

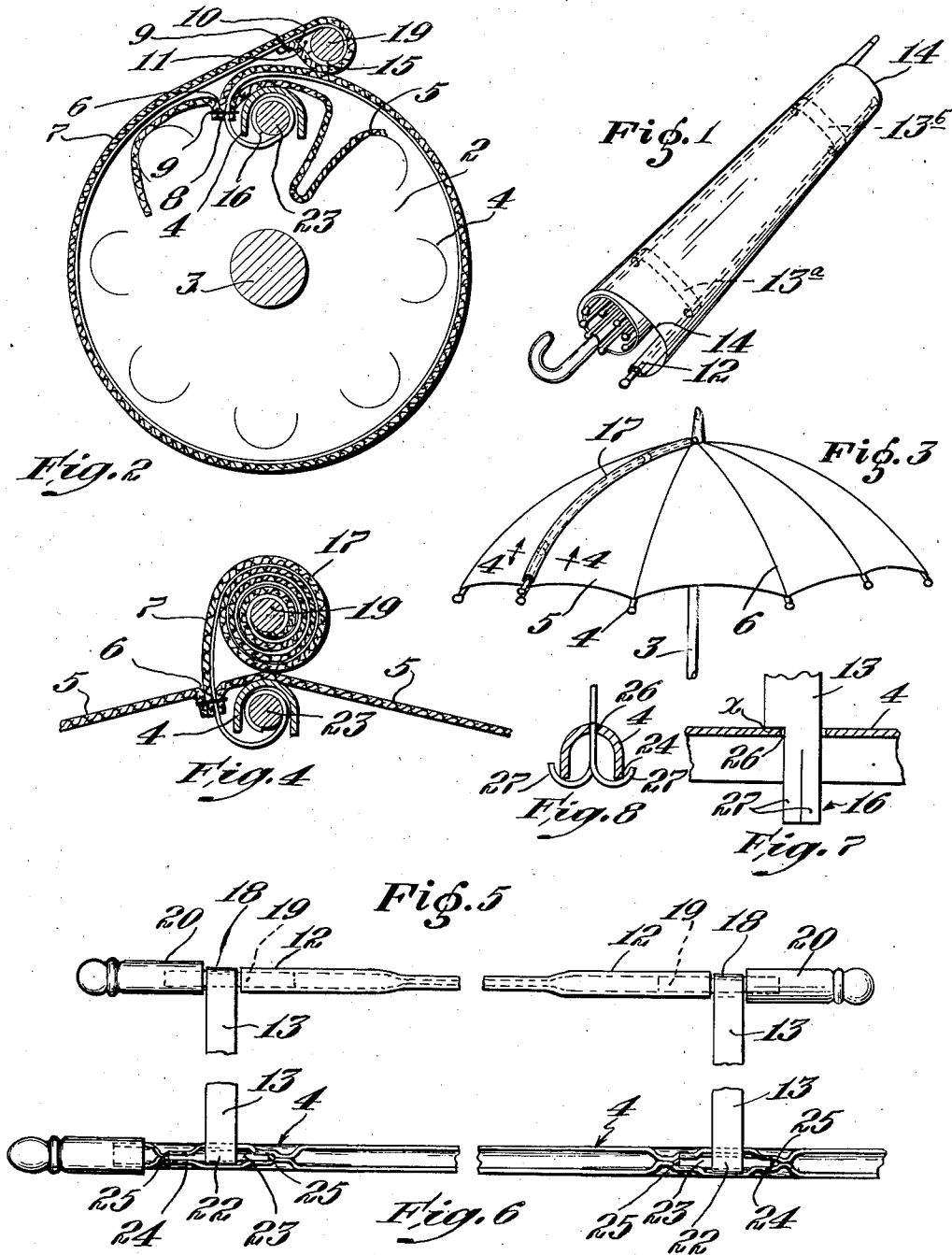
April 26, 1949.

E. SCHMIDT

2,468,240

UMBRELLA

Filed Jan. 31, 1946



Inventor
Edward Schmidt
by Robert Cushman Grover
Att'ys.

UNITED STATES PATENT OFFICE

2,468,240

UMBRELLA

Edward Schmidt, Rutherford, N. J.

Application January 31, 1946, Serial No. 644,455

7 Claims. (Cl. 135—33)

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This invention relates to umbrellas and more particularly to an umbrella having a permanently attached case to be used when the umbrella is folded and not in use.

One object of the invention is to provide an umbrella having a protective case which is permanently attached to the umbrella whether in use or folded so that the case cannot be inconveniently lost or mislaid. A further object of the invention is to provide an umbrella with an attached case which requires no laces, connecting flaps or buttons so often broken or torn off in attempting to encase the folded umbrella. Other objects are to provide an umbrella with a permanently attached case of simple and economical construction, which can quickly and easily compress the folds of the umbrella into a convenient size and protect them from soiling or accidental injury when not in use, and which presents a pleasant appearance and offers no obstruction or impediment to the person carrying the umbrella when in use.

According to the present invention an umbrella, comprising a stick and a flexible canopy extending outwardly from the stick, has a flexible case in the form of a resilient scroll extending from the stick to the free edge of the canopy and permanently attached at one edge to the canopy, and has its other edge free from attachment thereto, whereby the case may be positioned in a compact roll when the umbrella is open and positioned so as to encase the canopy and compress it to convenient size when the umbrella is folded, and means are provided for holding the case in either position. In a desirable embodiment of the invention the aforesaid holding means may be resilient, and in a preferred embodiment said means may be spaced spiral springs secured at one end to the free edge of the case and extending along its inner surface and through the canopy and secured at the opposite end to a rib of the umbrella.

For the purpose of illustration one embodiment of the invention is shown in the accompanying drawings in which—

Fig. 1 is a perspective view of one embodiment of the invention with the umbrella in folded position;

Fig. 2 is a cross-section with the umbrella closed and encased;

Fig. 3 is a perspective view of the invention with the umbrella open;

Fig. 4 is a cross-section taken along lines 4—4 of Fig. 3;

Fig. 5 is an elevation of the means for attach-

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ing the springs to a tubular rod with parts broken away;

Fig. 6 is an elevation of means for attaching the springs to an umbrella rib with parts broken away;

Fig. 7 is a side elevation of a modified means for attaching the springs to an umbrella rib; and

Fig. 8 is a cross-section of the modification shown in Fig. 7.

Referring to Figs. 2 and 3 the numeral 2 represents an umbrella of conventional construction having a stick 3, U-shaped ribs 4, a flexible canopy 5 and canopy seams 6.

A protective case 7 of flexible, preferably waterproof material, sufficiently wide to encase the umbrella when folded and of the same length as a canopy seam, has one edge 8 permanently secured to one seam 6 adjacent rib 4, by suitable means as stitches 9, the other edge 10 being turned under and secured, by similar means, to the body of the case to form an elongate pocket 11 adapted to receive a tubular rod 12 as shown in Fig. 1.

Two spiral springs 13 are spaced adjacent opposed edges 14 of case 6 and each is secured at one end 15 to the rod 12, and extend along the inner face of case 6 and through seam 8, the opposite end 16 being secured to the rib 4 as hereinafter described, whereby the case is resiliently carried by said springs in a compact roll 17, parallel to said seam, when the umbrella is open, as shown in Figs. 3 and 4, and is adapted to encase and resiliently compress the umbrella into a convenient size when the umbrella is folded as shown in Figs. 1 and 2.

Referring to Fig. 5, each of the ends 15 of springs 13 are formed into a loop 18, said loop being anchored to the tubular rod 12 by a pin 19 press-fit into the end of the rod and the end of a hollow tip 20.

Referring to Fig. 6, each of the ends 16 of springs 13 are formed into a loop 22, said loop being anchored to the rib 4 by a pin 23, the U-shaped edges 24 of the rib 4 being crimped about the pin adjacent the spring and further crimped to abut the ends 25 of the pin whereby the pin is secured against movement within the rib.

Referring to the modification shown in Figs. 7 and 8, each of the ends 16 of springs 13 are shouldered, as indicated at x, to seat on the top of rib 4 adjacent slot 26 formed therein. The ends, after being annealed, are bifurcated into two tongues 27 adapted to be inserted through the slot 26 and bent outwardly about opposite

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edges 24 of the rib to anchor the end of the spring to the rib.

When it is no longer desired to use the umbrella, the canopy 5 is conventionally folded and the roll 17 is unrolled against the tendency of the springs 13 to retain it in roll form, and then wound about the folded umbrella whereby the umbrella is encased and compressed into convenient size when the springs are again permitted to exert their roll-forming force.

While the umbrella herein described is one having a conventional canopy seam, it will be understood that the invention is not limited to this type of umbrella but may include other types in which the seams are omitted, in which case, the case edge 8 may be permanently attached to the outer surface of the canopy 5 by suitable means as stitches or cement and spaced slots may be formed in the canopy adjacent thereto through which springs 13 will extend.

It should be understood that the present disclosure is for the purpose of illustration only and that this invention includes all modifications and equivalents which fall within the scope of the appended claims.

I claim:

1. An umbrella comprising a stick, a flexible canopy extending outwardly from the stick, a flexible case extending from the stick to the free edge of the canopy and having one edge permanently attached to the canopy and its other edge free from attachment thereto, so that the case may be positioned in a compact roll when the umbrella is open and positioned so as to encase the canopy and compress it to convenient size when the umbrella is folded, means for selectively holding it in either position, and a stiffener for the free edge of the case to facilitate rolling the case into said compact roll.

2. An umbrella comprising a flexible canopy and having a canopy seam, a flexible case having one edge permanently attached to the seam and its other edge free from attachment thereto, so that the case may be positioned in a compact roll when the umbrella is open and positioned so as to encase the canopy and compress it to convenient size when the umbrella is folded, means for selectively holding it in either position, and a stiffener for the free edge of the case to facilitate rolling the case into said compact roll.

3. An umbrella comprising a flexible canopy and having a canopy seam, a flexible case having one edge permanently attached to the seam and its other edge free from attachment thereto, so that the case may be positioned in a compact roll when the umbrella is open and positioned so as to encase the canopy and compress it to convenient size when the umbrella is folded, resilient means for selectively holding it in either position, and a stiffener for the free edge of the case to facilitate rolling the case into said compact roll.

4. An umbrella comprising a stick, ribs, a flexible canopy extending outwardly from the stick, a flexible case extending from the stick to the free edge of the canopy and having one edge permanently attached to the canopy and its other edge free from attachment thereto, so that the case may be positioned in a compact roll when

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the umbrella is open and positioned so as to encase the canopy and compress it to convenient size when the umbrella is folded, spaced spiral springs each of which is secured at one end to the free edge of the case and extends along the inner face of the case and through the canopy and is secured at the opposite end to a rib of the umbrella and means for securing the springs to the case and rib, whereby the case is selectively held in either position.

5. An umbrella comprising ribs, a flexible canopy and having a canopy seam, a flexible case having one edge permanently attached to the seam and its other edge free from attachment thereto, whereby the case may be positioned in a compact roll when the umbrella is open and positioned so as to encase the canopy and compress it to convenient size when the umbrella is folded, spaced spiral springs each of which is secured at one end to the free edge of the case and extends along the inner face of the case and through the seam and is secured at the opposite end to a rib of the umbrella and means for securing the springs to the case and rib, whereby the case is selectively held in either position.

6. An umbrella comprising a flexible canopy and having a canopy seam, a flexible case having one edge permanently attached to the seam and its other edge free from attachment thereto, so that the case may be positioned in a compact roll when the umbrella is open and positioned so as to encase the canopy and compress it to convenient size when the umbrella is folded, and spaced spiral springs each of which is secured at one end to the free edge of the case and extends along the inner face of the case and through the seam and is secured at the opposite end to a rib of the umbrella, each of said opposite ends being bifurcated to form two tongues which project through a slot in said rib and having a shoulder seating on the rib adjacent the slot, said tongues being bent in opposite directions to anchor the end of the spring in the rib.

7. An umbrella comprising a stick, a flexible canopy extending outwardly from the stick and a case in the form of a resilient scroll extending from the stick to the free edge of the canopy and having one edge permanently attached to the canopy and its outer edge free from attachment thereto so that the case is positioned in a compact roll when the umbrella is open and may be positioned so as to encase the canopy and compress it to convenient size when the umbrella is folded.

EDWARD SCHMIDT.

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