1908. Serial No. 422,428.

To all whom it may concern:

Be it known that I, SAMUEL H. STEARNS, a citizen of the United States, residing at New Britain, county of Hartford, State of Connecticut, have invented certain new and useful Improvements in Bit-Brace Handles, of which the following is a full, clear, and exact description.

This invention relates to improvements in bit brace handles, the object of the invention being to provide a very simple and effective construction which will possess great strength.

An incidental and valuable incident of improvement resides in increasing the durability of the handle. Ordinarily handles of this type are made of wood and are liable to season-check or otherwise crack by reason of severe usage. By this invention this danger is substantially reduced.

In the accompanying drawings, Figure 1 is a side elevation of a portion of a bit brace showing my improved handle thereon. Fig. 2 is a vertical section view of the handle, detached, and taken on the plane of the line X—X Fig. 1. Fig. 3 is a horizontal section of the handle on the plane of the line Y—Y Fig. 1, certain parts being shown in elevation. Fig. 4 is an elevation of one view of the handle showing a part thereof in section. Fig. 5 is a similar view illustrating a modification.

1—2 represent the two sections of the handle. This handle is of a suitable contour to provide a convenient grip, and to that end may be of the usual outline. As shown, the handle is split longitudinally to provide the two sections 1—2, it being necessary in bit braces to provide a handle with a suitable line of division whereby it may be applied to the bow rod 3 of the brace. When the two sections are placed together, they form a bore between them of a suitable size to fit neatly around said rod 3, so that it may turn properly thereon. Ordinarily it has been customary to glue these parts together, and while in this instance the parts may be glued, no reliance is placed thereon for the secure clamping together of said sections, but, on the contrary, a mechanical coupling device is provided which is invisible. 4 represents said coupling device, in this instance in the form of a yoke or U-shaped member arranged to partially encircle the rod 3 of the bit brace. The inner walls of the sections 1—2 are recessed to receive the coupling 4, so that a part of said coupling will lie within the recess in each of said sections 1—2, while the main body of said yoke or coupling will bridge the line of division. 5—6 are screws arranged to pass through the sections 1—2 respectively, and screw into the coupling 4, as best seen in Figs. 2 and 3. When these parts are assembled, as shown in the drawings, and the screws 5—6 are set up, the sections 1—2 are drawn together and securely clamped. The abutting edges of the sections 1—2 may be provided with a suitable tongue-and-groove, as indicated at 7 in Fig. 3, but this is not essential. Any desired number of these coupling devices 4 may be employed, one, however, being sufficient to add material strength to the structure. In Fig. 5, I have shown the provision of two couplings, in this instance illustrated at 4^a 4^a, the handle sections being provided with a corresponding number of recesses to receive the same. The presence of the couplings 4 and 4^a within the handle tend to add to the durability of the same where the bore of the handle bears upon the rod 3, for in this instance, as will be seen, the couplings may be so placed as to take a substantial part of the wear. This would be of particular utility where no end bearings are provided. End bearings may, however, be provided as shown at 8—8 in Fig. 1. In this instance the end bearings may be in the form of ferrules which further coöperate to hold the parts 1—2 together at their ends, while the intermediate part is held together by the coupling.

The handle when assembled is of tubular form, and that term may be employed in the claims for convenience of expression. The screws 5—6 likewise perform the function of clamping members, and may be so referred to.

What I claim is:

1. A bit brace handle, comprising a plurality of sections arranged in tubular form, a coupling device arranged and hidden within said handle, each of said sections being arranged to receive said coupling device, and clamping members passing through said sections and making connection with said coupling.

2. In a bit brace handle, a plurality of sections arranged in tubular form, each of said

couplings having a recess within the same and intersecting the central bore, a coupling device arranged in said recess and hidden from view, and clamping members passing through said sections and engaging said coupling device.

3. In a bit brace handle, a plurality of sections arranged in tubular form, a coupling device in the form of a yoke arranged within said tubular handle and bridging the line of division between the sections, and clamping devices to secure said sections to said coupling.

4. In a bit brace handle, a plurality of sections arranged in tubular form, a concealed coupling arranged within the tubular body formed by said sections, said coupling bridging the line of division between the sections and extending partially around the bore through said assembled sections, and clamping devices arranged to connect said sections with said coupling.

5. In a bit brace handle, a plurality of sections arranged to form a tubular body, a plurality of coupling devices spaced apart and hidden within said sections, and a plurality of clamping devices arranged to hold said sections on said couplings, said couplings bridging the line of division between said sections.

SAMUEL H. STEARNS.

Witnesses:
H. S. WALTER,
W. J. WORAM.