

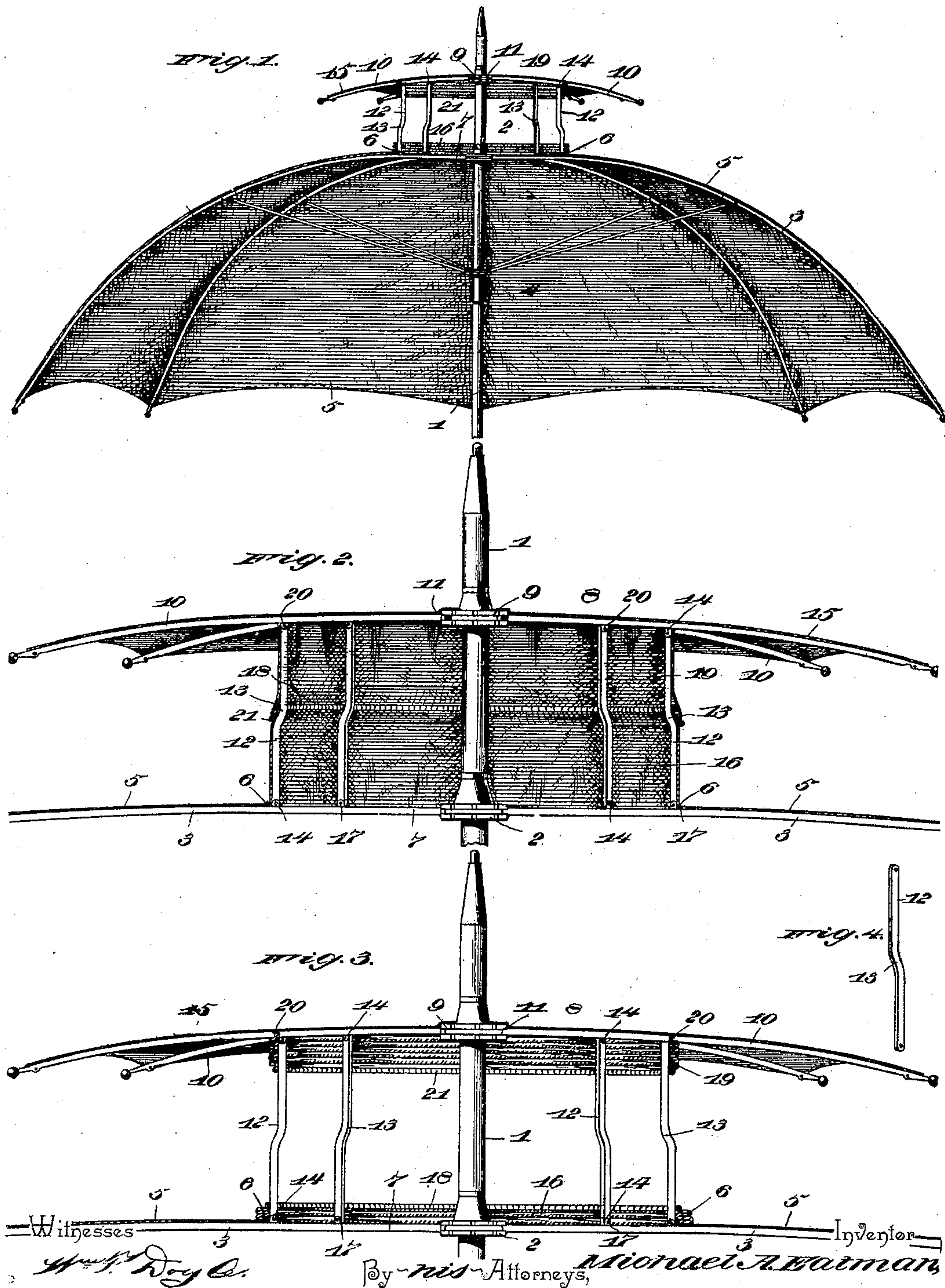
No. 617,415.

Patented Jan. 10, 1899.

M. A. EATMAN.  
VENTILATED UMBRELLA.

(Application filed June 22, 1898.)

(No Model.)



Witnesses

*W. F. Roy & Co.*

*H. A. Pembroke*

By his Attorneys,

*Michael A. Eatman*

Inventor

*C. A. Snow & Co.*



# UNITED STATES PATENT OFFICE.

MICHAEL ANGELO EATMAN, OF ITTABENA, MISSISSIPPI.

## VENTILATED UMBRELLA.

SPECIFICATION forming part of Letters Patent No. 617,415, dated January 10, 1899.

Application filed June 22, 1898. Serial No. 684,152. (No model.)

*To all whom it may concern:*

Be it known that I, MICHAEL ANGELO EATMAN, a citizen of the United States, residing at Ittabena, in the county of Leflore and State of Mississippi, have invented a new and useful Ventilator for Umbrellas and Parasols, of which the following is a specification.

My invention relates to improvements in ventilators for umbrellas and parasols; and the primary object that I have in view is to provide a construction by which a current of air may circulate upwardly through the central part of an umbrella or parasol, so as to admit of the escape of warm air confined within the limits of the umbrella and secure the admission of cooler air to the structure, thus promoting the comfort of the user.

A further object of the invention is to provide an improved ventilator which may be readily closed by hand to exclude driving rain from entering the umbrella through said ventilator, and a further object is to simplify the construction and operatively connect the parts of the ventilator to the umbrella-ribs for the purpose of making the ventilator foldable with the umbrella to which it is applied.

With these ends in view the invention consists in the novel combination and arrangement of parts of the ventilator in relation to certain elements of the umbrella or parasol, all as will be hereinafter fully described and claimed.

To enable others to understand the invention, I have illustrated the preferred embodiment thereof in the accompanying drawings, forming a part of this specification, in which—

Figure 1 is a sectional elevation with my improved ventilator applied to an umbrella and showing the parts in their opened positions. Fig. 2 is an enlarged vertical sectional view through the ventilator with certain parts of the umbrella and illustrating the slidable ventilator-bands in their closed positions to exclude rain from entering the umbrella through the ventilator. Fig. 3 is a view similar to Fig. 2 with the slidable bands opened to permit air to circulate freely from the umbrella to the ventilator. Fig. 4 is a detail perspective view of one of the offset links by which the radial arms of the ventilator may be attached to the umbrella-ribs.

Like numerals of reference denote like and

corresponding parts in each of the several figures of the drawings.

1 designates the staff of an umbrella, and 2 is the ordinary notch or crown-piece. The ribs 3 are pivoted to the notch or crown-piece, and they are operatively connected by the stretchers to the slidable runner 4. All these parts may be of any preferred construction known to those skilled in the art.

According to my invention the cover 5 to the umbrella or parasol is attached to the outer ends of the ribs 3 in the ordinary way, but the middle part of the cover is cut away and attached to the ribs, as at 6, for some distance away from the notch or crown-piece 2, thereby leaving an opening or space 7 in the central part of the cover and around the staff 1, through which opening or space the air is free to circulate. To close this ventilating opening or space against the admission of the sun and rain to the umbrella, I provide the ventilator 8, which is attached to the staff at a point above the notch 2 and is operatively connected with the ribs for opening and closing therewith.

This ventilator device embodies the auxiliary notch or crown-piece 9, which is rigidly fastened to the protruding part of the staff 1 at a suitable distance above the rib-notch 2, and to this auxiliary notch is connected a series of radial foldable arms 10, the inner ends of which are pivoted, as at 11, to said auxiliary notch. The arms or ribs of the ventilator are designed to lie above the ribs 3 in the same vertical plane therewith, and these arms 10 are operatively connected with the ribs 3 by the intermediate links 12. Each link 12 is a single piece of metal similar to each of the ribs 3 and the arms 10, and each link is bent or offset at a point intermediate of its length, as at 13, for the purpose of making the series of links accommodate two slidable bands, which are properly fitted around the series of links and are adapted to be drawn across the same, so as to overlap one another at their adjacent edges, and thereby close the space between the ventilator and the umbrella-cover to exclude driving rain from entering the umbrella through the ventilator. The links 12 are pivotally attached at their upper ends to the arms of the ventilator, while their lower ends are attached in



like manner to the ribs 3, such pivotal connection of the links to the ventilator-arms and the umbrella-ribs being indicated by 14.

The ventilator-arms 10 are inclosed by a cover 15, which closely surrounds the staff at the point where the arms 10 are attached to the auxiliary notch 9, and the outer edge of this cover 15 is secured to the extremities of the foldable arms 10.

The space between the ventilator-cover and the umbrella-cover may in the event of emergencies be closed by a slidable band or bands; but in the preferred embodiment of the invention as represented by the drawings I prefer to employ two bands, which may be adjusted independently of each other and are arranged on the offset links 12 to overlap one another at the meeting edges when closed across the space between the covers to the ventilator and umbrella. The lower band 16 is attached to the cover 5 or to the lower ends of the links 12 at the points indicated at 17, and in the free upper edge of this lower slidable band is provided a holding-elastic 18, which is adapted to closely hug the links 12 and sustain the band in its open position across said links. The upper slidable band 19 is fastened at its upper edge to the ventilator-cover 15 or the upper ends of the links 12 at the points indicated by the numeral 20, and in the lower edge of said upper slidable band is secured the holding-elastic 21, which also serves to hold the band 19 in its adjusted position on the links.

The umbrella may be opened and closed by sliding the runner 4 lengthwise on the staff to adjust the ribs and stretchers in a well-known manner. The ventilator-arms are pivotally attached to the auxiliary notch and operatively connected by the links with the umbrella-ribs, whereby the ventilator is opened or closed with the ribs. When the umbrella is opened, the links 12 raise the arms 10 and spread the cover 15 of the ventilator. Normally the slidable band 16 is drawn closely against the umbrella-cover, while the slidable band 19 is raised against the ventilator-cover, and these bands are maintained in their adjusted positions by the frictional engagement of the holding-elastics with the ventilator-links 12. A free or unobstructed space is thus provided through the cover of the umbrella and the ventilator for the circulation of air through the umbrella. It is not necessary in an ordinary rain to close the ventilator-space, because the cover 15 of the ventilator will shed the water upon the umbrella-cover; but when the rain is blown by the wind with considerable force against the umbrella it is advisable to close the ventilator-space in order to prevent the rain from being driven through the ventilator and the opening in the umbrella-cover. This end is attained by lifting the band 16 on the links 12 and drawing the band 19 downward on the links. The extent of adjustment of the two

slidable bands is limited by having said bands attached to the covers of the umbrella and ventilator, respectively, and when the slidable bands are adjusted the meeting edges thereof are designed to lap one over the other to more effectually exclude the admission of rain through the umbrella.

It will be observed that the upper band is fitted to the links to be pulled down to the offsets or bends 13 therein, while the lower band may be raised to surround the lower edge of the upper band and the offsets in said link. These offsets thus serve to permit the two bands to overlap one another and secure close joints between the bands without making the latter present an unsightly appearance.

The cover 15 and the slidable bands 16 19 may be made of fabric or any other suitable material, and the holding-elastics in the slidable bands may be of rubber or spring metal.

Slight changes may be made in the form of some of the parts, while their essential features are retained and the spirit of the invention embodied. Hence I do not desire to be limited to the precise form of all the parts as shown, reserving the right to vary therefrom.

Having thus described the invention, what I claim is—

1. The combination with a staff, umbrella-ribs, and ventilator-arms attached to said staff, of the connecting-links pivoted to said ribs and arms and each link offset at a point between its rib and arm, and slidable bands inclosing the connecting-links and arranged to have their overlapped edges spaced by the offsets in said links, substantially as described.
2. The combination with an umbrella, of foldable arms; links pivoted to said arms and to the umbrella-ribs, a slidable band attached to the lower ends of the links and provided with an elastic, and another slidable band attached to the upper ends of the arms and also provided with an elastic, the elastics of said bands serving to confine the bands in frictional engagement with the foldable links, substantially as described.
3. The combination with a staff and the ribs of an umbrella or parasol, of the foldable arms carrying the cover, the offset links pivoted to said arms and ribs, and independently-adjustable bands attached to the respective ends of the links and slidably fitted to and around said links to have their adjacent edges separated by the bends or offsets in the links when the bands are adjusted to close the space between the arms and ribs, substantially as described.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

MICHAEL ANGELO EATMAN.

Witnesses:

W. E. BEW,  
J. M. MCINTYRE.