Feb. 11, 1941. A. KNOEDLER 2,231,337

UMBRELLA HANDLE AND METHOD OF MAKING SAME

Filed June 24, 1938

FIG. 1

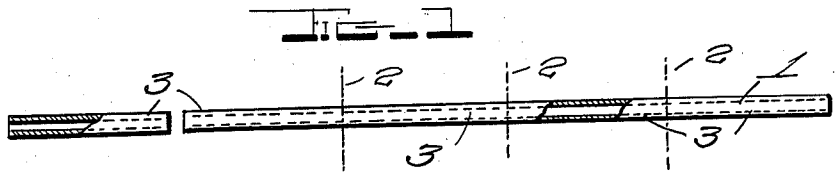


FIG. 2

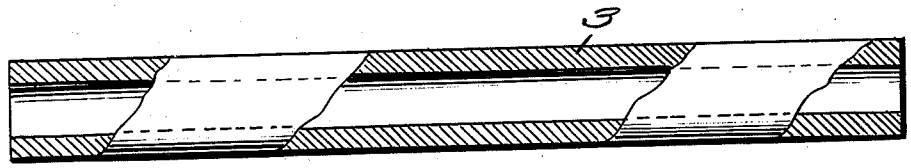


FIG. 3

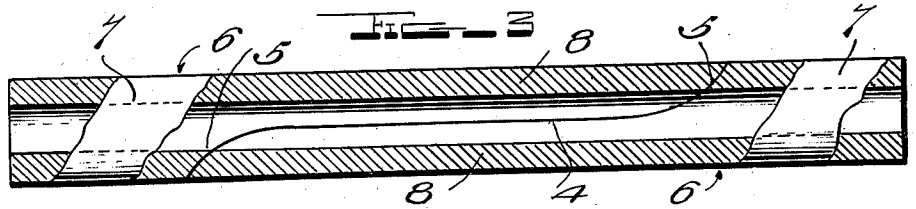


FIG. 4

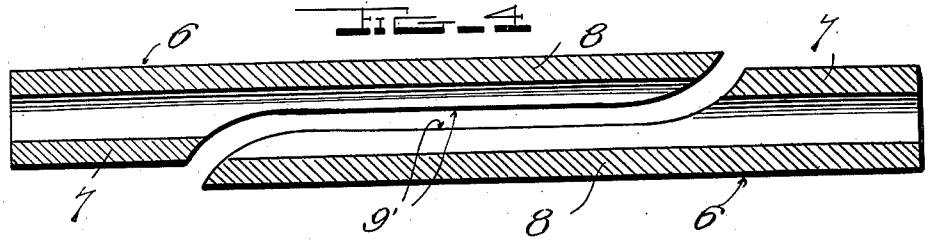


FIG. 5

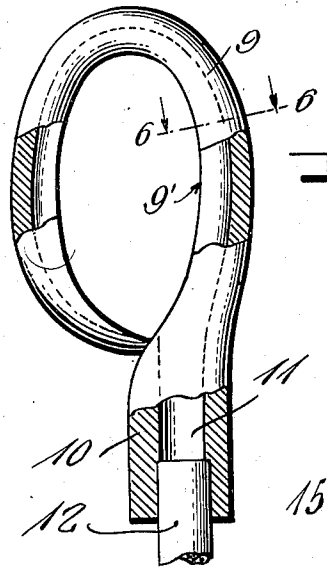
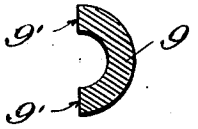


FIG. 7

FIG. 6



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Patented Feb. 11, 1941

2,231,337

UNITED STATES PATENT OFFICE

2,231,337

UMBRELLA HANDLE AND METHOD OF MAKING SAME

Alphonse Knoedler, South Orange, N. J.

Application June 24, 1938, Serial No. 215,707

2 Claims. (Cl. 135—46)

This invention relates to a handle for an umbrella, cane or the like and it is one object of the invention to provide a handle made from a section of tubular Celluloid rod, the tubular rod being so cut that a great saving of material will be effected, thus reducing the cost of the handle and in addition, reducing its weight.

It is another object of the invention to so cut the rod that the sections thereof will each have a bored staff receiving end portion and for the remainder of its length be so shaped that it can be readily heated and reshaped to produce an attractive handle.

Another object of the invention is to so form the handle that its bore may be of slightly less diameter than the wooden staff of an umbrella, thus causing the staff to have a wedging fit within the handle and firmly hold the handle in place upon the staff.

The invention is illustrated in the accompanying drawing wherein:

Figure 1 is a view of the tubular rod from which sections are cut in order to form handles;

Figure 2 is an enlarged view of one section of the tubular rod, the view being partially in elevation and partially in longitudinal section;

Figure 3 is a view showing the rod section cut to provide two handle-forming blanks;

Figure 4 is a sectional view showing the blanks of Figure 3 shifted longitudinally away from each other;

Figure 5 is a view of a handle formed from one of the blanks, the handle being partially in elevation and partially in longitudinal section and applied to the staff of an umbrella;

Figure 6 is a sectional view taken along the line 6—6 of Figure 5, and

Figure 7 is a view illustrating a modified form of handle.

The stock from which handles of the umbrella type are formed in accordance with this invention consists of a tubular rod 1 formed of Celluloid or similar initially plastic material, the rod being of a predetermined length adapting it to be cut along the dot-and-dash lines 2 to form a plurality of tubes 3 which are all of the same predetermined length and each formed with a bore of the same diameter. The tubes may be 8⅜ inches long and the bore ⅜ inch in diameter but it is to be understood that these dimensions are merely examples as other dimensions may be desired.

After the rod has been cut to form the tubes 3 each tube is cut longitudinally along the line 4 which has oppositely curved end portions 5 terminating in spaced relation to opposite ends of the tube. The tube when so cut will be divided into separate sections 6, each of which constitutes a blank having a tubular end portion 7 and a tongue 8 extending from one end thereof. The tubular end portions are each of a uniform diameter throughout its length and the companion tongue which is formed integral therewith is arcuate transversely to provide a convexed outer surface and a concaved inner surface bordered by flat edge faces 9' along its margins. It should also be noted that due to the manner in which the tube is cut the tongue 8 will be of a uniform width throughout its length but taper towards its free end when viewed as shown in Figures 4 and 5.

After the tube has been cut to form the two blanks 6, each blank has its tongue softened and the softened tongue is then bent to form a hand grip 9 extending upwardly from the upper end of a tubular shank 10 formed by the tubular end portion 7 of the blank. The hand grip illustrated in Figure 5 is of oval outline and the end of the bent tongue is cemented or otherwise firmly secured to the upper end of the shank at the opposite side thereof from the end of the tongue which is integrally united to the shank. It will be understood that while the hand grip has been shown of oval outline, it may be of other shapes, the important features of the invention being the formation of the blanks as shown in Figures 3 and 4, then softening the tongues and bending them to form a handle having a tubular shank and a hand grip carried by the upper end thereof, and then allowing the softened material to harden. By so forming the handle, there will be produced a handle which is of light weight and a great saving of material will be effected as tubular stock is used instead of a solid rod. It should also be noted that the shank 10 will be formed with a longitudinal bore 11 open at both ends and of a uniform diameter throughout its length. Therefore, if the bore is ⅜ of an inch in diameter, it may be forced upon the upper end portion of a wooden umbrella staff 12 which is $\frac{7}{16}$ of an inch in diameter and the staff will be wedged tightly into the shank and the handle firmly held in place upon the staff by cement which will be applied to the staff or walls of the bore 11 before the staff is forced into the bore. The fact that the tube is cut as shown in Figures 3 and 4 also imparts an attractive appearance to the handle as the outer surface of the hand

grip will be transversely arcuate and its inner surface will be in the form of a longitudinally extending channel bordered by flat marginal edges.

In Figure 7, there has been illustrated a modified form of handle. In this embodiment of the invention, the tubes 3 instead of being cut to form the two blanks 6, are merely heated to soften it and then bent to form a handle 13 which is of hollow tubular formation throughout its length and thus formed with a bore 14 serving to reduce the weight and cost of the material as well as providing the shank 15 of the handle with an open socket to receive the upper end of the umbrella staff.

From the foregoing description of the construction of my improved device, the operation thereof and the method of applying the same to use, will be readily understood. It will be seen that I have provided a simple inexpensive and efficient means for carrying out the objects of the invention and while I have particularly described the elements best adapted to perform the functions set forth, it is obvious that various changes in form, proportion and in the minor details of construction may be resorted to, without departing from the spirit or sacrificing any of the principles of the invention.

Having thus described the invention, what is claimed is:

1. The method of forming a handle of the umbrella type comprising forming a tube of set plastic material of predetermined length and diameter having a bore of predetermined diameter, cutting the tube diagonally along curved lines to its center at points spaced from ends of the tube and then cutting the tube along a diameter of the tube between the diagonal cuts to divide the tube into sections each constituting a blank having a tubular shank and a transversely arcuate concavo-convexed tongue extending longitudinally therefrom and having flat side edge faces and oppositely curved inner and outer ends, temporarily softening the tongue of a blank and bending the softened tongue to dispose the outer end of the tongue against the curved inner end portion of the tongue and form an endless handhold predetermined shape extending from the tubular shank of the blank, and then allowing the plastic material to harden.

2. A handle of the umbrella type comprising a tubular shank having a bore of predetermined diameter adopting the shank to have tight wedging fit upon an umbrella staff, and a tongue extending upwardly from said shank and having oppositely curved inner and outer ends, the tongue being bent to dispose its outer end against its curved inner end and form an open hand grip, and said tongue and the hand grip formed thereby being of transversely arcuate concavo-convexed formation to provide an inner chanel bordered by flat side edge faces of appreciable width.

ALPHONSE KNOEDLER.