

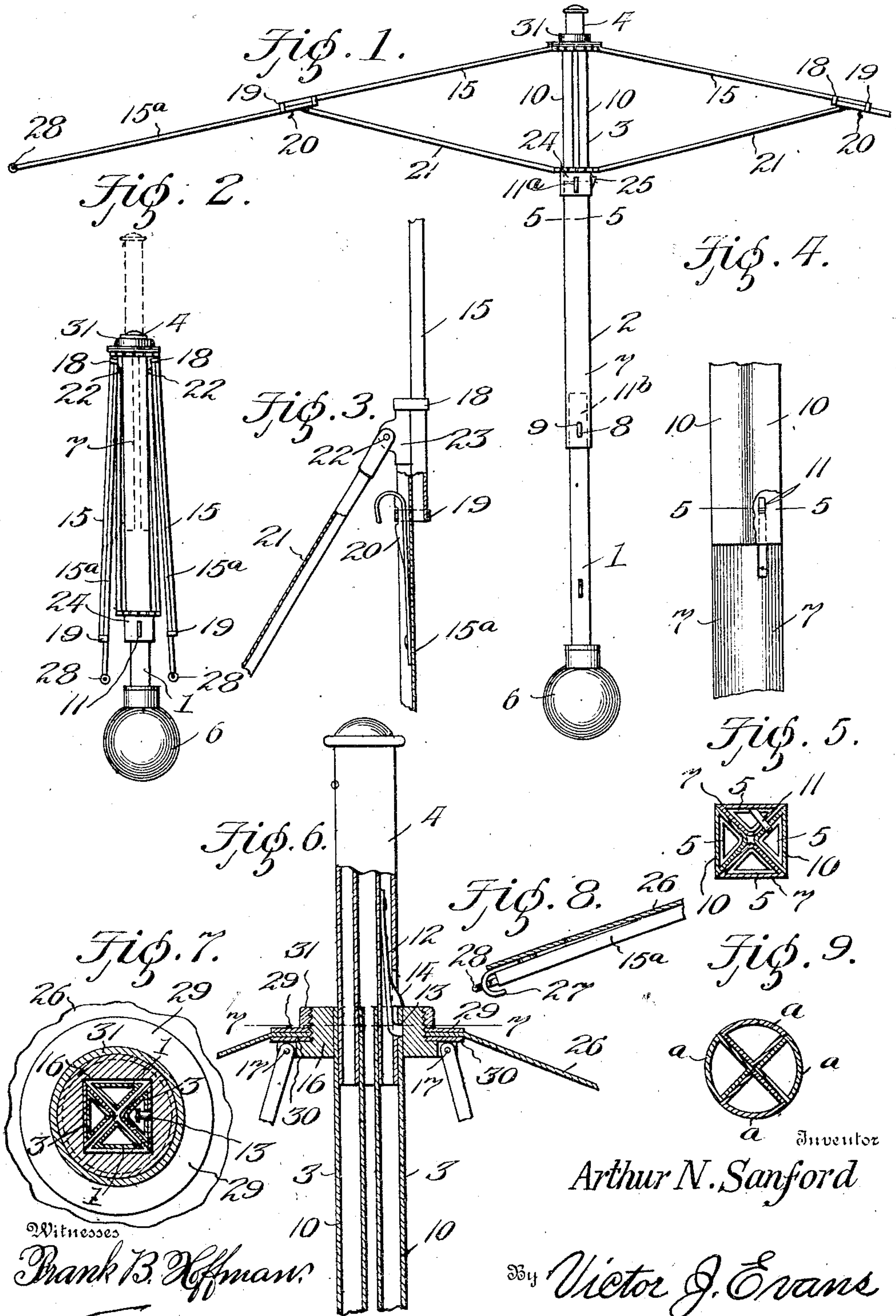
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PATENTED FEB. 18, 1908.

A. N. SANFORD.

UMBRELLA.

APPLICATION FILED APR. 10, 1907.



Witnesses
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UMBRELLA

No. 879,678.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, ARTHUR N. SANFORD, a citizen of the United States of America, residing at Wapato, in the county of Yakima and State of Washington, have invented new and useful Improvements in Umbrellas, of which the following is a specification.

This invention relates to umbrellas, and one of the principal objects of the same is to provide an umbrella in which the parts are telescopic and which will permit the umbrella to be folded within a comparatively small space, and particularly reduced in length so that the folded umbrella may be readily placed in a trunk, suit case, or traveling bag.

Another object of the invention is to provide a telescopic umbrella frame which shall be simple in construction, which will operate efficiently, and which will be strong and durable.

Still another object of the invention is to provide an umbrella of the character described, and a removable cover, which can be readily connected to the umbrella frame and disconnected therefrom by simple means.

These and other objects may be attained by means of the construction illustrated in the accompanying drawings, in which:

Figure 1 is a side elevation of an umbrella frame made in accordance with my invention, said frame being shown extended. Fig. 2 is a side elevation of the umbrella frame shown closed, and with the upper end section of the stick shown in dotted lines extended. Fig. 3 is a detail and partial sectional view showing the manner of connecting the braces to the sectional ribs. Fig. 4 is a detail elevation showing an interior spring catch for holding two sections of the stick in extended position. Fig. 5 is a cross sectional view on the line 5—5, Fig. 1, and Fig. 4. Fig. 6 is a partial longitudinal section of the upper end of the umbrella frame showing the manner of clamping the removable cover in place thereon. Fig. 7 is a sectional view on the line 7—7, Fig. 6. Fig. 8 is a detail sectional view of the outer edge of the cover, and showing the manner of securing the same to one of the ribs. Fig. 9 is a transverse sectional view of a modified form of telescopic stick in which the sections are rounded at their outer surface instead of being square as shown in the other views.

Referring to the drawing for a more particular description of my invention, the nu-

meral 1 designates the handle section of the stick, 2 is the section within which the section 1 slides, 3 is the section of the stick which slides within section 2, and the end section 4 slides within the section 3, thus reducing the length of the stick and permitting the umbrella to be folded in a small space to take but little room in a suit case or other traveling bag. The handle section 1 consists of four triangular portions 5 connected together at their lower ends and secured by means of a knob or hand hold 6, the upper ends of the sections 5 being mounted to slide within the two members 7 of the section 2, said members 7 being substantially V-shape in cross section or triangular if the outer surface of the handle is to be rectangular. It will be understood, of course, that the outer surface of the stick may be round as shown in Fig. 9. A spring catch 8 carried by the handle section is adapted to engage a slot or aperture 9 in the section 2 to hold said sections extended. The section 3 consists of two members 10 of substantially triangular shape in cross section, and said two members are adapted to slide along the section 2, and to be held in extended position by means of a spring catch 11^a. This spring catch is concealed within the section 2 near the upper end of one of the members 7, and is released by the extension 11^b of section 1 shown in dotted lines in Fig. 1, when the umbrella is being folded, and after the catch 8 has been released and section 1 is shoved within section 2, thus releasing catch 11, and permitting sections 2 and 3 to telescope. The section 4 is formed of four members similar to the handle section 1 and said section is mounted to slide within the section 3, and to be held in extended condition by means of a spring catch 12 provided with a projecting toe 13 which engages in an opening in the section 3, as shown more particularly in Fig. 6, said toe 13 extending through one of the members of the section 4. The spring catch 12 is also provided with a projection 14 which engages the upper edge of the cover clamping ring. The ribs 15 are pivotally connected to the ring 16, as at 17, and mounted to slide on the ribs 15 are the outer sections 15^a of said ribs. The outer sections 15^a are provided with a ring or band 18 which slides upon the section 15 and the latter section is provided with a similar band 19 which slides upon the section 15^a. A spring catch 20 is carried by the sections 15^a and this catch engages the ring 19 to hold

the sections 15 and 15^a in extended position. The braces 21 are pivotally connected at 22 to ears 23 formed on the sliding section 15^a, and at their inner ends the braces 21 are
 5 pivotally connected to a sliding sleeve 24 in any suitable manner, said sleeve adapted to slide upon the section 2 of the stick and to be held in extended position by means of a
 10 spring catch 25. The removable cover 26 is provided at its outer edge with a series of hooks 27 adapted to engage eyes 28 in the outer ends of the rib sections 15^a. The cover
 15 26 is provided with a central opening adapted to fit over the ring 16 and to be clamped in place by the oppositely disposed washers 29 and 30 which are clamped in place with
 the cover between them by means of the threaded ring 31, as shown more particularly in Fig. 6.

20 Upon reference to Fig. 9 it will be seen that the sections of the stick may be rounded upon their outer surface, as at *a* instead of being rectangular, as shown in the other figures.

25 The operation of my invention may be briefly described as follows: In closing the umbrella, draw sliding sleeve 24 toward handle section 1, after releasing spring catch 25. The ribs 15^a will be brought along side
 30 the stick, and spring catches 20 will come in contact with braces 21 and will be released. Clasp one hand about the ribs near where the braces are coupled to ears 23, to keep the ribs near the stick, then shove sliding sleeve
 35 24 toward top of umbrella and rib sections 15^a will be shoved along and beneath rib sections 15. Next shove stick together after releasing spring catch 8, when the extension 11^b of section 1 will release spring catch 11.
 40 Next release spring catch 13 and slide section 4 within sections 2 and 3.

To open the umbrella draw stick to extended position where it will be held by
 45 spring catches 8, 11 and 13. Draw sliding sleeve 24 toward handle keeping ribs along the stick with one hand until they are drawn to extended position, where they will be held by spring catches 20.

From the foregoing it will be obvious that an umbrella made in accordance with my in- 50
 vention may be quickly closed to occupy but small space, can be readily extended, is comparatively simple in construction, the cover may be readily removed and replaced by a
 55 new one, and will be found very convenient and efficient for its purpose.

The relative proportions of the parts may be changed and the details of construction may also be changed within certain limits without departing from the spirit and scope 60
 of the invention as defined in the following claims.

Having thus described the invention, what I claim is:

1. An umbrella comprising a stick made 65
 in sections and said sections adapted to slide one upon the other, each of said sections being composed of a plurality of substantially triangular members with the apices of the
 70 triangular members disposed centrally of the sections, spring catches for holding the sections extended, ribs comprising pivoted sections and sliding sections, and spring catches
 for holding said sliding catches in position.

2. An umbrella comprising a telescopic 75
 stick made in sections and each section consisting of a plurality of members of substantially triangular form in cross section, and means for holding the sections of said stick
 80 extended and retracted, substantially as described.

3. A folding umbrella provided with a telescopic stick made in sections and each section consisting of a plurality of members
 85 of substantially triangular form in cross section, said sections being mounted to slide one within the other, and clasps for holding the sections of the stick extended and retracted.

In testimony whereof, I affix my signature 90
 in presence of two witnesses.

ARTHUR N. SANFORD.

Witnesses:

H. D. HUNT,
 N. T. TURNER.