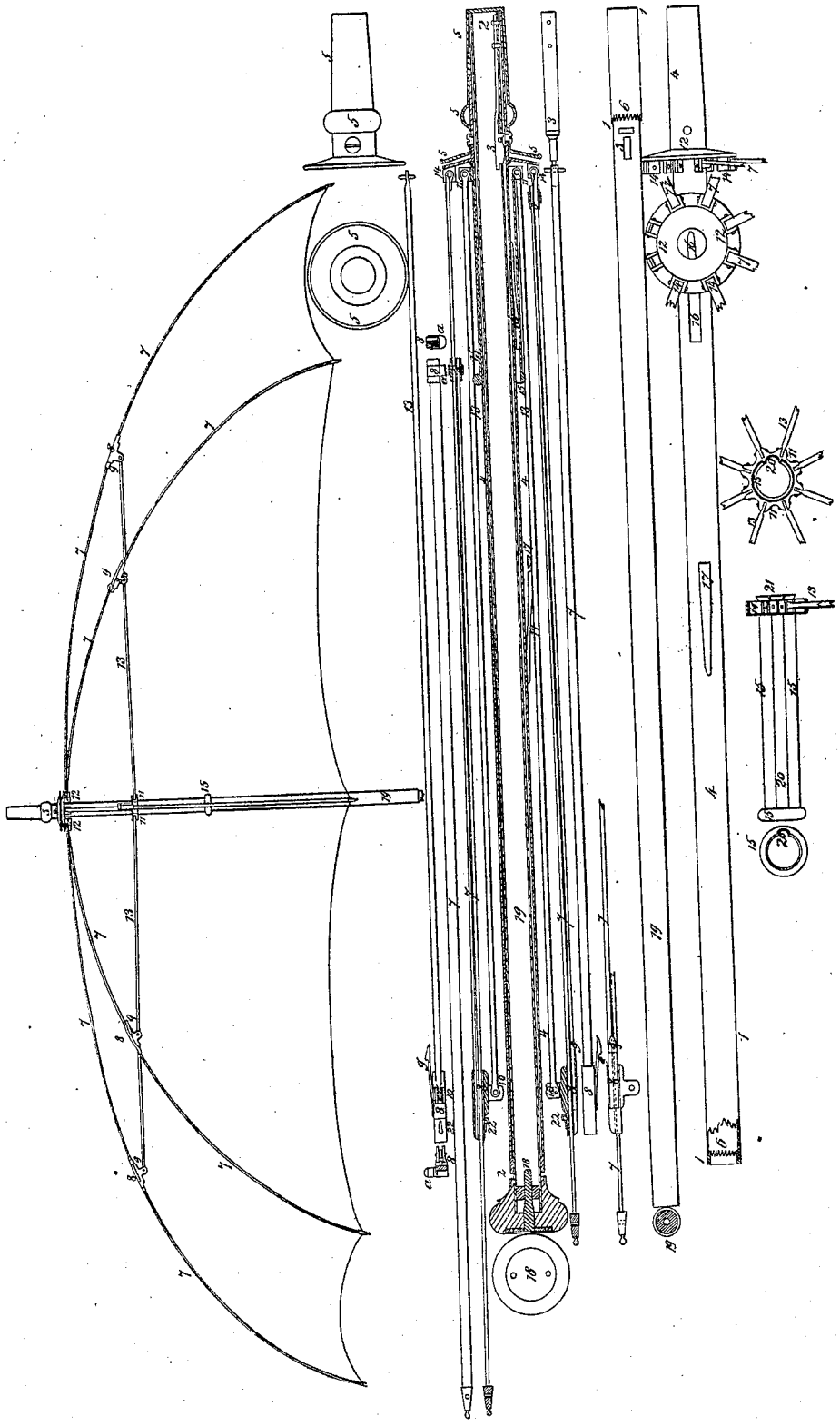
E. Hale.

Umbrella.

Patented Dec. 28. 1839.

No. 1449.



# UNITED STATES PATENT OFFICE.

ELISHA HALE, OF NEWBURG, NEW YORK.

## IMPROVEMENT IN THE MODE OF CONSTRUCTING UMBRELLAS AND PARASOLS.

Specification forming part of Letters Patent No. **1,449**, dated December 28, 1839; antedated June 28, 1839.

*To all whom it may concern:*

Be it known that I, ELISHA HALE, of Newburg, county of Orange, and State of New York, have invented a new and Improved Mode of Constructing Umbrellas and Parasols; and I do hereby declare that the following is a full and exact description.

This invention consists of constructing an umbrella or a parasol in a new way, which, when slid together in its contracted form and size, will not occupy more than about half its extended length, making it a convenient portable article.

To enable others skilled in the art to make and use my invention, I will proceed to describe its construction and operation.

I construct my umbrella and parasol by making the staff in two pieces of metal or wood of nearly equal length and so formed that one part of it slides into the other a little distance to support it when extended, as at 1, and quite into it to pack it up. (Shown at 2.) If the staff is made of metal, it is formed of two tubes of suitable size; but if made of wood it is formed of one tube and one solid piece of timber, and near the inner end of that part of the one sliding into the other is affixed a spring and catch 3, also a small stopper on it (marked 6) striking against one of the same form in the end of the cavity of the outer part of the staff (marked 4) to prevent the staff from sliding too far out, and the spring and catch 3 will always take its place against the outer end of tube 4 when the inner part 19 is drawn out and the stoppers 6 meet together.

To take the inner part of the staff out of the tube 4, forming the upper and outer part of it, the screw 18 must be taken out and the head off and the cap-thimble 5 off too and draw it out at the head of tube 4. Thimble 15 has a range through the length of it formed up, as at 20, to let the springs 16 and 17 pass through it as they are pressed down and the thimble 15 moved up and down on the tube 4. The upper end of this thimble 15 at 21 is made a little bell-mouthed, so that it may pass freely up over the lower end of tube 4 when spreading the umbrella, &c.

On clasp 8 is formed a small loop at 22, to which the covering of the umbrella, &c., is attached to keep it firmly to its place.

The spreaders forming the frame for the covering of the umbrella and parasol (shown at 7) are made of steel in a flattish square form (but the shape may be varied) and in two pieces of nearly equal length, and well tempered, so as to spring sufficiently and return to a straight form, and are tinned over to prevent them from rusting and to render it more convenient to solder the clasps, springs, and catches onto them, and they are connected to each other by a clasp on one end of each piece of them, (shown at 8,) and when extended are kept to their position by spring 9 and catch *a*. Spring 9 is a small piece of steel with a hook near the end of it, so formed as to slide into the catch *a* when the spreader is drawn out, and by the hook on the end taking hold of catch *a* keeps it to its place. Catch *a* is a small thin piece of metal attached to that part of clasp 8 which is united to the inner end of the outer piece of the spreader 7, into which catch the spring 9 enters and and keeps the spreader extended.

To shorten the spreaders for packing the umbrella, &c., the springs 9 will be pressed down and the outer end of the spreaders and part of clasp 8 on each will be slid on the other part of the spreaders up to the head-piece 12.

The stretchers used to spread the umbrella and parasol (shown at 13) are made longer than those used in the common kind, and both ends are made flat and one end pin-jointed into clasp 8, which clasp is suitably formed to receive one end of the stretcher, as shown at 10, and the other end of the stretcher is pin-jointed to thimble 15 on the staff at 11. The head-piece 12 for the spreaders to enter on the upper end of the staff is made larger in diameter than the usual kind and so formed that the spreaders are pin-jointed to it at 14. On the thimble 4, near the head-piece 12, is a longish half-round steel spring (marked 16) and affixed to the thimble. Nearer down to the center of the thimble is attached to it another spring similar to the one named and marked 17, both used as hereinafter described to keep thimble 15 to a certain position.

To shorten the umbrella and parasol and contract the length for packing them up, the staff will be slid one part into the other about half its extended length, so that the part on which the head or handle is affixed is all, ex-

cept the head, fully inclosed in the other part, as shown at 2, and that end of the stretchers attached to thimble 15 are with it slid up quite to the head-piece 12, and the spreaders are also slid one on the other up to the same head-piece 12 to shorten them, as aforesaid, for packing.

To open and extend the umbrella and parasol for use in accordance with the plan set forth in the drawing, first draw out the staff to full length. Next pull down the thimble to which the stretchers are attached about halfway on the staff. Then draw out the spreaders at full length and the springs 9 will take hold of catch *a* and keep them extended. Next slide up the thimble 15 against spring 16 and spring 17 will keep it to its place and the spreaders extended for use, and while the staff and spreaders are kept at full length and the umbrella, &c., in regular use the stretchers will be moved up to spread them and down to close them in the old usual way and the thimble 15 will only be slid up to the head-piece 12 to pack up. The stretchers will stand at right angles with the staff when the umbrella or parasol is spread, so that the thimble to which they are attached may be moved either up or down on the staff.

The covering of the umbrella and parasol will be put on to the spreaders in the usual way, but more firmly attached to the center of the spreaders to loop 22 on the outer end of the inner piece, and when the outer pieces of them are slid in the covering will be folded over and wrapped closely together to put the article into a suitable case for conveyance.

What I claim as my invention, and wish to secure by Letters Patent, is—

1. The forming the staff of an umbrella and parasol of two tubes or of one tube and one solid piece of nearly equal length having springs and catches on them and sliding one into the other for the purpose of shortening them in the manner of telescope-tubes, and in combination therewith the forming the metallic or other spreaders of an umbrella and parasol with a division in them and united by clasps having springs and catches on them and sliding one on the other to reduce them to nearly one-half their extended length, in manner set forth.

2. The sliding the thimble 15, with the stretchers attatched, up to the head-piece 12 to pack up the umbrella and parasol, as herein described.

ELISHA HALE.

Witnesses:
JNO. FS. COBB,
F. HUYCKE.