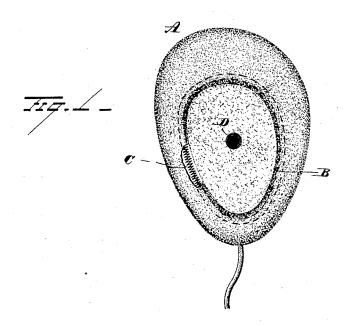
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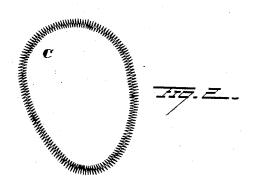
C. C. SHELBY.

EAR MUFF.

No. 346,175.

Patented July 27, 1886.





ANothugham Albert Popkins C C Shelby.
By Fasy, John John.

UNITED STATES PATENT OFFICE.

CHRISTOPHER C. SHELBY, OF NEW YORK, N. Y., ASSIGNOR TO THE CANFIELD RUBBER COMPANY, OF BRIDGEPORT, CONNECTICUT.

EAR-MUFF.

SPECIFICATION forming part of Letters Patent No. 346,175, dated July 27, 1886.

Application filed February 6, 1886. Serial No. 191,031. (No model.)

To all whom it may concern:

Beit known that I, CHRISTOPHER C. SHELBY, of New York, in the county of New York and State of New York, have invented certain new 5 and useful Improvements in Ear-Muffs; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to an improvement in

ear-muffs.

Hitherto it has been customary to construct an ear-muff having a stiff wire frame surrounding the opening, which receives the ear 15 or partially surrounding the same, an an elastic cord has been employed to connect the lower ends of the muffs beneath the chin. Rubber elastic has also been employed to make the muff hug the ear. The use of a stiff wire has 20 been found objectionable on account of its stiffness, and its liability to chafe the ear and produce annoyance, and the iron wire commonly employed has been liable to rust, on account of which retailers have refused to lay in a full 25 stock. The use of rubber elastic is also objectionable, as it soon rots or becomes impaired by moisture, and when used to surround the ear it has a tendency to draw and stop the circulation.

The object of my present invention is to provide an ear-muff which shall possess the advantages of both the elastic and metallic frames, and which shall be free from their objectionable features.

With these ends in view my invention consists in a pocket adapted to fit the ear, and provided with a non-rusting elastic metallic band around the opening to receive the ear.

My invention further consists in an ear-muff 40 having an opening to assist in hearing and adjustable to the ear without the use of a chin-

My invention further consists in certain features of construction and combinations of 45 parts, as will be hereinafter described, and pointed out in the claims.

In the accompanying drawings, Figure 1 is a view of the ear-muff, showing the position of the metallic elastic in dotted lines, and 50 showing the opening to assist in hearing. Fig. | the said opening might be employed, and that 100

2 is a detached view of the metallic elastic band.

A represents the ear-shaped pocket formed of any suitable material-velvet, for example—and lined with some soft material, which 55 will be agreeable, and furnish warmth when in contact with the ear.

B represents the opening through which the ear is received into the pocket. The opening B is surrounded by the metallic elastic band 60 C. shielded from contact with the ear, and held in position by turning the edge of the fabric over it and stitching it down, or by sewing a facing over it.

The metallic elastic band C, which is an im- 65 portant feature in my present improvement, consists of a fine spiral spring, formed of a metal which will not be liable to seriously rust when exposed to moisture or for a long time to the air. Brass is the metal preferred, on 70 account of its elasticity, its cheapness, and the convenience with which it may be worked.

The band C is of such a length, when it rests free from tension, that it will just about extend around the funnel or bell of the ear at its 75 junction with the head. The fabric of which the pocket of the muff is made is somewhat elastic, and may, if so desired, be made slightly gathered about the opening B. This, in connection with the elasticity of the band C, 80 will admit of the muff being readily adjusted, but, when on, the band C will cease to draw as soon as the border of the opening B comes in contact with the ear.

The opening to assist in hearing consists of 85 an eyelet, D, secured in the muff at about its central portion. This form of opening is preferred on account of its cheapness and the readiness with which it may be inserted, and its protection against the fraying out of the 90

The muff, constructed as above described, will yield to the ear, last in stock for any length of time without becoming impaired, will hold to its adjustment on the ear, and is 95 light and durable.

It is evident that other shapes of openings than round might be made to assist in hearing, and that other constructions of frame about other slight changes might be resorted to without departing from the spirit and scope of my invention; hence I do not wish to limit myself strictly to the construction herein set forth;

Having fully described my invention, what I claim as new, and desire to secure by Letters

Patent, is—

1. An ear-muff consisting of a flexible pock10 et adapted to fit the ear, and provided with a
spiral spring surrounding the opening for the
entrance of the ear, substantially as set forth.

2. An ear-muff consisting of a flexible pocket adapted to receive the ear, a spiral spring around the opening for the entrance of the ear, and an opening in the outer side of the pocket to assist in hearing, substantially as set forth.

In testimony whereof I have signed this specification in the presence of two subscrib-

ing witnesses.

CHRISTOPHER C. SHELBY.

Witnesses:

RATCLIFFE HICKS, S. VAN ZANDT.