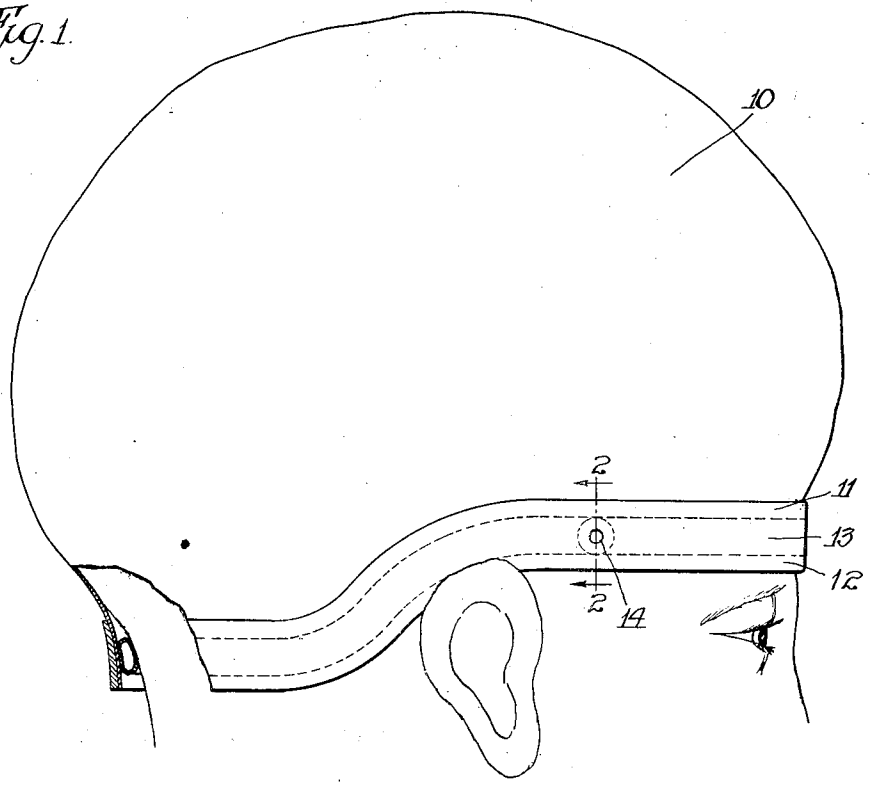
O. R. JEFFERS.

BATHING CAP.

APPLICATION FILED JULY 30, 1917.

1,349,206. **Patented Aug. 10, 1920.**

Fig. 1.



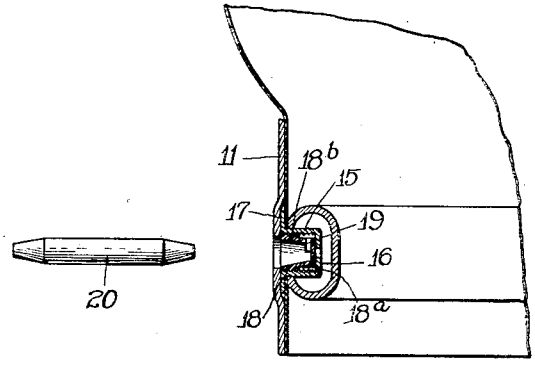


Fig. 2.

Witness:
R. Burkhardt.

Inventor:
Owen R. Jeffers
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UNITED STATES PATENT OFFICE.

OWEN R. JEFFERS, OF CHICAGO, ILLINOIS, ASSIGNOR TO GENERAL PATENT MANUFACTURING COMPANY, OF CHICAGO, ILLINOIS, A CORPORATION OF ILLINOIS.

BATHING-CAP.

1,349,206. Specification of Letters Patent. Patented Aug. 10, 1920.

Application filed July 30, 1917. Serial No. 183,437.

To all whom it may concern:

Be it known that I, OWEN R. JEFFERS, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Bathing-Caps, of which the following is a specification.

This invention relates to bathing caps, especially to those designed for ladies' wear, the prime object of the invention being to provide a cap that is absolutely water-tight.

The complete enjoyment of bathing and swimming has heretofore been discounted for the ladies by reason of the fact that it is impossible for them to indulge without getthe hair wet, there being no bathing caps on the market which will meet this requirement. The constant demand for such a cap has prompted this invention.

It is obvious that if a bathing cap is to be waterproof, its edges must fit snugly and securely against the head of the wearer. In the caps at present available, such fitting is approximated by tension, that is to say, when in use the edge of the cap is stretched and thus held into position on the head. The elasticity of the material, even when reinforced by a contracting band, does not meet the situation, however, for the reason that if the edge of the cap encircles the head on the surface of greatest circumference, it does not inclose the hair at the neck. And if the cap is pulled down far enough to cover that portion of the hair, the contracting edge no longer has its maximum effectiveness inasmuch as it is working upon a smaller circumference. It is also true that caps of the description must necessarily have the bottom edges cut on a straight line so as to provide a direct and effective contracting force, and it is therefore impractical to design a cap that will have sufficient contraction and at the same time inclose the neck hair. In the event, however, that such a cap could be designed having the greatest possible tension and so set upon the head as to incase all of the wearer's head, it would not be water-tight, for the reason that the stretched edging would not conform to the contour of the head, but would only set tightly across flat portions and against protuberances thus allowing the water to creep in wherever depressions were present.

An efficient cap, therefore, is one that will provide a covering for all of the hair and at the same time present an edging that will conform to and tightly fit the shape of the head.

Accordingly I have designed such a cap, the same being illustrated in the accompanying drawings and constructed in the following manner.

Figure 1 of the drawings shows the cap in place on the head of the wearer; and

Fig. 2 is a detail of the inflatable tube and valve, the view being taken in section through the lines 2—2 of Fig. 1.

Reference numeral 10 represents the body portion of the cap, made from pure gum or other light weight sheet rubber to be worn so that the lower or opening edge of the cap will pass across the forehead and temples, behind the ears, then down and across the back of the neck. Around the bottom of the cap and on the outside is cemented or vulcanized a contracting band 11 of heavy rubber preferably one and a half to two inches in width. Disposed about the inner lower edge of the cap is a thin rubber strip 12 preferably one-half to three quarters of an inch in width, the side edges only of which are vulcanized or otherwise securely fastened to the body portion 10, leaving the free space 13 available to receive and hold air pumped or otherwise introduced through the valve 14. The inner strip 12, therefore, corresponds to or constitutes an inflatable tube passing around the lower edge of the cap. If this inner tubing be inflated to the proper degree, and the cap placed in position to be worn the adjustable but tight contact provided by said inflated tube will adapt itself to any and all uneven surfaces in the engaged portions of the head thereby accomplishing a water proofing that is easily obtainable and at the same time comfortable. Obviously a completed tubing could be substituted for the strip 12 and would attain the same results.

The valve 14 controlling the passage of air into and from the inflatable tube is similar to that used on water polo balls, rubber foot balls, etc., and comprises a metallic cup 15 internally screw-threaded and centrally apertured in its inner end member 16. At its outer or opening edge said cup is provided with an annular flange 17 which is securely fastened between the body portion 10 and contracting band 11. Coacting with

said cup is a screw plug 18 having a solid end 18^a and an annular side wall 18^b said side wall having near its joinder with end 18^a, the port 19. At the lower or inner half of said plug its periphery is reduced and is not threaded. The inner surface of side wall 18^b is smooth and converges toward the end 18^a. The body portion of the cap has an opening through band 11 at valve 14 to allow hollow stem 20 to enter and frictionally engage the inner walls of plug 18. Said stem has its ends tapered to provide for such frictional engagement, and it is through this medium that plug 18 is screwed and unscrewed. When the plug is tightly screwed into the cup 15 its solid end 18^a abuts against the apertured end 16 of said cup thereby imprisoning the air in tube 13. When the plug is unscrewed an outlet for the air is presented through the apertured end 16, the space between cup 15 and the lower end of plug 18 and thence through port 19. In filling the tube the course is merely reversed, the air being presented at port 19 by blowing or pumping through stem 20. When the desired amount of pressure has been secured, plug 18 is screwed in tightly and stem 20 removed. Other forms of valve may, of course, be used advantageously, and while I have otherwise described in detail the structure which to me seems best adapted for accomplishing the objects of my invention, I do not wish to be understood as limiting myself to the precise form shown nor as excluding from the protection afforded by the appended claims modifications in construction and arrangement which embrace the spirit of my invention.

I claim:

1. A bathing cap having its lower edge provided with an inner pneumatic tube and an outer relatively broad and heavy contractible and expansible band, said band curved edgewise to extend when in place from the forehead to a point back of the ears and thence downwardly around the back of the neck.

2. A bathing cap having permanently associated therewith pneumatic tubing at the inner lower portion thereof, and an elastic band at the exterior lower portion.

3. A bathing cap having a body portion and a contracting band and pneumatic tubing at the edge thereof, the lower edge of the cap disposed between the tube and band.

In testimony whereof I have hereunto signed my name in the presence of two subscribing witnesses.

OWEN R. JEFFERS.

Witnesses:
FRANKLIN M. WARDEN,
EBBA F. NYDEN.