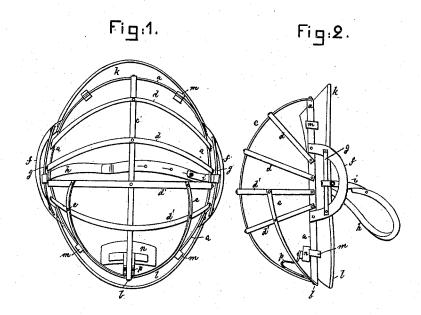
## G. W. HOWLAND Mask.

No. 205,093.

Patented June 18. 1878.



Witgesses N.S. Whitney. L.S. Connor.

Inventor. Seo W. Howland; by Corosby Sprigory Mitters,

## NITED STATES PATENT OFFICE.

GEORGE W. HOWLAND, OF BOSTON, MASSACHUSETTS.

## IMPROVEMENT IN MASKS.

Specification forming part of Letters Patent No. 205,093, dated June 18, 1878; application filed May 16, 1873.

To all whom it may concern:

ANDERTHOUGH IN THE

Be it known that I, GEORGE W. HOWLAND, of Boston, county of Suffolk, State of Massachusetts, have invented an Improvement in Masks or Face-Guards, of which the following is a specification:

This invention relates to masks or faceguards for base-ball players, wicket-keepers, and other persons needing protection for the

face against blows from balls, &c.

My invention consists in a face guard or mask provided with an arched pad or cushion arranged just within and so as to be interposed between the face-surrounding rim and the head of the wearer of the mask, such arched pad at the top bearing upon the coronal suture, and at the sides and bottom upon the cheek bones and angle of lower jaw. This pad, bearing so high upon the head, leaves the vision of the wearer of the mask unobstructed, which would not be the case if a rest attached to the front bars of the mask bore directly upon the frontal bone just above the eyes; also, in the combination, with a mask and arched pad, as described, of temple-shields; also, in the combination, with the mask, of a spring-supported chin-plate.

Figure 1 of the accompanying drawings represents in front elevation one of my improved masks, and Fig. 2 is a side elevation

thereof.

The face-surrounding rim a of the mask is herein shown as made of a single piece of spring-steel shaped to fit about the front of the head, and with its ends riveted together

The main vertical rib c extends from the bottom to the top of such rim a; and connecting the rim a and rib c are cross-braces d d and d' d', the ones d' being further held by auxiliary braces e e. These braces, rims, and cross-pieces, as shown, are composed of narrow and light, but quite stiff, spring-steel, and, owing to their stiffness, I am enabled to make a strong and safe mask with but one vertical rib, which is a great desideratum, for ribs other than one directly between the eyes impede the vision and blur the sight. This rib

and the cross-pieces of steel, although narrow, are sufficiently stiff to resist a hard blow, as from a ball or bat, yet they are sufficiently elastic to yield a little to a very hard blow.

At each side of the face surrounding rim, at points which will cover and shield the temples, are temple-guards f, and to these temple-guards I have attached strap-holders g to receive the head-straps h i, provided with hooks, buckles, or other suitable devices to hold the strap about the head and the mask

in place over the face.

Arched pads k l are attached to the rim aby means of loops m. The pad k rests upon the coronal suture, or surrounds the upper front portion of the forehead, which thereby enables the mask to be securely held against lateral or swell or back movement, and gives a firm support for the mask. The pad l fits the angle of the lower jaw and extends under the chin, and to bear against the front of the lower jaw I have placed a chin-plate, n, and supported it upon a spring, p, whereby any blow against the front of the mask will be eased upon the chin. This pad l may extend to and meet the pad k, or may fall somewhat short of such point.

The chin-plate, by its action upon the front of the chin, assists in holding the mask firmly in place at its lower end, and supports it

easily against the face.

It will be noticed that this mask differs from others used heretofore in that the pads about the interior of the rim of the mask bear uniformly about the face, thereby distrib-uting the shock of a blow over a large portion of the face rather than at one spot.

I claim-

1. In a face guard or mask, the combination, with the face-surrounding rim, of an independent or separable arched pad, k, adapted to bear upon the head of the wearer, as and for the purpose described.

2. In a face guard or mask, arched pads k l, connected with, but forming no integral part of, the face-surrounding rim, and adapted to bear upon the head and front of the face,

as and for the purpose described.

3. The combination, with the mask and arched pads, of the temple-shields, substan-

tially as described.

4. The combination, with the mask, of a spring-supported chin-plate, substantially as described.

5. The arched pads, combined with the facesurrounding rim by means of loops, substantially as described.

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

GEO. W. HOWLAND.

Witnesses: H. C. SCHAFER, A. WISWELL.