May 17, 1938. P. S. SOBOTKA 2,117,373

INTERCHANGEABLE UMBRELLA HANDLE

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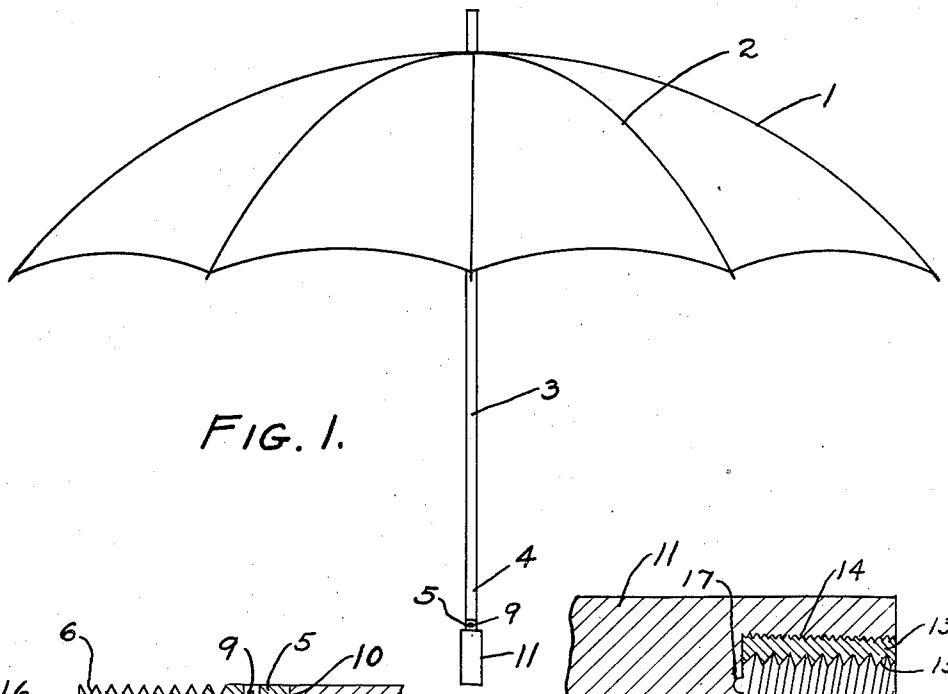


FIG. 1.

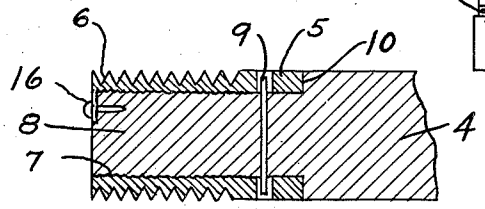


FIG. 2.

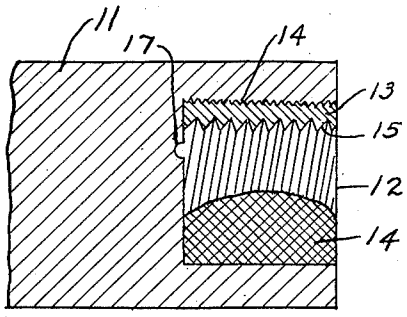


FIG. 4.

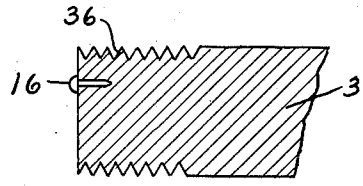


FIG. 3.

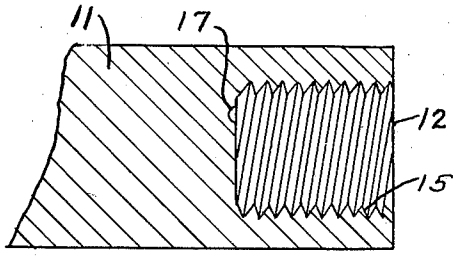


FIG. 5.

Inventor

PHILLIP S. SABOTKA.

By Howard J. Whelan.

Attorney

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INTERCHANGEABLE UMBRELLA HANDLE

Phillip S. Sobotka, Baltimore, Md., assignor to Polan Katz & Company, Baltimore, Md., a co-partnership composed of Jesse N. Polan, Charles Katz, and William L. Fox

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1 Claim. (Cl. 135—46)

This invention refers to umbrellas, parasols and the like, and more particularly to the arrangement of securing the handle and stick together. Its objects are to provide a device or arrangement that will enable the stick and handle to be readily detached from each other or put together, and such that the arrangement can be utilized as a basis for providing an interchangeable and universal method of changing or substituting handles quickly on umbrellas. Another object is to provide in the device an arrangement that will not materially weaken the structure of the handle or stick; that will not detrimentally affect the appearance of the umbrella, but rather improve it; and will avoid the use of cements, glues and other uncertain frictionally holding means.

The usual method of placing handles on umbrellas consists in forcing a portion of the stick end into a drilled out portion of the handle and securing same together with glue. In this invention, a quicker, more positive, and more substantial method is used. Handles can be interchanged quickly and properly without difficulty by anyone, whether skilled or unskilled, and any time or occasion. The advantage of this interchangeability is emphasized by the fact, that ordinarily umbrella sticks and covers are made in one factory, while the handles are made elsewhere. At the same time, handles will vary considerably in the number and kind of designs used, and must conform with the general wishes and selections of the customers.

The umbrella proper follows certain standard lines, which are practically unvariable. The problem arising at times is brought about by a sudden order for immediate delivery of a large number of umbrellas with handles of certain types. The sticks of the umbrellas in stock at the time are "empty", that is, without handles, and the factory is burdened with the requirement of placing the handles on, glued to the stick, together with the time required for the glue to properly dry. This may hold up the order from two days to a week, but in spite of this fact, such is the general practice followed in this art among manufacturers of umbrellas. If the handles are already placed on the sticks such cannot be removed or substituted without damaging the umbrella. With this invention, the handle is screwed on or off at a moment's notice, and the exact wishes of all concerned met, whether in the factory, store, or home. The same umbrella may vary the type of handle used with it, as often and in the manner that the owner or user may see fit, and without any trouble or inconvenience.

It also has advantages in packing or travelling purposes.

The invention consists in providing a metal bushing arranged to fit on the stick or in the handle, while the handle is formed to adapt itself to the ferrule, so that the two may be screwed together and securely held in place.

In the drawing, which illustrates by way of example, an embodiment of this invention:—

Figure 1 is a view in elevation of an umbrella embodying this invention,

Figure 2 is a sectional view through the end portion of the umbrella stick shown in Figure 1, taken longitudinally through same,

Figure 3 is a modified form of stick shown without a bushing, the view being shown in section,

Figure 4 is a section taken through the handle indicated in Figure 1, showing the bushing adapted to receive the bushing on the stick,

Figure 5 is a sectional view through a modified form of handle without bushing means but arranged directly to receive the stick.

Similar reference characters refer to similar parts throughout the drawing.

The drawing shows a conventional form of umbrella having a cover 1, ribbed at 2, and with a central supporting stick 3. At the end portion 4 of the stick is mounted a hollow metal or composition bushing 5, having its lower portion 6 screw threaded on its exterior surface. The internal surface is knurled or roughened at 7 to enable it to bind in the material 8 of the stick on which it is to be placed. A pin 9 is used for additionally holding the bushing to the stick. The stick is recessed at 10 to take the bushing as indicated.

The handle 11 shown in Figure 4 is provided with an orifice 12 in which a sleeve 13 is inserted. This sleeve is provided with a knurled or roughened exterior surface 14 and an internal screw thread portion 15 adapted to coact with the portion 6 of the stick bushing. When the stick bushing 5 is screwed into the handle sleeve, they both become secured to each other. A projecting head 16 consisting of a plug set in the end portion of the stick is arranged to lock in a depression 17 in the bottom of the orifice 12. This operates when the handle and stick have completed their operation and is sufficient to prevent the stick and handle unscrewing from each other, but not enough to prevent them being unlocked without the use of a little extra effort.

In the modified form shown in Figure 3, where the bushing is eliminated and the stick itself is screw-threaded directly at 36 instead, the operation of the device is similar. While in the detail indicated in Figure 5, the handle is also directly screw-threaded and the bushing eliminated.

However, the stick shown in Figure 2, may be used with the handle forms indicated in Figure 4 or 5, or the handle forms shown in Figures 4 and 5 may be used with each form of stick end portion shown in Figure 2 or 3. This is believed to be evident from the drawing. It is also immaterial whether the bushing and sleeve are made from metal or composition of some well known kind. The handles and stick are more or less of standard materials.

The operation of putting on the handles or taking them off is a matter of customary procedure, except that the locking device obtained through the use of the plug 16 and recess 17 prevents undue loosening. This is simple in construction but effective in action. It avoids the use of springs, catches, or other mechanical equipment, and comes into action at the proper point of connection between the handle and stick. The roughened or knurled surfaces on the bushing and sleeve serve to catch in the material of the handle or stick and thus eliminate the use of cement or glue, and in fact become so imbedded in the material as to prevent any possibility of the same becoming loosened. This is particularly valuable where the climate or other conditions affect the material of the handle or stick of the umbrella.

While several forms of the invention have been shown in the drawing and described in the application, it is not desired to limit this application for patent to these particular forms, or in any other way otherwise than limited by the prior art as it is fully appreciated that other constructions might be used that would employ the same principles and come within the scope of the appended claim.

Having thus described the invention, I claim:—

In combination with the handle portion of an umbrella stick, means for providing screw threadable engagement on said handle portion, a handle on the umbrella stick having an internal open-ended chamber screw threaded to adjustably engage with said handle portion, and a plug head for causing substantial resistance to unlocking of the handle portion from the stick disposed between the same and adapted to be forced into both by the screw threadable engagement of the aforementioned parts, substantially as described.

PHILLIP S. SOBOTKA.