

(No Model.)

F. FRANK.

COMBINED CAP, PILLOW, AND LIFE PRESERVER.

No. 529,119.

Patented Nov. 13, 1894.

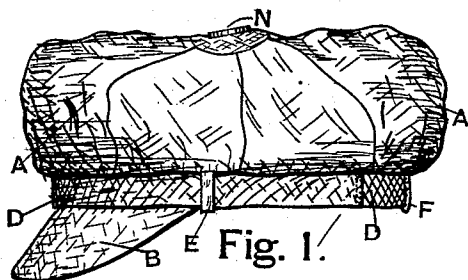
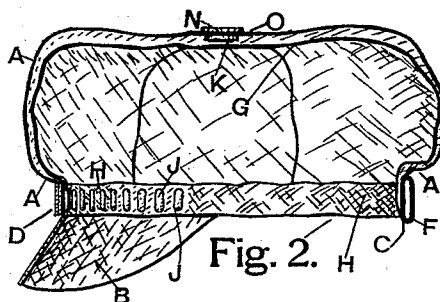


Fig. 1.



UNITED STATES PATENT OFFICE.

FRANÇOIS FRANK, OF CHICAGO, ILLINOIS.

COMBINED CAP, PILLOW, AND LIFE-PRESERVER.

SPECIFICATION forming part of Letters Patent No. 529,119, dated November 13, 1894.

Application filed September 28, 1893. Serial No. 436,659. (No model.)

To all whom it may concern:

Be it known that I, FRANÇOIS FRANK, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented a new and useful Combined Cap, Pillow, and Life-Preserver, of which the following is a specification.

My invention relates particularly to improvements in a combined cap, pillow and life preserver, which is the subject of Letters Patent of the United States, No. 419,765, granted to me January 21, 1890, and my object is to improve the construction of the article above named so that it is better adapted to the requirements of practice than has been heretofore attained, and the improvements consist in providing a better form of cap for conversion into a pillow or life preserver, and in so attaching the guard strap to the cap that it may be used for the double purpose of a cap guard and for attaching the article to one's body when used as a life preserver or to a chair when used as a pillow; and still another improvement consists in providing means for ventilating the article when worn as a cap without adding materially to either the cost or weight and, finally, I have provided a new construction of valve through which air may be introduced or expelled from the cap which has given perfectly satisfactory results, all of which is fully explained hereinafter, and is illustrated in the accompanying drawings, in which—

Figure 1 is a side elevation of a cap in which is embodied my improvements. Fig. 2 is a vertical section of Fig. 1 showing the general construction, as will be more fully explained hereinafter. Fig. 3 is a side elevation of the cap arranged as a pillow or life preserver. Fig. 4 is a plan view of the air valve and the casing therefor; and Fig. 5 is a vertical section on line V W of Fig. 4, on a scale twice as large as Fig. 4, of the air valve and casing therefor, together with a portion of the top of the cap, and a ring cemented in the center of the top of the cap to which ring the valve casing is secured. Fig. 6 is a vertical section of the air valve casing on the same enlarged scale as shown in Fig. 5. Fig. 7 is a vertical section of valve K showing holes S. Fig. 8 shows, respectively, an elevation and a vertical section on line X Y of a portion of

the interior of the cap band, with corrugations between which air may pass into and out of the cap for ventilating purposes. 55

Similar letters refer to like parts throughout the several views.

The material of this article of wearing apparel is usually made of some textile material combined with rubber, but may be made of any other suitable material adapted to the purpose, the parts being joined together in any suitable way so as to form an air and water tight bag, which, when folded one half within itself forms, with the attachments hereinafter described the cap shown in Fig. 1, in which A is the outer crown portion and B the visor which is attached to the cap band C, as shown in Figs. 2 and 3. There is a guard strap or band D which I usually provide with slide clasps E at the ends thereof, the central of length portion of the strap being held to the rear portion of the cap by means of a loop F through which the strap passes. Strap D is usually wholly or partially made of elastic material and when not in use is brought around the band of the cap, and by means of the slide clasps E pulled in closely to the cap band, as is usually done with the ordinary inelastic guard straps for caps. 80

The inside portion G of the crown of the cap is almost as large as the outside portion A, these portions being connected together at the inside of the cap by means of the sweat band H, Figs. 2 and 8. This sweat band may be made of textile fabric and rubber, with cork, or any other suitable material which is capable of being pressed into permanent ridges or corrugations, in a portion or all the circumference of the band, which are adapted to contact with the head of the wearer of the cap and permit the air to pass into and out of the inside of the crown of the cap between the corrugations, but should the direct contact of the corrugations be found annoying or objectionable in any particular a smooth band of leather, or other suitable material, may be secured in position to cover the corrugations, and still permit the air to pass in and out, as before described. 100

In manufacturing this article of wearing apparel the inside portion of the crown of the cap is secured to the upper edge of the sweat band H, while the lower edge of the sweat

band is secured to the lower edge of the outer portion of the crown and forms a bag. There is a valve K for the admission and exit of air to the space between the outside and inside portions of the crown of the cap, which valve is composed of an outer flange I, and the valve proper K which is joined to the flange by means of a stem M. The valve casing N is cylindrically shaped, and screw threaded exteriorly, to screw down into a ring O which is cemented air tight to the top of the cap. The bottom portion of the valve casing N is faced with rubber or leather at P, and through the bottom of the casing is a hole Q through which operates the stem M of valve K, the valve when in its position against its seat serving to cover hole Q, as shown in Fig. 5, the valve being held in the closed position by means of a helical spring R, which has one end in contact with the bottom of the casing N, while the other end of the spring contacts the under side of the valve flange L. There are several holes S through flange L for the admission of air into the interior and the exit of air out of the interior of valve casing N.

The valve casing N when screwed out of the ring O leaves an orifice of sufficient size so that water may be introduced there through and the bag be used as a water receptacle. It will be noticed by reference to Fig. 3, that, the inside and outside sections of the crown portion of the cap are almost cylindrical when inflated and that the sweat band H and the cap band proper C have a smaller diameter than the crown portions so that the visor B lies close to these depressed portions of the bag when it is fully inflated, the visor being thus out of the way and protected when the bag is used as a pillow or life preserver.

In blowing up the bag the mouth is applied around the projecting portion of casing N when, by blowing, valve K is forced inward against the pressure of spring R, the air entering holes S of valve flange L, thence down through casing N and through hole Q at the bottom thereof, thence past valve K and into the bag. At each inspiration of the lungs, when the blowing is stopped, the valve K is automatically closed by the action of spring R.

When it is necessary to collapse the bag one of the fingers may press upon the flange L when through the medium of stem M valve K will be opened and permit the air to escape by a light pressure upon the bag.

By removing the guard strap D from its usual position around the cap band to the position shown in Fig. 3 the strap may be readily adjusted around one's body so that the inflated cap may serve as a life preserver, pillow or

for holding water the length of the strap being adjusted to the size of the body by means of the slide clasps E.

I claim as my invention and desire to secure by Letters Patent—

1. An article of wearing apparel in the form of a cap, which is adapted to conversion into a pillow and life preserver, consisting of an outer crown section, and an inner lining section which is adapted to fold into and out of said crown section, said sections connected to form an air tight bag with a circumferential depression midway the length thereof, substantially as shown and described.

2. In an article of wearing apparel in the form of a cap, which is adapted to be converted into a pillow and life preserver, the guard strap D attached to the rear portion of said cap and serving the double purpose of a guard strap for the cap and as a means of attaching the article as a life preserver to the body of the wearer, substantially as described.

3. In an article of wearing apparel in the form of a cap, which is adapted to conversion into a pillow and life preserver, consisting of an outer crown section, and an inner lining section which is adapted to fold into and out of said crown section, said sections connected to form an air tight bag by means of circumferential bands, the inner one of said bands having corrugations projecting inwardly, which are formed in the manner and for the purpose described.

4. In an article of wearing apparel in the form of a cap, which is adapted to conversion into a pillow and life preserver, and consisting of an outer crown section, and an inner lining section adapted to fold into and out of said crown section, said sections connected to form an air tight bag, the combination therewith of a means for the inlet and outlet of air consisting of a hollow cylindrical casing removably attached to said bag, an air passageway into said bag through one end of said cylinder, an inwardly opening disk valve guarding said passageway, a stem of the valve projecting outward through the air passageway and terminating in a perforated disk fitted to move loosely within the casing, and a helical spring between the perforated disk and the bottom of the cylinder serving for the purpose described.

In testimony that I claim the foregoing I have hereunto set my hand, this 21st day of September, 1893, in the presence of witnesses.

FRANÇOIS FRANK.

Witnesses:

O. R. KAUFMAN,
OSCAR SNELL.