

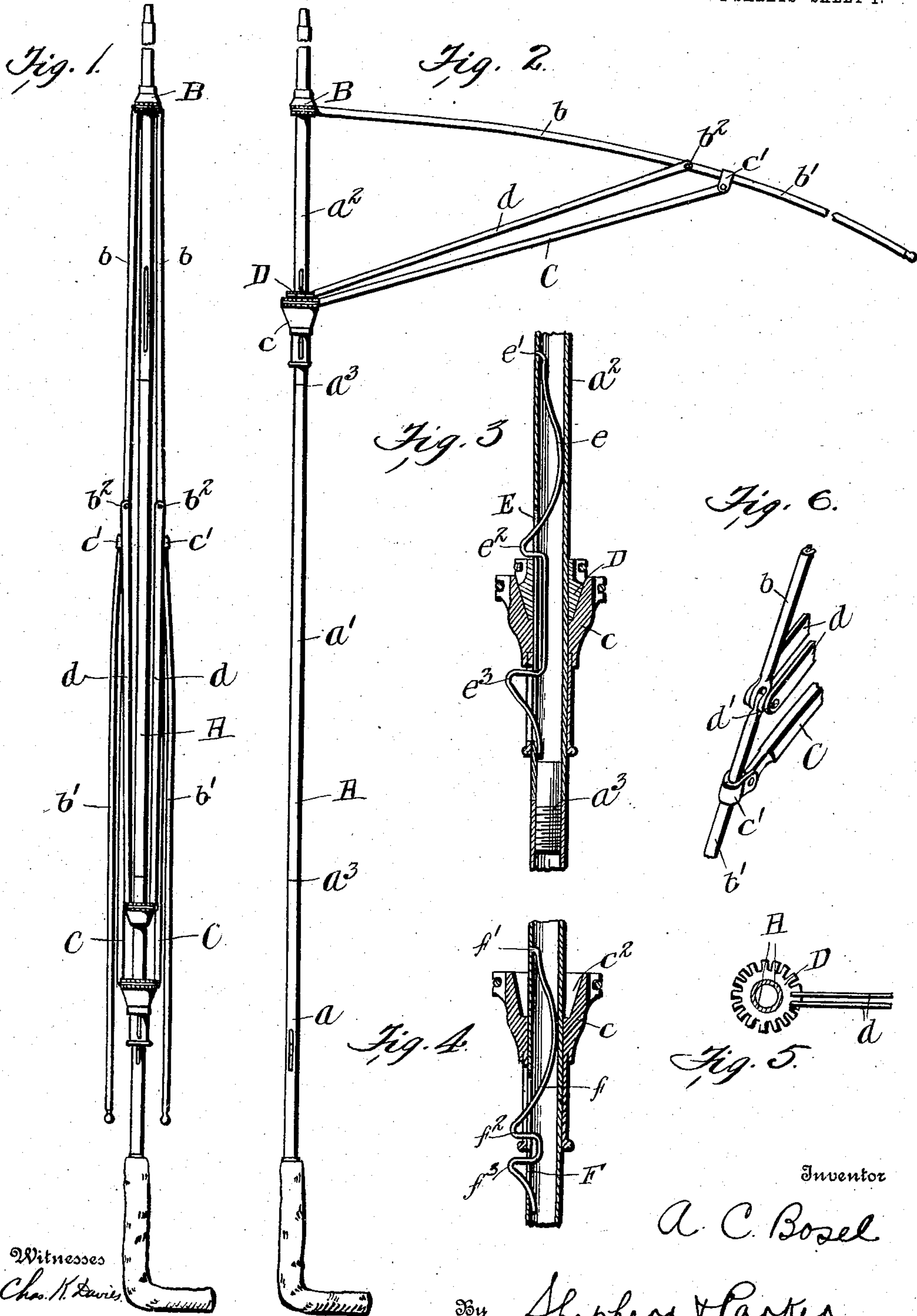
No. 868,071.

PATENTED OCT. 15, 1907.

A. C. BOSEL.  
UMBRELLA.

APPLICATION FILED FEB. 16, 1907.

2 SHEETS—SHEET 1.



Witnesses  
Chas. H. Davis,

Myron G. Clear

By

Shepherd & Parker

Inventor

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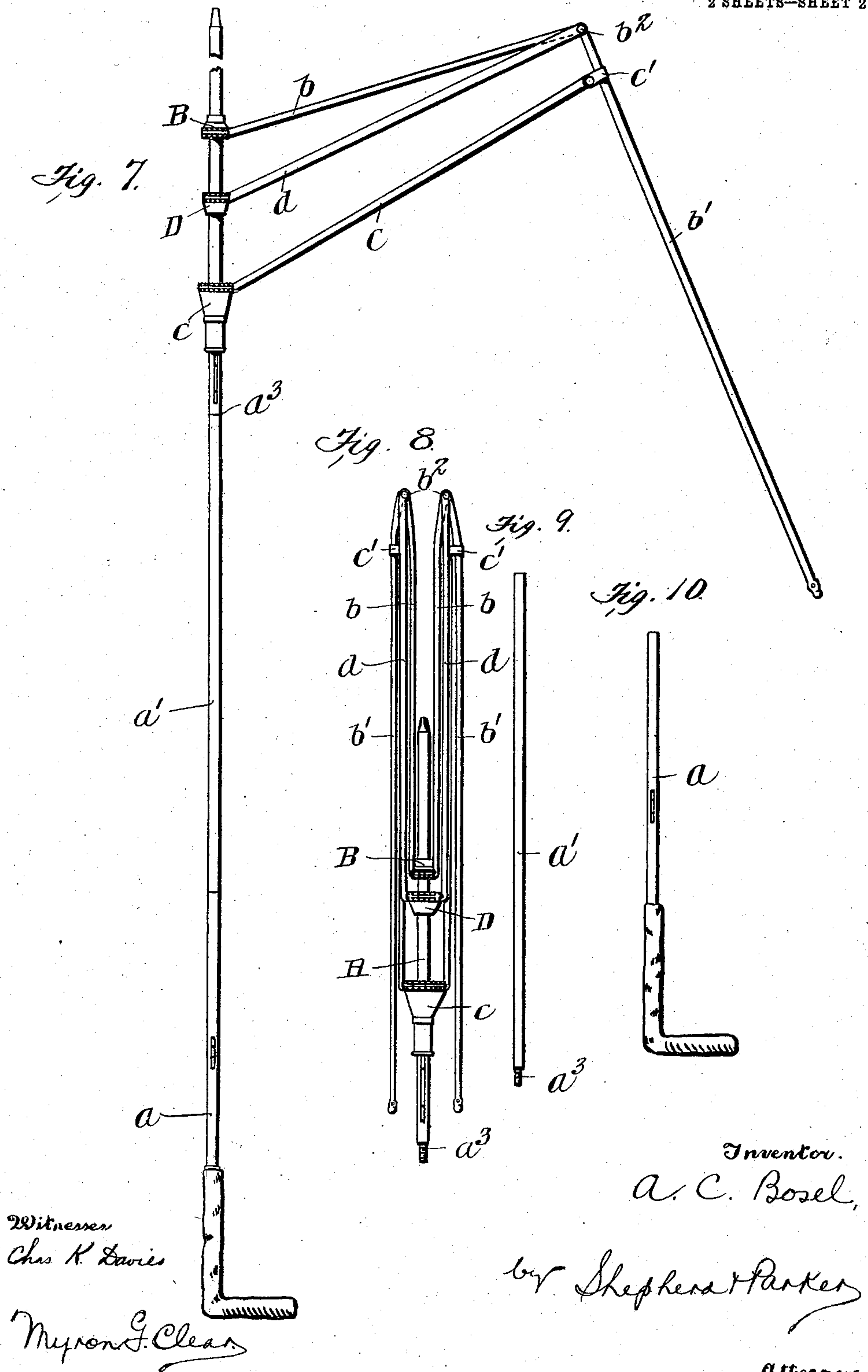
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# UNITED STATES PATENT OFFICE.

ALBERT C. BOSEL, OF HENDERSON, MINNESOTA.

## UMBRELLA.

No. 868,071.

Specification of Letters Patent.

Patented Oct. 15, 1907.

Application filed February 16, 1907. Serial No. 357,615.

*To all whom it may concern:*

Be it known that I, ALBERT C. BOSEL, a citizen of the United States, residing at Henderson, in the county of Sibley and State of Minnesota, have invented certain new and useful Improvements in Umbrellas, of which the following is a specification.

This invention relates particularly to folding umbrellas and has for its object to provide an umbrella of this class which may be opened and closed in the ordinary way and which may, when it is required, be folded into a very small package to be put into a valise when traveling.

My invention also resides in certain other features hereinafter described and pointed out in the accompanying drawings in which,

Figure 1 is an elevation of the skeleton frame of my improved umbrella, in the closed position. Fig. 2 is a similar view showing one of the ribs extended to the opened position. Fig. 3 is a cross section showing the spring catch for holding the runners when the device is open. Fig. 4 is a similar view showing the catch for holding the runner when the device is closed. Fig. 5 is a plan view of the supplemental runner. Fig. 6 is a perspective plan view of a portion of one of the ribs showing the connections thereto of the main and supplemental brace rods. Fig. 7 is a view similar to Fig. 2, showing the ribs bent preparatory to folding the umbrella up. Fig. 8 is an elevation of the upper section of the umbrella rod showing the ribs in the folded position and slightly exaggerated in form. Fig. 9 is an elevation of the central section of the umbrella rod, and Fig. 10 is a similar view of the handle section.

Referring to the figures the umbrella rod A is preferably constructed in three sections, handle section  $a$ , central section  $a'$  and upper section  $a^2$ , the said sections being detachably assembled by means of the screw connections  $a^3$ . An ordinary crown piece B is mounted on the rod A and has extending therefrom the two part ribs comprising the inner and outer portions  $b$  and  $b'$  respectively, hinged together at  $b^2$ . The stretchers or main brace rods C are connected at their inner ends to the main runner  $c$  and at their outer ends to the outer portions  $b'$  of the ribs adjacent their inner hinged ends by means of the clips  $c'$ .

The main runner  $c$  is provided with a tapering recess  $c^2$  and is mounted on the rod A to slide thereon in the ordinary way. A supplemental runner D is also slidably mounted on the rod A, above the main runner  $c$

and is provided with a tapering lower face adapted to fit within the recess  $c^2$  of the same. Supplemental runner D has extending therefrom a plurality of supplemental brace rods  $d$ , each comprising twin members which are secured at their outer ends on the extensions of the pivot pin  $d'$  which hinges the outer and inner rib portions  $b'$  and  $b$  respectively together.

The rod A is preferably constructed of hollow metal tubing and is provided within the portion  $a^2$  thereof with a slot E and a spring member  $e$  fastened therein at  $e'$  and bent to form the spaced catches  $e^2$  and  $e^3$ , projecting from the slot E and between which the main and supplemental runners are adapted to be held when the umbrella is in the opened position. The handle portion  $a$  of rod A is similarly provided with a slot F and a spring  $f$  fastened at  $f'$  within the rod and bent to form a catch  $f^2$  projecting through the slot F and adapted to engage within the main runner  $c$  to hold the same when in the closed position. Spring  $f$  is also bent beyond catch  $f^2$ , to form the portion  $f^3$  thereof extending out of the slot F and adapted to be operated by the finger to depress catch  $f^2$  to release the runner.

It will be readily seen by reference to the foregoing description and the accompanying drawing that the umbrella may be closed from the position shown in Fig. 2, by simply folding the main and supplemental runners closely together and depressing the spring catch  $e^3$ , and when the runners have passed over said catch the supplemental runner D may be released, while the downward movement of the main runner is continued until the same is caught by the catch  $f^2$ . The supplemental runner D, will, if operated thusly, automatically adjust itself on the rod A as the downward movement of the main runner  $c$  is continued.

The operation of folding the umbrella to be packed away is as follows, special reference being made to Figs. 7 and 8: Spring catch  $e^2$  is depressed and the supplemental runner D is moved upwardly toward the crown piece B, breaking the joint  $f^2$  of the ribs and forcing the outer end of the portion  $b'$  thereof inwardly with the point  $c'$  as the pivot. The upward movement of the supplemental runner is continued as far as possible, or to a point slightly beyond the position of the same as shown in Fig. 7, and held there while the main runner is moved upwardly again spreading the outer portions  $d'$  and allowing the upward movement of the supplemental runner to be continued until the arms are swung to the position shown in Fig. 8. The sections of the

rod A are then detached at the screw connections  $a^3$  and bound by any suitable means to the folded portion of the umbrella and the operation is complete.

Having fully described my invention I claim:

- 5 In a folding umbrella the combination with the collapsible central rod, of the two part hinged ribs extending therefrom, a main runner mounted on said central rod and provided with a circular tapering recess, a supplemental runner mounted on said rod above said main runner and provided with a tapering lower end adapted to
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fit within said recess, rods extending from said supplemental runner and connected to said ribs at the hinge thereof, and stretcher rods extending from said main runner and connected to the outer portion of said rib adjacent the inner hinged ends thereof substantially as described. 15

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

ALBERT C. BOSEL.

Witnesses:

H. J. SCHAFER,  
A. C. BLASING.