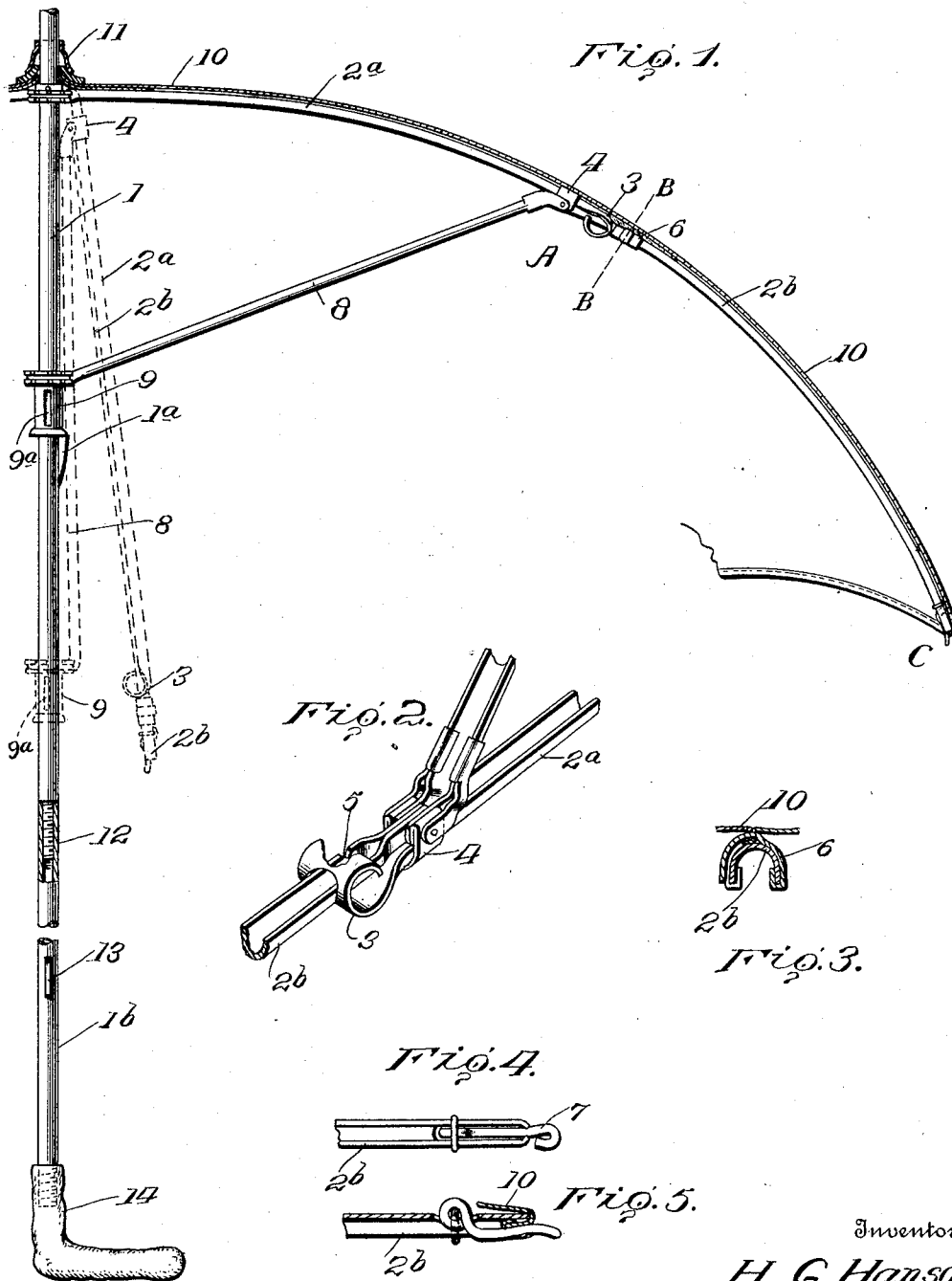


H. G. HANSON.
 COLLAPSIBLE UMBRELLA.
 APPLICATION FILED AUG. 24, 1911.

1,056,022.

Patented Mar. 18, 1913.



Witnesses

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HANS G. HANSON, OF BOWDON, NORTH DAKOTA.

COLLAPSIBLE UMBRELLA.

1,056,022.

Specification of Letters Patent.

Patented Mar. 18, 1913.

Application filed August 24, 1911. Serial No. 645,840.

To all whom it may concern:

Be it known that I, HANS G. HANSON, citizen of the United States, residing at Bowdon, in the county of Wells and State of North Dakota, have invented certain new and useful Improvements in Collapsible Umbrellas, of which the following is a specification.

My invention comprehends certain new and useful improvements in collapsible umbrellas, and has for its main object to provide an improved umbrella which can be taken down and made to occupy a very small space, thereby making it possible to place it in a trunk or a suit case.

A further object is to provide an umbrella the cover of which is detachably secured to the frame in a novel way and which is readily removable for repair or replacement.

With these and other objects in view as will more fully appear as the description proceeds the invention consists in certain constructions, arrangements and combinations of the parts that I shall hereinafter fully describe and claim.

For a full understanding of the invention reference is to be had to the following description and accompanying drawing in which:

Figure 1 is a partial section and elevation of the device; Fig. 2 is an enlarged perspective view of the detail at A in Fig. 1; Fig. 3 is an enlarged sectional view on the line B—B of Fig. 1; Figs. 4 and 5 are enlarged views showing the construction at C in Fig. 1.

Corresponding and like parts are referred to in the following description and indicated in all the views of the accompanying drawing by the same reference characters.

Referring to the drawings, a sectional rod, designated by the numeral 1, represents the upper part of an umbrella rod of the usual construction, and is provided with the customary spring operated catch 1^a. A U-shaped rib comprising telescopic sections 2^a and 2^b, the former section being flattened at its outer end and formed into a return bend 3, is connected to the rod 1 through the inner end section 2^a, being pivotally attached in the usual manner. The return bend 3 is provided with an aperture through which the section 2^b passes and is free to move longitudinally therein. A U shaped clip 4 embraces the section 2^a and is secured to the inner end of the section 2^b, thereby forming

a continuous extensible rib. A notch 5 is formed in the lower part of the section 2^b near its inner end and is engageable with the extremity of the bend 3 thereby tending when engaged to maintain the section 2^b in its extended position. A clip 6 provided with a cover engaging hook is slidably mounted upon the section 2^b intermediate its outer end and the return bend 3 of the arm 2^a. A pivotally attached pin 7 is mounted near the outer end of the section 2^b on the under side thereof and for the purpose of engaging a portion of the cover 10 and forcing the same between the lateral edges of said section where the cloth is retained by the frictional engagement of the pin in the channel of the rib.

A spreader 8 is pivotally connected at one end to the clip 4 at the junction point of said clip and the section 2^b, the other end of said spreader being pivotally connected to the usual type of sleeve 9 which is provided with the usual catch engaging slot 9^a and is free to move longitudinally upon the rod 1.

It is of course to be understood that the rib and spreader described each represents but a single one of a plurality of similar members mounted about the rod 1 to form the completed framework of the umbrella.

A cover to the umbrella frame is designated by the numeral 10, the same being held in place on the rod 1 by a detachable cap 11. It is of course understood that the cover is constructed for detachable engagement with the clip 6 and the pin 7.

The rod 1 is broken by a joint 12 forming the section 1^b which is provided with a spring operated catch 13 engageable with the slot 9^a of the sleeve 9 when the umbrella is closed, and is also detachably connected to a handle 14.

From the foregoing description in connection with the accompanying drawings, the operation of my improved extensible umbrella will be apparent.

Assuming that the umbrella is in use, the telescoping sections 2^a and 2^b are extended to their full length and the extremity of the return bend 3 is engaged in the notch 5 thereby tending to maintain the sections in this relation. The sleeve 9 is in its elevated position on the catch 1^a thereby holding the spreader 8 in support of the extended ribs. The clip 6 and the pin 7 secure the cover to the ribs.

To lower the umbrella the catch 1^a is depressed and the sleeve 9 lowered, thus through the spreader 8 lowering the rib. The umbrella is now in its closed position, being retained thus by the engagement of the slot 9^a with the catch 13.

To collapse the umbrella the ribs are held and the sleeve 9 pushed up, whereby the clip 4 is pushed upwardly on the section 2^a, thereby causing the section 2^b to telescope therewith. The rod 1 is separable at the joint 12 and the handle 14 is detachable.

To remove the cover, disengage the pin 7, disconnect the clip 6 from the cover, and remove the cap 11.

Having thus described the invention what is claimed as new is:

1. In a folding umbrella, a staff, a rib comprising an inner and an outer section, the inner section being pivoted to the staff and having its outer end portion bent to form a convoluted head extending transversely of the said section and formed inwardly of its terminal edge with an opening, the outer section of the rib being slidably fitted through the opening in the head and formed with a notch, the said terminal edge

of the head bearing frictionally against the said outer section of the rib and being arranged to engage in the notch when the sections are extended whereby to hold them in extended relation, a runner upon the staff, and a stay rib pivoted to the runner and to the inner end of the outer rib section.

2. An umbrella including a sectional rod, a plurality of sectional telescoping ribs pivotally attached thereto, cover attaching devices carried by said ribs, said ribs being constructed with the outer end of the inner section flattened and formed into a return bend provided with an aperture through which the outer section is passed, a U clip secured to the inner end of said outer section, and slidably mounted upon the inner section, said outer section being formed with a notch on the under side near the inner end, said notch being engageable by the end of the return bend of the inner section.

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

HANS G. HANSON. [L. s.]

Witnesses:

H. F. KONICHEK,
C. D. FUNK.