June 15, 1926. 1,588,810

W. H. RUDOLPH ET AL

COUPLING

Filed May 3, 1923

Fig.1.

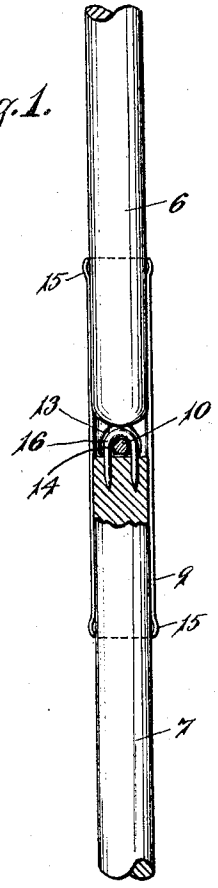


Fig.2.

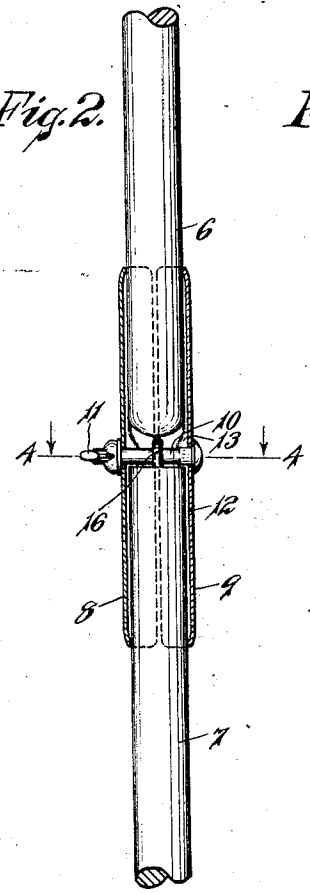


Fig.3.

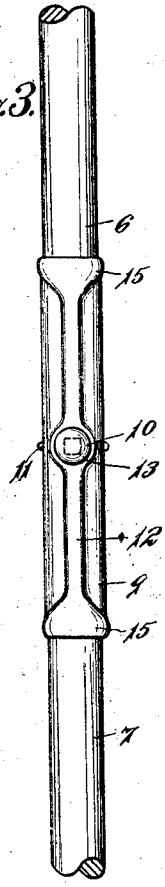


Fig.5.

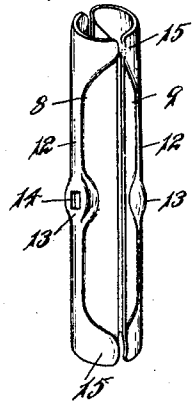


Fig.6.

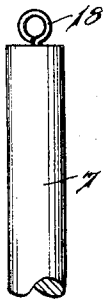


Fig.7.

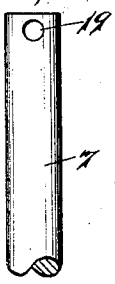
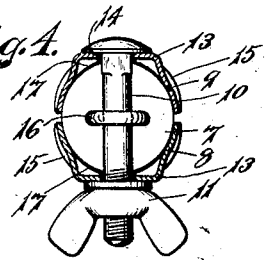


Fig.4.



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UNITED STATES PATENT OFFICE.

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COUPLING.

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An object of the invention, among others, is to provide means whereby the above results may be obtained in a simple and efficient manner; and a further object is to provide means whereby the said device may be anchored to one of the structures with which it is used so that the possibility of the said device becoming lost or misplaced is eliminated.

One form of device in which the invention is embodied and in the construction and use of which the object herein set out, as well as others, may be attained is shown in the accompanying drawings in which—

Figure 1 is a view showing the application of the coupling in connection with sections of two handles, one of the members of the device being removed, and one of the handle sections being broken away to show the construction.

Figure 2 is a side view of the structure from a point at right angles to the point of view of Figure 1 and with the coupling cut in central lengthwise section.

Figure 3 is a view in side elevation of the structure.

Figure 4 is a view in section on a plane denoted by the dotted line 4—4 of Figure 2, scale enlarged.

Figure 5 is a perspective view showing the halves in their relative position, the connecting bolt being left out.

Figure 6 is a view showing a section of a handle having a modified form of anchoring means applied thereto.

Figure 7 is a similar view showing still another modified form of anchoring means.

This invention is especially adapted to cases where it is desired to couple together two members, such as brush handles and the like for the purpose of lengthening said handle in order that a longer reach may be obtained.

In the use of certain implements having handles it often happens that a longer handle is required for some operations than for others, and this invention provides means for lengthening the handle whereby an extra length or section may be readily added to the original handle. As such extensions are used only temporarily, however, there has been a serious objection to coupling devices of prior kinds, since they are liable to become lost or misplaced when not in use. This invention overcomes said objection by providing a simple and inexpensive means whereby the said coupling device may be permanently anchored to one of the handle sections, and in such a way that said device will not in any way hinder the efficient use of the implement to which the handle is secured.

In the device shown in the accompanying drawing the numeral 6 denotes a handle such as is commonly attached to an implement of the character referred to, and 7 a section of an extension or extra handle.

This improved coupling is constituted of two members, 8 and 9, which are similarly formed, being curved latterly, each member serving as one half of the device. Said members are connected by means of a bolt 10, and they are secured by a wing or thumb nut 11. Each of the said members is provided with a stiffening rib 12, formed with an enlarged stiffening portion, 13, around a hole 14, preferably squared at the center of each coupling member. Said members also have enlarged stiffening portions, 15, at the ends thereof.

As a means for anchoring the coupling to one of the handle sections there is shown in Figures 1 and 2 a staple 16 of ordinary construction which is secured in the end of the handle section 7.

In assembling the coupling the connecting bolt is passed through the openings in the coupling members and in the staple thus anchoring the coupling to one of said handle sections in such a way that while being securely held thereon it will still permit the free opening and closing movement of the coupling members for the connection of another handle section. In order that the coupling may perfectly fit the handles regardless of the variation in the sizes, which is commonly found to exist, each half of the coupling is formed with a slight semi-elliptical curve as shown at 17 in Fig. 4. These coupling members are made of elliptical shape to fit the smaller sizes of handles, and being of a slightly resilient material, each half will be conformed in size to the larger sized handles by the pressure applied against the coupling members by means of the connecting bolt, 10, and thumb nut, 11, the semi-elliptical form of each of said halves providing a space between the bottom

thereof and the handles to permit the necessary yielding of the halves to fit the handle.

In the modified form of anchoring means, illustrated in Figure 6, an ordinary screw eye 18 may be used in place of the staple 16 shown in Figure 1, and if desired a hole, as denoted by the numeral 19 in Figure 7, may also be used in place of this above mentioned staple. It will be understood that although we have shown a convenient form of a coupling, it need not necessarily be made of two parts as other forms of construction as well as other forms of anchoring means than are herein described may be used without departing from the purpose and scope of our invention.

We claim—

1. In a coupling for alined extension handle members, in combination with handle members, a plurality of coupling members inclosing the alined handle members, and means interposed between the adjacent ends of the handle members and embodying a part permanently carried by one of the handle members for positively securing said coupling members to one of the handle members and clamping the coupling members on both handle members.

2. In a coupling for alined extension handle members, in combination with handle members, a plurality of coupling members inclosing the alined handle members, means for removably securing said coupling members together and to said handle members, and means cooperating with said securing means and carried by one of the handle members for permanently attaching said coupling to one of the handle members.

3. In a coupling for alined extension handle members, in combination with handle members, a plurality of coupling members inclosing the alined handle members, means to connect said coupling members together, said means also to removably secure the coupling members to the handle members, and means on one of said handle members through which said connecting and securing means on the coupling members extend to attach said coupling members to one of the handle members.

4. In a coupling for alined extension handle members, in combination with handle members, a plurality of coupling members inclosing the alined handle members, means comprising a bolt for securing said coupling members to the handle members with the bolt spaced from the handle members and positioned between the adjacent ends thereof, and means carried by one of the handle members to cooperate with the bolt for holding the coupling members thereon.

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