Nov. 3, 1925. 1,560,073

M. BONTEMPI ET AL

HAT PROTECTOR

Filed Jan. 26, 1924

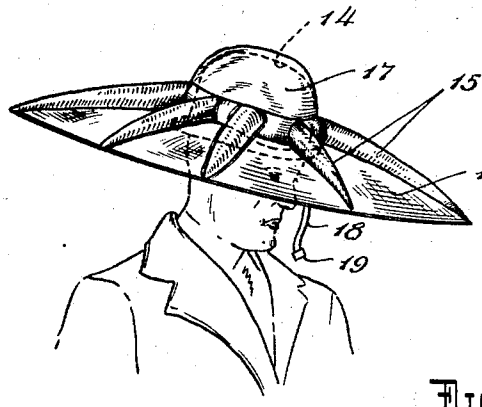


Fig. 1.



Fig. 2.

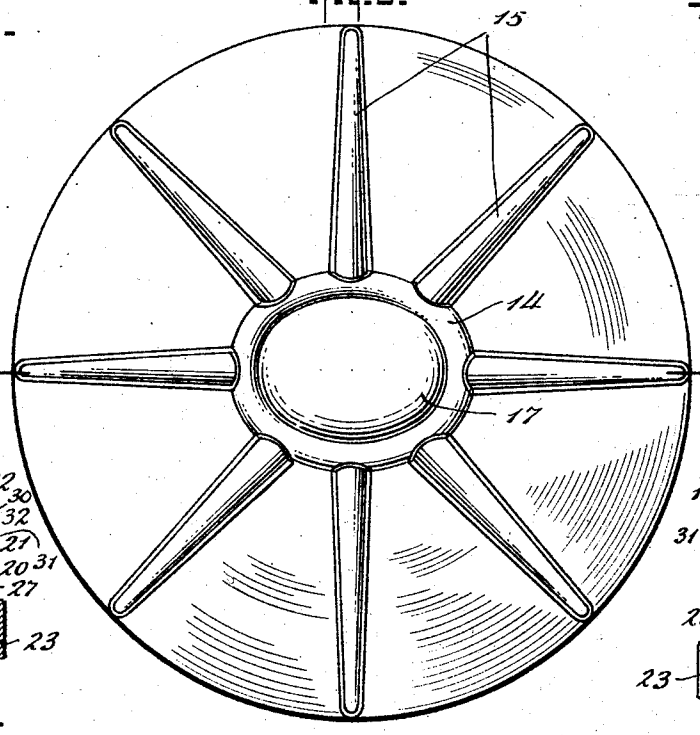


Fig. 3.

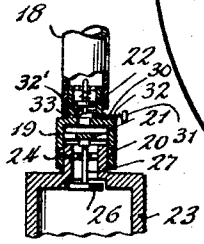


Fig. 5.

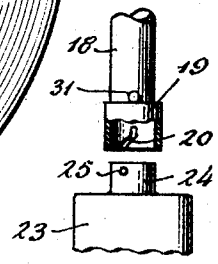


Fig. 6.

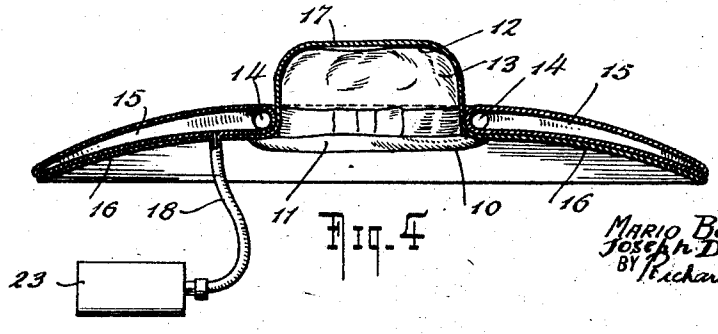


Fig. 4.

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UNITED STATES PATENT OFFICE.

MARIO BONTEMPI AND JOSEPH DE LEO, OF BRONX, NEW YORK.

HAT PROTECTOR.

Application filed January 26, 1924. Serial No. 688,656.

To all whom it may concern:

Be it known that I, MARIO BONTEMPI, a subject of the King of Italy, residing at Bronx, county of Bronx, and State of New York, and I, JOSEPH DE LEO, a citizen of the United States, residing at Bronx, county of Bronx, and State of New York, have invented certain new and useful Improvements in Hat Protectors, of which the following is a specification.

This invention relates to improvements in devices for shielding a person from the effects of rain or direct rays of the sun when exposed to such conditions of weather, partaking of the nature of an umbrella.

One of the objects of the invention is to provide a device which can be carried in the pocket of a garment when its use is not required, it being composed of normally limp elements collapsible into a parcel not materially larger than an ordinary pocket handkerchief.

A further purpose is to produce a device comprised of a plurality of inflatable ribs, extending radially outward from a tubular ring, and having engaged between them impervious webs, a cover of similar material being suited to extend over the crown of a hat to which the ring is fitted.

Another aim is in the provision of means for inflating the ring and ribs, whereby the latter elements are stiffened sufficiently to distend the webs and adequately support the same, constituting in effect an umbrella, carried by the user's hat, in an appropriate position, directly and centrally over the garments worn, and which obviates the necessity of using the hands as a support.

These and other like objects, which will become apparent as the description progresses, are accomplished by the novel construction and arrangement of parts hereinafter described and shown in the accompanying drawing, forming a material part of this disclosure, and in which:—

Figure 1 is a view showing an embodiment of the invention in a fully extended position and illustrating its application.

Figure 2 is a similar view of the same, also shown in position on a hat, but in a deflated and folded position.

Figure 3 is a plan view of the device as completely extended, drawn to an enlarged scale.

Figure 4 is a transverse sectional view of the same taken on line 4—4 of Figure 3.

Figure 5 is a fragmentary view of the end of the inflating tube.

Figure 6 is a similar view of a portion of the compressed air tank showing its connections.

Referring more specifically to the drawing, the numeral 10 designates in general a conventional type of men's hat, the same consisting of a brim 11 and crown 12, the hat being in all respects of ordinary construction and worn in the usual manner.

An endless flexible tube 14 is fitted to loosely engage around the body 13 of the hat, adjacent the brim 11 over the ribbon, if one be used, said tube being round as shown or of any other preferred cross section, its wall being elastic and relatively thin.

Extending radially outward from the ring are integral hollow ribs 15, tapering towards their outer ends, the ribs being of uniform length and equally spaced, presenting normally limp members capable of being folded into any desired position.

Extending between and joining the several ribs is a web 16 the outer edge of which terminates at the outer ends of said ribs.

Also secured to the inner portion of the element 14 is a casing 17 shaped to envelop the crown and exposed portion of the hat body, thus forming a complete covering over the head and shoulders of an individual when it is extended and it will be apparent that the entire structure will be made of waterproof material, so pliable as to permit tight folding of the entire device when deflated. In order to inflate the ring and ribs, so that the latter are caused to stand firmly outward in supporting the web, a flexible tube 18 is fixed in the under side of one of the ribs to extend to a conveniently accessible distance.

At the free end of the tube is an inlet head 19 having the open receptive elements 20 of a bayonet joint arranged helically, above which is an inreaching projection 21 disposed centrally of the axis of the tube 18, adjacent to a spring operated check valve 22 adapted to prevent the exit of air through the tube when the valve is closed.

A receptacle 23, adapted to be carried in the pocket, is provided with a mouth or dispensing spout 24 enterable in the head 19 and having elements 25 engageable with the bayonet joint elements 20 of the head.

The passage through the spout 24 is con-

trolled by a disc valve 26, at the center of which is a stem 27 suited to make contact with the projection 21 and thus open the valve 26 when the bayonet joint elements are in engagement.

The receptacle 23 is intended to contain a supply of air under a very considerable pressure, so that when the aforesaid connections have been made, the air will rush past the valve 26, force open the check valve 22, pass through the tube 18 and enter the ring 14 and ribs 15, inflating the same to a point of sufficient rigidity to support the structure in an effective manner.

When this has been accomplished, the bayonet joint elements 20 and 25 are separated, the check valve 22 preventing the emission of air from the umbrella elements and the disc valves 26 is forced to its seat by the pressure of the compressed air remaining in the receptacle 23.

To deflate the elements 14 and 15 and thus permit them to collapse, a plunger 30 is slidably mounted transversely and centrally across, the head 19, the same being provided with a knob 31 extending into convenient position for operation.

Said plunger is normally pressed outward by an encircling coil spring 32, and carried on the upper surface of the plunger is a bent flat spring 33 adapted to make contact with a projection 32′ extending down from the center of the check valve 22, said check valve, when raised permitting the air to escape.

In order to avoid undue waste of the compressed air, the head 19 may first be inserted in the mouth when it is desired to inflate the device and the breath blown as forcibly as possible into the tube, which thereafter may be connected to the compressed air reservoir 23 to secure results unattainable by personal efforts alone.

From the foregoing it will be seen that an effective device has been described for attaining the objects set forth, that is the protection of the wearer from rain or sunshine, and that when not in use, it can be compactly folded and carried about on the person, it being understood that the compressed air reservoir may be refilled as required by any convenient means.

It will be further apparent that an air pump may be directly applied to the head 19 whereby the same results may be accomplished and further, that changes in the form, proportions and minor details may be made within the scope and spirit, of the claims hereto appended.

Having thus described our invention, what we claim as new and desire to secure by Letters Patent, is:—

1. A head covering including an inflatable ring capable of encircling the crown of a hat adjacent the rim thereof, a plurality of ribs extending from said ring and having communication therewith, a flexible web connecting said ribs, and a crown covering forming an extension of said web and centrally disposed relative thereto so as to fit over and conform to the contour of said crown when said ring is disposed adjacent the rim of the hat.

2. A head covering including an inflatable ring capable of encircling the crown of a hat adjacent the rim thereof, a plurality of ribs extending from said ring and having communication therewith, a flexible web upon which said ribs are mounted and including a central crown portion capable of being extended upwardly through said ring and fitted over the crown of a hat to conform to the contour thereof when said ring is disposed adjacent the rim of said hat.

In testimony whereof we have affixed our signatures.

MARIO BONTEMPI.
JOSEPH DE LEO.