

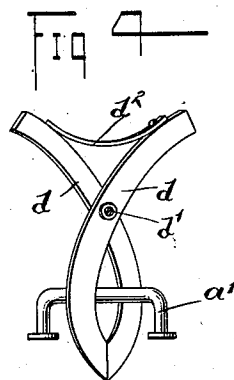
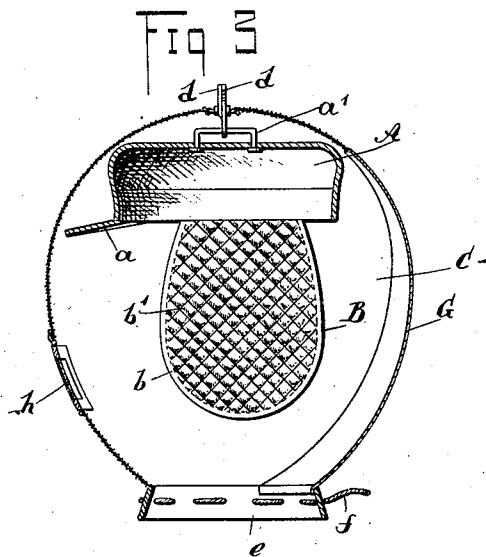
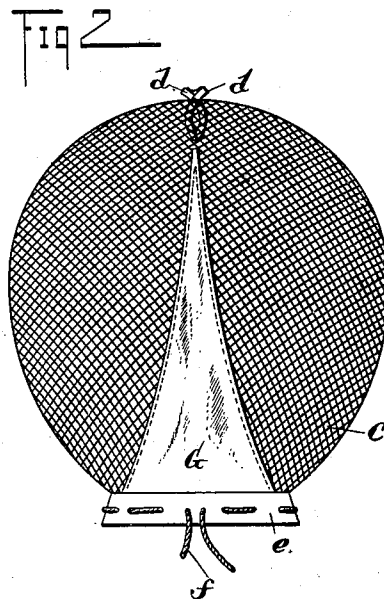
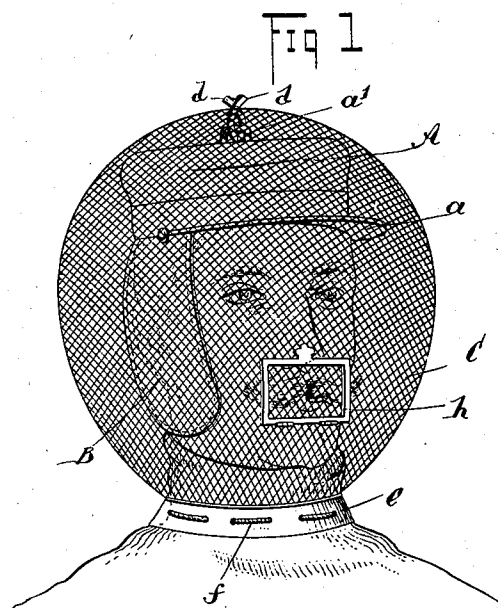
No. 618,001.

Patented Jan. 17, 1899.

H. E. BEACH.
PROTECTIVE HEAD SCREEN.

(Application filed Feb. 17, 1898.)

(No Model.)



WITNESSES:
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UNITED STATES PATENT OFFICE.

HENRY E. BEACH, OF GRAND FORKS, CANADA.

PROTECTIVE HEAD-SCREEN.

SPECIFICATION forming part of Letters Patent No. 618,001, dated January 17, 1899.

Application filed February 17, 1898. Serial No. 670,643. (No model.)

To all whom it may concern:

Be it known that I, HENRY E. BEACH, a citizen of the United States, residing at Grand Forks, in the county of Yale, Province of British Columbia, and Dominion of Canada, have invented new and useful Improvements in Protective Head-Gear, of which the following is a full, clear, and exact specification.

This invention relates to cap and head screens for protection against mosquitos, flies, &c.

The object of my invention is to provide a simple and improved combined cap and screen which can be worn without discomfort and which will serve as an effectual protection against mosquitos and other insects while the wearer is sleeping or working or engaged in any usual occupation.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference designate corresponding parts in the several views.

Figure 1 is a perspective view showing my improved combined cap and screen in position. Fig. 2 is a rear elevation of the screen. Fig. 3 is a vertical transverse sectional view of the same, and Fig. 4 is a detail perspective view of the clamping device by which the screen is attached to the cap.

Referring to the drawings, A designates the cap, which may be in the main of any ordinary or suitable construction, having a fore piece or visor *a*. At its top the cap A is provided with an elongated button *a'*.

B designates ear-flaps which are carried by the cap A at each side and are formed by an elongated casing or bag *b*, interiorly padded with cotton or other soft material, as at *b'*. These flaps are adapted to be let down into position, so that they will effectually protect the ears and sides of the face of the wearer while lying down or sleeping with the protective screen in position.

C designates the screen, which is of globular form and is constructed of wire-netting, preferably malleable, so as to admit of the required degree of flexibility. This globular screen is adapted to inclose the head of the wearer and serve as a thorough protection for the face and head and neck. It is provided at its top with clamping-fingers *d d*, pivotally connected, as at *d'*, and adapted to engage

the button *a'* upon the cap A, and thus permit of the detachable connection of the screen with said cap. The clamping-fingers *d* are preferably retained in a normal position of engagement by means of a spring *d²*.

The bottom edge of the globular screen C is drawn in or contracted to adapt it to fit the neck of the wearer, and said bottom edge carries a flexible band *e* of leather or other suitable material, cords or draw-strings *f* or other suitable means being provided to permit of the tightening or drawing in of said band around the neck of the wearer. In lieu of the flexible band of leather or other suitable material the band may be formed of spring-steel and provided with a suitable cloth covering, if desired.

The screen C is slit or opened at its back, this slit or opening being preferably of inverted-V shape, with the wider portion at the base or bottom, so that the slit converges to a point at the top. The purpose of this slit or opening is to afford the requisite flexibility and allow of the widening or contraction of the globular screen in the operation of adjusting the same over the head of the wearer and securing it in position.

The slot or opening is covered or closed by a corresponding flexible strip G, which is preferably formed of rubber cloth. In the front of the screen C is formed a door *h*, formed of wire-netting and adapted to close a corresponding opening in the screen-body. This door is adapted to swing upon a suitable hinge or pivot and is provided for the purposes of permitting eating, drinking, and expectoration.

The operation and advantages of my invention will be readily understood. The device is especially adapted for effective use by miners or other operators in cold regions or regions in which mosquitos, flies, or other annoying insects abound. It is, however, also adapted for service under various other conditions as desired.

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

1. A protective head-gear having a cap, a globular-formed screen inclosing the cap and adapted to inclose the head of the wearer, a fastening device attaching the screen to the

top of the cap, the screen being provided with a gore or slit, a strip of flexible fabric secured in said gore or slit, a flexible band at the bottom of the screen, the band being adapted to encircle the neck of the wearer, and means 5 attached to the band for drawing the same to adjust the band to the neck of the person.

2. A protective head-gear having a cap, a globular-formed screen inclosing the cap and 10 adapted to inclose the head of the wearer, an elongated button attached to the top of the cap, and a fastening device carried by the screen and comprising two clamping-fingers pivotally connected and a spring bearing be-

tween them to hold the lower ends of the fin- 15 gers normally engaged so that they may lock with the button, the upper ends of the fingers being projected above the screen within the reach of the person.

In testimony that I claim the foregoing as 20 my invention I have signed my name, in presence of the subscribing witnesses, this 29th day of January, 1898.

HENRY E. BEACH.

Witnesses:

CHARLES CUMINGS,
F. H. McCARTER.