



PATENT SPECIFICATION

1,194,169

DRAWINGS ATTACHED.

Date of Application (No. 1035/70) and filing Complete Specification: 20 June, 1968.

Application made in Germany (No. B93761 III/33a) on 2 Aug., 1967.

(Divided out of No. 1,192,676).

Complete Specification Published: 10 June, 1970.

Index at acceptance:—A4 P(3, 5B, 7A2, 11A, 11C, 12F).

International Classification:—A 45 b 25/10.

COMPLETE SPECIFICATION.

Improvements relating to Umbrellas.

We, BREMSHEY AND Co., a Kommanditgesellschaft organised under the laws of Germany, of Ahrstrasse 5—7, Solingen-Ohligs, Germany, do hereby declare the invention, for which we pray that a patent may be granted to us, and the method by which it is to be performed, to be particularly described in and by the following statement:—

The invention relates to umbrellas, of the kind which have a flat shaped cross-section when in the fully closed state, a correspondingly laterally elongated crown, to which the spokes are attached, and a canopy which, sometimes together with an interposed elastic member, is clamped between the crown and a laterally elongated cap mounted on the crown. Such umbrellas are usually telescopic.

In umbrellas which have a circular cross-section when closed, that is to say in round umbrellas, the cap is usually screw-threaded and is screwed into the crown.

However the method of attaching the cap to the crown used in round umbrellas is not satisfactory for use with flat shaped umbrellas of the kind described because with these umbrellas it is necessary to ensure that the two laterally elongate parts, that is the crown and the cap, always extend with their longer dimensions parallel to each other when the umbrella has been assembled. A screwed connection cannot satisfy this requirement.

The object of the present invention is to provide an umbrella of the kind described which is constructed in such a way that when the parts have been assembled the cap is always aligned with the crown.

To this end, according to this invention, in a frame for an umbrella of the kind described the cap is attached to the crown by means of a pair of axially projecting spigots

on one of the cap and crown, the spigots being spaced apart in the direction of the larger transverse dimension of the umbrella frame, and the spigots being received in complementary sockets in the other of the cap and crown, the spigots and sockets having a configuration and resilience such that when the spigots are pushed into the sockets they are held in position so that the cap and crown are axially located relatively to one another and are located against relative rotation about the longitudinal axis of the umbrella frame.

An example of an umbrella constructed in accordance with the invention is illustrated in the accompanying drawings in which:—

Figure 1 is a perspective view of crown parts of the umbrella before assembly;

Figure 2 is a longitudinal section through the parts shown in Figure 1 when assembled with a canopy; and,

Figure 3 is a plan view of the parts shown in Figure 2 without the canopy.

In the illustrated example a tubular umbrella stick 1 has a crown 2 in the form of a flat shaped body mounted on its end as is usual in the case of flat umbrellas of the kind described. Umbrella spokes will be pivoted to the crown by conventional pivoted means.

A canopy 8 is clamped between the crown 2 and a cap 9, which is also of flat shape.

The underside of the cap 9 is provided with two projecting pins 16, which engage in holes 17 in the crown 2, thus preventing relative rotation about the stick axis. Each pin 16 has two slots 18 offset at 90° to each other. Only one of these slots in the head of each pin are shown in the drawings. The slots allow the pins 16 to yield radially to some extent. The head of each pin is conical, and has a collar 19 which engages under

a shoulder 20 in the hole 17. The crown and the cap are assembled simply by pushing them together. To release the cap it is merely necessary to apply axial thrust, by means of a tool inserted through a hole 21 which receives the end of the umbrella stick 1. If desired the tool can be inserted through the hollow stick, without separating the stick from the crown 2.

The cap 9 has a chamfered edge 22 and is made of a flexible and resilient material. If desired the flexibility can be increased by means of an internal groove 23. The flexibility of the edge 22 ensures that the canopy is firmly clamped between the flexible edge and the crown 2 and the skirt-like nature of the edge 22 provides a space 24 around the spigots 16 between the crown 2 and the cap 9 to receive any seam at the edge of the canopy.

WHAT WE CLAIM IS:—

1. A frame for an umbrella which has a substantially flat rectangular cross section when closed, the frame including a laterally elongate crown and a laterally elongate cap between which the umbrella canopy will be trapped when the frame is covered, the cap being attached to the crown by means of a pair of axially projecting spigots on one of the cap and crown, the spigots being spaced apart in the direction of the larger transverse dimension of the umbrella frame, and the spigots being received in complementary sockets in the other of the cap and crown, the spigots and sockets having a configuration and resilience such that when the spigots are pushed into the sockets they are held in position so that the cap and crown are axially located relatively to one another

and are located against relative rotation about the longitudinal axis of the umbrella frame.

2. A frame according to claim 1, in which each spigot has an enlarged head which snaps behind an annular shoulder in the complementary socket.

3. A frame according to claim 2, in which each spigot has at least one slit extending axially from its tip to increase the resilience of the head.

4. A frame according to claim 2 or claim 3, in which the tip of each spigot is chamfered to assist in leading the spigot into its socket.

5. A frame according to any one of the preceding claims, in which the spigots project from the cap and the sockets are formed in the crown.

6. A frame according to any one of the preceding claims, in which the cap and crown are shaped so that when the cap is attached to the crown, a space is formed between them around the two spigots to receive the edge of the canopy.

7. An umbrella having a frame according to any one of the preceding claims, with its canopy trapped between the cap and crown.

8. An umbrella according to claim 7, substantially as described with reference to the accompanying drawings.

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Printed for Her Majesty's Stationery Office by Burgess & Son (Abingdon), Ltd.—1970.
Published at The Patent Office, 25 Southampton Buildings, London, W.C.2A 1AY
from which copies may be obtained.

