B. HELLINGA.

BATHING CAP.

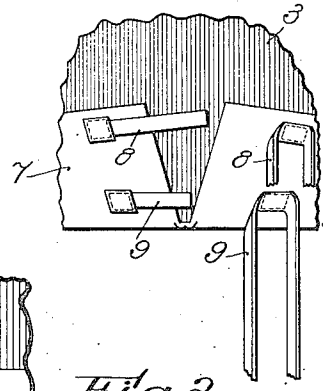
APPLICATION FILED NOV. 4, 1914.

1,153,687. Patented Sept. 14, 1915.

Fig. 1.



Fig. 3.



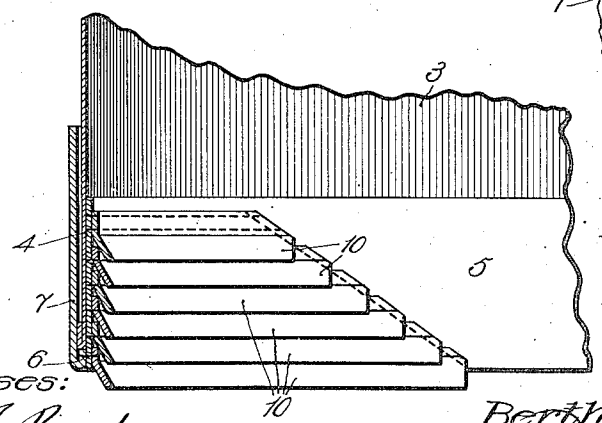


Fig. 2.

Witnesses:
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UNITED STATES PATENT OFFICE.

BERTHA HELLINGA, OF AMSTERDAM, NETHERLANDS.

BATHING-CAP.

1,153,687. Specification of Letters Patent. Patented Sept. 14, 1915.

Application filed November 4, 1914. Serial No. 870,218.

To all whom it may concern:

Be it known that I, BERTHA HELLINGA, a subject of the Queen of the Netherlands, residing at Amsterdam, Netherlands, have invented a certain new and useful Improvement in Bathing-Caps, of which the following is a full, clear, concise, and exact description, reference being had to the accompanying drawings, forming a part of this specification.

My invention relates to bathing caps, and has for its object the provision of a device of this class which will automatically tighten around the head of the wearer when the cap is subjected to water, to effectually prevent water from obtaining access to the interior of the cap.

In the particular embodiment herein shown I provide a cap comprising a body portion of rubber, to which is secured on the inside a band of chamois. The band is of a width so as to extend upwardly on the outside of the body portion, where it is provided with tying means. Secured to the chamois band on the inside of the cap I provide a plurality of chamois strips, each of the strips having its lower portion free to extend inwardly. As is well known, a band of chamois when subjected to water will contract longitudinally and expand transversely. In other words, the band of chamois or strip of chamois will attain a greater cross-section after it has been subjected to water a short time. The band above referred to is, therefore, arranged to contract when wet and the strips to expand transversely to tighten against the head of the wearer.

My invention will be more clearly understood by referring to the drawings, in which—

Figure 1 is a perspective view of the device of my invention; Fig. 2 is a fragmentary cross-sectional view taken through the rear part of the cap; and Fig. 3 is a fragmentary front elevational view of the outside band and tying means, said band being shown in its open or untied position.

Similar reference numerals refer to similar parts throughout the several drawings.

The cap comprises a body portion 3 preferably made of rubber, although not necessarily so, as this may be made of silk or any combination of silk and rubber. Cemented to the rubber at 4 is a chamois band 5, this band being secured to the body portion 3 entirely around the inside. Sewed to the band 5 at 6 is a second band 7 arranged to extend upwardly over the outside of the cap. The band 7 is provided at each end with suitable strips of chamois 8 and 9 to facilitate the tying of the band 7, to securely hold the cap in place on the head of the wearer. Sewed to the band 5 on the inside of the cap and at the back thereof are a plurality of chamois strips 10, 10, each having its lower portion freely extending inwardly as illustrated. These strips 10, 10 may, if desired, extend entirely around the cap, but I have found it desirable to place these only at the back.

The operation of the strips 10, 10 and bands 5 and 7 is as follows: When water is sprayed on the band 7 the same will immediately leave the band as the characteristics of the chamois when dry are such that water will not adhere to it, but after the cap has been submerged in water a short time the band will become wet and be caused to contract longitudinally to tighten the cap on the head of the wearer. As the water endeavors to seep through between the back portion of the cap and the neck of the wearer the lower one of the strips 10 is encountered, the strip immediately acting as a pocket to prevent the water from obtaining access to the interior of the cap. As this lower strip becomes saturated with water, the strip commences to expand, thereby filling the space between the neck and cap. If a portion of the water succeeds in passing this first barrier, the second strip is caused to act as a pocket and when saturated will also expand, filling the space between the cap and the neck of the wearer. If again this second strip is not entirely effective in blocking the path of the water, the third strip will be brought into operation, then the fourth, and so on.

Although I have described the bands and strips as being made of chamois, the same may be made of any other material having substantially the expanding and contracting characteristics of chamois when subjected to water.

What I claim as new and desire to secure by Letters Patent of the United States is:

1. A bathing cap comprising a body portion and a chamois band secured to said body portion.

2. A bathing cap comprising a body portion, a chamois band secured to the inside of said body portion arranged to extend upwardly on the outside of said body portion, and means for tightening said band.

3. A bathing cap comprising a body portion, and a plurality of chamois strips secured to the inside of said body portion.

4. A bathing cap comprising a body portion and a plurality of chamois strips secured to the inside of said body portion, each of said strips having its lower portion free to extend inwardly.

5. A bathing cap comprising a body portion, a chamois band secured to the inside of said body portion, and a plurality of chamois strips carried by said band.

6. A bathing cap comprising a body portion, a chamois band secured to the inside of said body portion, and a plurality of chamois strips carried by said band, each of said strips having its lower portion free to extend inwardly.

7. A bathing cap comprising a body portion, a chamois band secured to the inside of said body portion arranged to extend upwardly on the outside of said body portion, and a plurality of chamois strips carried by said band.

8. A bathing cap comprising a body portion, a chamois band secured to the inside of said body portion arranged to extend upwardly on the outside of said body portion, and a plurality of chamois strips carried by said band, each of said strips having its lower portion free to extend inwardly.

9. A bathing cap comprising a body portion and a plurality of strips secured to the inside of said body portion, said strips having substantially the expanding characteristics of chamois when subjected to water.

10. A bathing cap comprising a body portion, and a plurality of strips secured to the inside of said body portion, each of said strips having its lower portion free to extend inwardly, said strips having substantially the expanding characteristics of chamois when subjected to water.

11. A bathing cap comprising a body portion, a band secured to the inside of said body portion, and a plurality of strips carried by said band, said band and strips being made of material having substantially the contracting and expanding characteristics of chamois when subjected to water.

12. A bathing cap comprising a body portion, a band secured to the inside of said body portion, and a plurality of strips carried by said band, each of said strips having its lower portion free to extend inwardly, said band and strips being made of material having substantially the contracting and expanding characteristics of chamois when subjected to water.

13. A bathing cap comprising a body portion, a band secured to the inside of said body portion and arranged to extend upwardly on the outside of said body portion, and a plurality of strips carried by said band, said band and strips being made of material having substantially the expanding and contracting characteristics of chamois when subjected to water.

14. A bathing cap comprising a body portion, a band secured to the inside of said body portion arranged to extend upwardly on the outside of said body portion, and a plurality of strips carried by said band, each of said strips having its lower portion free to extend inwardly, said band and strips being made of material having substantially the same contracting and expanding characteristics of chamois when subjected to water.

In witness whereof, I hereunto subscribe my name this 2nd day of November, A. D. 1914.

BERTHA HELLINGA.

Witnesses:
ALBIN C. AHLBERG,
ADELE R. ELSNER.