April 7, 1925. 1,532,802

W. F. FEISTNER

UMBRELLA OR PARASOL

Filed June 26, 1923 2 Sheets-Sheet 1

Fig. 1.

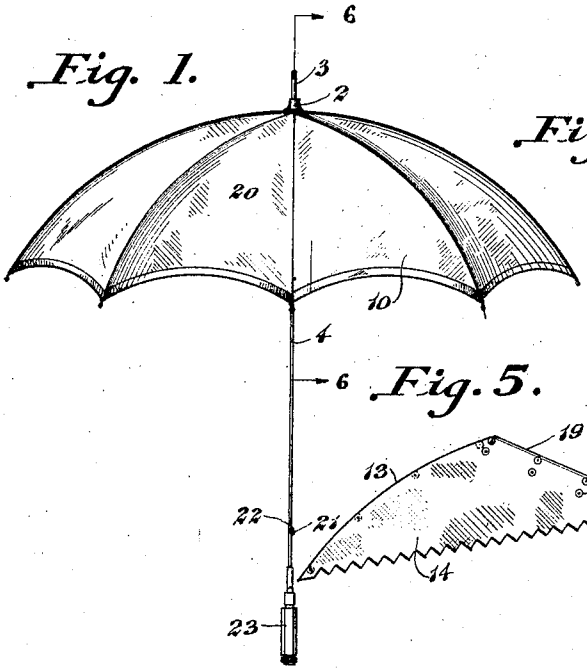


Fig. 2.

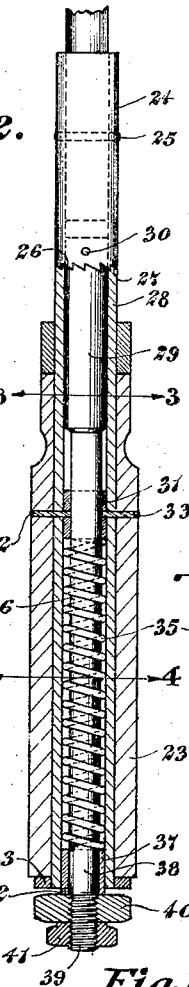


Fig. 3.

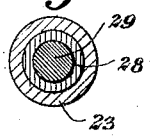


Fig. 4.

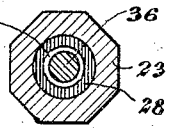


Fig. 5.

Fig. 6.

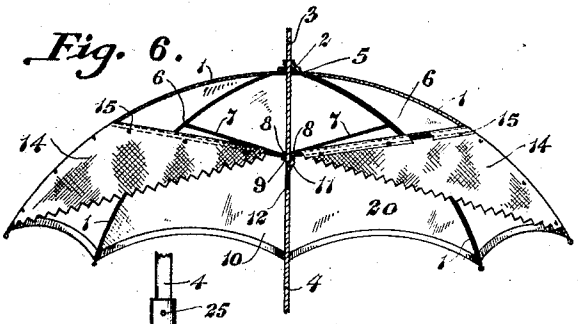


Fig. 7.

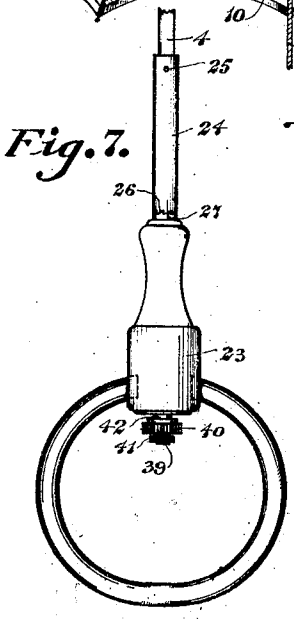


Fig. 8.

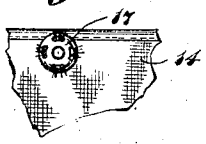


Fig. 9.

Fig. 10.

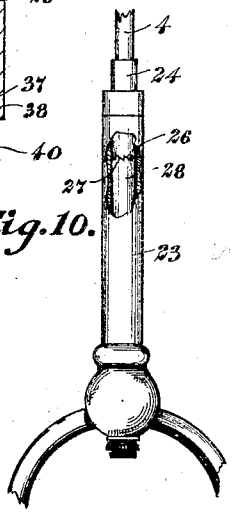


Fig. 11.

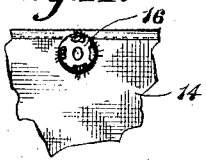


Fig. 12.

INVENTOR.

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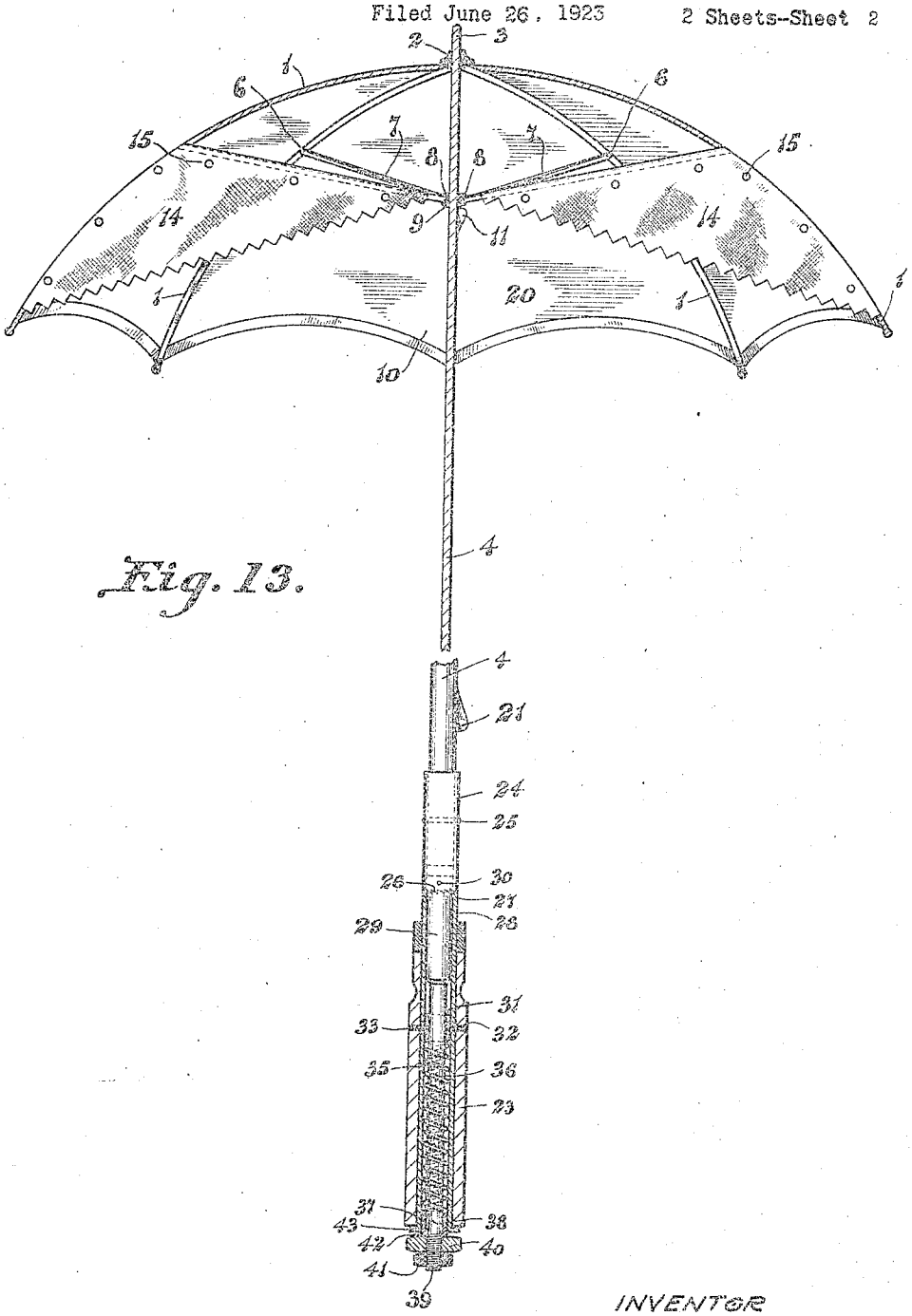


Fig. 13.

INVENTOR

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BY James N. Ramsey

ATTORNEY

Patented Apr. 7, 1925. 1,532,802

UNITED STATES PATENT OFFICE.

WILLIAM F. FEISTNER, OF NEWPORT, KENTUCKY.

UMBRELLA OR PARASOL.

Application filed June 26, 1923. Serial No. 647,820.

To all whom it may concern:

Be it known that I, WILLIAM F. FEISTNER, a citizen of the United States, and a resident of Newport, in the county of Campbell and State of Kentucky, have invented certain new and useful Improvements in Umbrellas or Parasols, of which the following is a specification.

My invention relates to improvements in umbrellas and parasols. Previous to a rain the humidity of the air is usually high and the air is calm, thereby causing an individual to be affected by the heat; also usually when an umbrella or parasol is used as a protection against the sunshine the temperature is high. In view of these usual heat discomforts when using an umbrella or parasol I have provided means whereby the user may simultaneously fan himself while using the umbrella or parasol.

The objects of my invention are to provide an umbrella or parasol which, in addition to the usual use as a protection against rain and sunshine, may simultaneously be used to create movement or current of air for the purpose of fanning the user; to provide simple, efficient and practical means whereby a person using an umbrella or parasol having my invention embodied therein may direct the flow of air at will; to provide means whereby the handle of my improved umbrella or parasol may be quickly transformed from one for actuating my fans to a stationary handle; to provide means whereby my invention may be installed on any umbrella or parasol.

My invention comprises vertically inclined wings or fans attachable to the ribs and top of any umbrella or parasol and a ratchet handle attachable to the stem of any umbrella or parasol for revolving the vertically inclined wings or fans for the purpose of fanning the user.

In the drawings:

Fig. 1 is a side elevation of my novel umbrella or parasol showing a handle for the use of gentlemen;

Fig. 2 is a side elevation showing my novel umbrella or parasol handle partly in section;

Fig. 3 is a sectional view taken on a line corresponding to 3—3 of Fig. 2;

Fig. 4 is a sectional view taken on a line corresponding to 4—4 of Fig. 2;

Fig. 5 is a side elevation showing my wing or fan;

Fig. 6 is a side elevation of an umbrella or parasol top taken on a line corresponding to 6—6 of Fig. 1, showing my wings or fans attached;

Fig. 7 is a fragmental elevation showing my novel umbrella or parasol handle for the use of ladies;

Fig. 8 is a fragmental view of the fan or wing showing a plan view of the tongue portion of my snap in enlarged form, attached to the fragment;

Fig. 9 is a fragmental view of the fan or wing showing a side view of the tongue portion of my snap in enlarged form, attached to the fragment;

Fig. 10 is a side elevation of my novel umbrella or parasol handle partly in section with a fragmental ring and stem showing the ratchet teeth enclosed or concealed within the casing;

Fig. 11 is a fragmental view of the fan or wing showing a plan view of the eye portion of my snap in enlarged form, attached to the fragment; and

Fig. 12 is a fragmental view of the fan or wing showing a side view of the eye portion of my snap in enlarged form, attached to the fragment.

Fig. 13 is a view partly in vertical section and partly in side elevation, the stem being broken in two for lack of space and the part below the break being on a larger scale.

The frame of my umbrella or parasol is of the usual construction and comprises outside ribs 1 pivotally connected to an upper collar 2 fixed near upper end 3 to stem 4. Braces 7 are pivotally connected at one end 6 to the ribs and at the other end 8 to runner 9 received around and capable of sliding movement on stem 4. The cover 10 preferably of flexible material is fixed to ribs 1. Catch 11, pivotally mounted and connected in slot 12 in stem 4, has an outward spring movement for securing lower runner 9, ribs 1, brace 7 and cover 10 in an elevated position as shown in Fig. 1. The upper edges 13 of radial wings 14 are secured to braces 7 by snaps 15 each having an eye 16 fixed to wings 14 respectively, for receiving tongue 17 fixed to wings 14 respectively. The eye and tongue are positioned on wing 14 so that portions 18 of the radial wings may be

occupied by braces 7 when the wings are attached. The upper and outer edges 19 of the wings 14 are fixed to flexible cover 10 by snaps 15 having tongue 17 fixed to cover 10 for receiving eye 16 fixed to the wings.

Upper collar 2, lower runner 9, ribs 1, brace 7, flexible cover 10 and radial wings 14, will hereinafter be referred to as top 20.

The catch 21 pivotally connected in slot 22 in stem 4 secures top 20 of my umbrella or parasol in closed position in the usual manner as by a spring within stem 4 urging the catch in contact with and securing runner 9 against upward movement.

The movement of air is created as by the radial wings 14 being transversely vertically inclined and rotated with the top of the umbrella or parasol. The vertical inclination of the stem 4 regulates the direction of the current of air created. Manually rotating handle 23 fixed to stem 4 is the most convenient method for revolving wings 14. For rotating stem 4 and top 20 I provide mechanism comprising tube 24 fixed to stem 4 by pin 25 combinedly received through the walls of tube 24 and through the lower end of stem 4 encased in the lower end of tube 24. On the lower end of tube 24 are formed ratchet teeth 26 meshing with ratchet teeth 27 formed on the upper end of tube 28. A rod 29 having the upper end fixed in the lower end of tube 24 by pin 30 is received in tube 28. Collar 31 is fixed inside of tube 28 by pins 32 and 33 and also secures exterior casing 23. Spring 35 is received around reduced section 36 of rod 29 and has its upper end in contact with collar 31 and its lower end in contact with collar 37 received around the lower portion of the rod at 38. The lower end of said rod is externally threaded at 39 for receiving nut 40 for securing collar 37. Nut 41 is also threaded to lower end 39 of rod 29 for the purpose of locking nut 40. Spring 35 through collar 31, pins 32 and 33, collar 37, nut 40 and tube 28 urges ratchet teeth 26 to mesh with ratchet teeth 27.

The operating mechanism of my novel umbrella is as follows: Assuming that the umbrella or parasol is closed and radial wings 14 are attached to flexible cover 10 and to braces 7, inward pressure of catch 21 releases runner 9 thereby permitting upward movement of the runner for elevating the cover. For convenient manual actuation of my radial wings or fans 14, stem 4 may be loosely encircled by one hand. Rotary movement is imparted by the other hand to handle 23, ratchet teeth 26 and 27, respectively, of upper tube 24 and lower tube 28 which are urged into mesh by spring 35 thereby rotating top 20, causing radial wing 14 to agitate the surrounding air and creating a current of air toward handle 23. Movement of the handle in a reverse direction for assuring successive positions of the hand for rotating handle 23 does not interfere with the continued direction of movement of top 20 as the angular portions of teeth 27 slide over the angular portions of teeth 26, through cooperation of spring 35. Teeth 26 and 27 are urged in mesh by spring 35 being in tension and having its lower end contacting collar 37 secured by nut 40 and having its upper end contacting collar 31 secured by pins 32 and 33 passing through the exterior walls of handle 23 and tube 28.

Nut 40 threaded to lower end 39 of rod 29 is for the double purpose of regulating the tension in spring 35 and to lock ratchet teeth 26 and 27 so that handle 23 is fixed to stem 4 by screwing nut 40 upward until butt 42 of the nut contacts collar 43 encircling rod 29, thereby through casing 23, pin 32, pin 33 and tube 28 the ratchet teeth 26 and 27 are locked.

As shown in Fig. 10 ratchet teeth 26 and 27 are enclosed within casing 23 for the purpose of eliminating any undesirable noise caused by the ratchet teeth.

As shown in Fig. 2 teeth 26 and 27 are designed to rotate top 20 in an opposite direction from that of teeth 26 and 27 as shown in Fig. 7.

It is to be understood that it is not intended to confine the invention to the forms of embodiments herein disclosed because it is susceptible of embodiments of various forms all coming within the scope of the claims.

What I claim as new and desire to secure by Letters Patent is:

1. In an umbrella fan, a wing adapted to be attached to the upper portion of said umbrella and manually operative means adapted to revolve said wing in one direction when said handle is rotated intermittently.

2. In an umbrella fan comprising a fan attached to the upper portion of said umbrella and a handle adapted to revolve said fan in only one direction when said handle is rotated alternately in reverse directions.

3. In an umbrella fan, a wing removably attached to the upper portion of said umbrella, an upper tube having ratchet teeth formed at the lower end thereof, said tube fixed to the stem of said umbrella, a lower tube having ratchet teeth formed at the upper end thereof, a rod through said upper tube and said lower tube, said rod fixed to said upper tube, an upper collar fixed to said lower tube and around said rod, a lower collar around said rod and contacting an upper nut threaded to the lower part of said rod, a lower nut threaded to the lower end of said rod, a finger contact handle fixed around said lower tube and a tension spring around said rod, said spring having its upper end in engagament with the lower end of said upper collar and its lower end in engagement with the upper end of said

lower collar, and said spring adapted to urge said ratchet teeth of said upper and lower tubes in engagement with each other for rotating the upper portion of said umbrella or parasol.

4. An umbrella fan comprising a manually operative and adjustable handle, a wing attached to the upper portion of said umbrella and adapted to rotate continuously in one direction when said handle is rotated alternately in reverse directions.

5. An umbrella fan comprising an adjustable handle attached to the stem of the umbrella, a wing attached to the upper portion of said umbrella and adapted to revolve continuously in one direction when said handle is rotated alternately in reverse directions, and said wing adapted to revolve alternately in reverse directions when said handle and stem are readjusted to move in unison and rotated alternately in reverse directions.

WILLIAM F. FEISTNER.