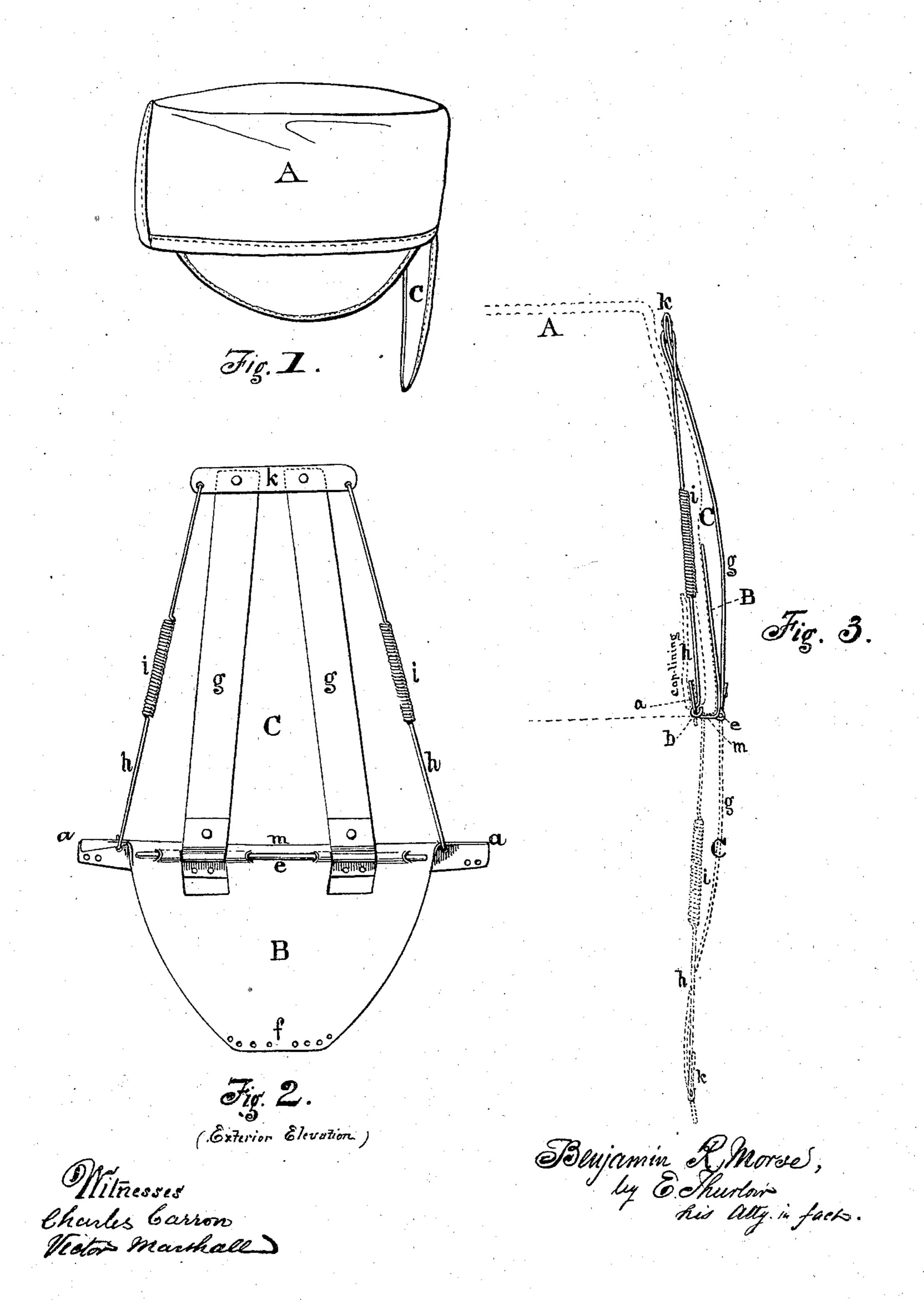
B. R. MORSE. Ear-Coverings for Hats and Caps.

No. 138,040.

Patented April 22, 1873.



UNITED STATES PATENT OFFICE.

BENJAMIN R. MORSE, OF GALESBURG, ILLINOIS.

IMPROVEMENT IN EAR-COVERINGS FOR HATS AND CAPS.

Specification forming part of Letters Patent No. 138,040, dated April 22, 1873; application filed March 15, 1873.

To all whom it may concern:

Be it known that I, Benjamin R. Morse, of Galesburg, in the county of Knox, in the State of Illinois, have invented an Improvement in Flaps or Ear-Coverings for Hats or Caps; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the annexed drawing making a part of this specification, in which like letters of reference refer to like parts, and in which—

Figure 1 represents a front view of cap with one ear-flap up, the other down; Fig. 2, elevation of mechanism of the flap; Fig. 3, end or side elevation of ear-flap in erect position

against the upper part of the cap.

This invention consists in providing a cap or hat with hinged concave flaps to cover and protect the ears, and which will remain in but two positions—i.e., covering the ear or pressed

back against the cap or head.

One of the forms in which I construct the flap I will now describe: The flaps are made of a metallic or other rigid frame hinged to a plate of metal or other stiff base, which is fastened to the cap, &c., over the ear. The frame of the "flap" on each side consists of an elastic wire or spiral spring hinged or hooked to the base-plate at one end and to a cross-piece forming the extremity of the flap, which piece is kept extended by straight steel springs extending from the cross-piece and hinged to the base-plate. The side springs hhare so set as to keep the central springs slightly curved, and also out of the line of the hinges of the latter, by which two devices the flaps will maintain but two positions—i. e., upright against the cap or pressed firmly against and covering the ears entirely. The whole is covered with some warm material, as usual.

In the drawing, A represents the cap; B, the base-plate of the flap C, which plate is sewed or otherwise fastened permanently or temporarily, as desired, to that part of the cap just above the ear of the wearer. It is a stiff plate of metal or other rigid material pierced with small holes to sew or fasten it to the cap, and is bent inward at its upper edge a short distance (about one-fourth of an inch) at a right angle; thence downward for a little more than the same distance in a parallel plane to

that of the plate to form a stiff edge, m, both to strengthen this upper edge of the plate and to remove the attaching points for the springs g g from those of the springs h h to secure an inward pull for the latter on the former springs. This upper corrugation b m is slightly curved to conform to the surface of the cap, and to assist the springs h h in their tension upon the springs gg in bringing the flap "up" or "down." A straight rigid wire is nearly as effective as the wires h i, and also used by me with advantage. Cis the flap proper or ear-cover, which is covered with a warm material, and composed of one or two straight steel springs, gg, hinged to a wire or similar pivot at the outer corner of the base-plate B, which springs keep the end piece k of the flap extended, and to which they are riveted or otherwise fastened. From the ends of this piece kan elastic or spiral wire, hh, is extended on either side or edge of the flap, down to the inner bend or angle of the plate B, formed by the surfaces b m, to which edge the wires are each pivoted by a terminal hook passing through holes in this angle. The wires hh are so adjusted as to keep the springs g g permanently bent in a slight curve to cause the flap to remain in but two settled positions, viz., against the ear and against the side of the cap above the ear, and in no other or intermediate position. The springs h h may be transposed with, g g, the other springs, but the concavity of the flap will be destroyed. The former springs h h may be substituted by strong rubber strings or bands, but without improvement, as they will not be sufficiently contractile for effect; and rigid wires in the place of them are equally effective in keeping the extending spring or springs g curved.

The operation of this ear-flap is as follows:
The extending springs g g operating against the contracting springs i i, being hinged at some distance apart upon the plate B, act together to retain the flap in but two places—i.

e., against the ear or erect against the cap above the ear, out of the way when not required for use. Rigid wires, in place of the

wires h i h i, are equally effective.

What I claim as my invention is—
1. An ear-flap for hats or caps, consisting of a spring-frame so attached to a base-plate

that it shall remain in two positions, viz., extended over the ear or erect against the side of hat or cap.

2. The ear-flap, consisting of the base-plate B, contractile springs h h, extending springs g g, and connecting-plate k, arranged and operating substantially as described.

In testimony that I claim the foregoing im-

provement in flaps or ear-coverings for caps, hats, &c., I have hereunto set my hand this 17th day of February, A. D. 1873.

BENJAMIN R. MORSE.

Witnesses:

D. HENSHAW,

P. P. HEMSTREET.