(No Model.)

# A. J. CUMNOCK.

## MASK.

No. 460,301. Patented Sept. 29, 1891.

Fig. 1.

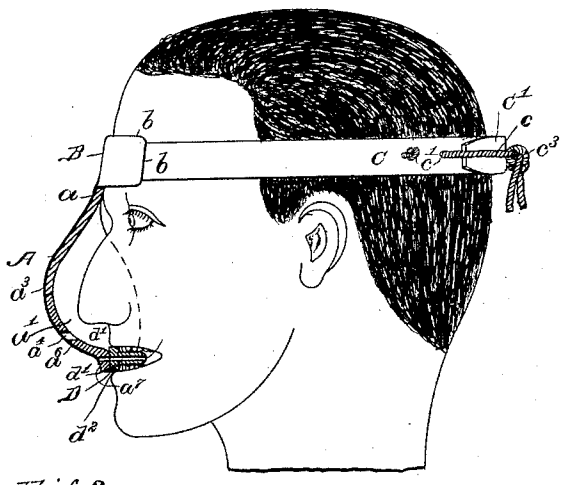



Fig. 2.

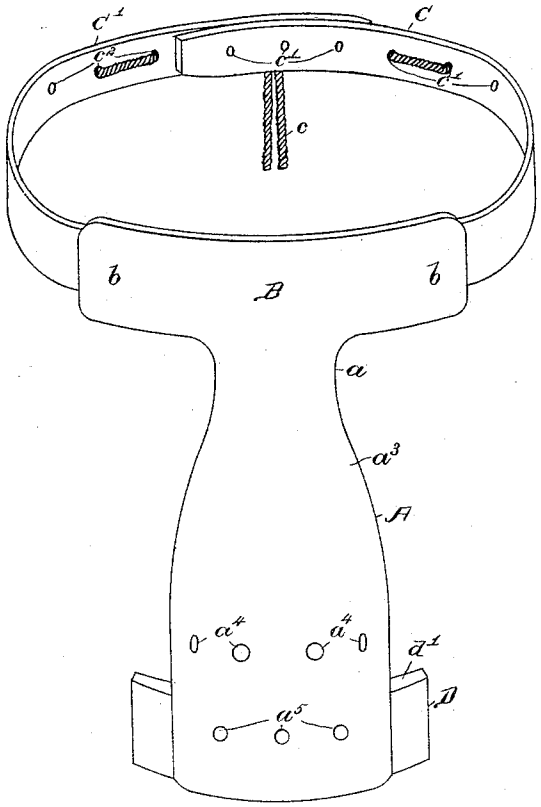



Fig. 3.

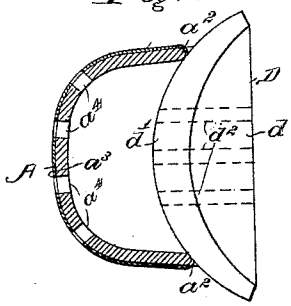
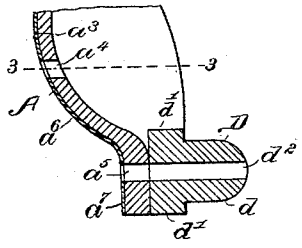



Fig. 4.




Witnesses—
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Inventor—
Arthur J. Cumnock
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# UNITED STATES PATENT OFFICE.

ARTHUR JAMES CUMNOCK, OF LOWELL, ASSIGNOR TO JOHN F. MORRILL, OF BOSTON, MASSACHUSETTS.

## MASK.

SPECIFICATION forming part of Letters Patent No. 460,301, dated September 29, 1891.

Application filed February 2, 1891. Serial No. 379,933. (No model.)

*To all whom it may concern:*

Be it known that I, ARTHUR JAMES CUMNOCK, a citizen of the United States, residing at Lowell, in the county of Middlesex and Commonwealth of Massachusetts, have invented a certain new and useful Improvement in Masks, of which the following is a specification.

My invention relates to masks intended especially for the protection of the nose and to some extent of the forehead and mouth of a person playing foot-ball and similar athletic games; and it consists in the devices and combinations hereinafter described and claimed.

In the accompanying drawings, Figure 1 is a side view of a man's head and my improved mask applied thereto, the lower part of the mask being in vertical central section; Fig. 2, an isometric view of the mask detached, showing the mask proper, the mouth-guard, the frontlet, and head-strap; Fig. 3, a horizontal section through the mask proper on the line 3 3 in Fig. 4, showing the mouth-guard in plan, the breathing-holes in the mouth-piece being indicated by dotted lines; Fig. 4, an enlarged section of the lower part of the mask proper and the mouth guard or support, the section being in the same plane as the section in Fig. 1.

In playing foot-ball, although blows with the clinched hand are not permitted, it is allowable to push or ward off one's opponents with considerable force, using the open hand, and in the excitement of the game this allowable degree of force is frequently exceeded and injuries to the face and head are not unusual. There are also sudden pushes—in effect blows—administered by the shoulders and elbows, and a player's nose is sometimes broken, while injuries to the mouth and forehead are less frequent and interfere less with the continuance of the game. A player whose nose is broken is prevented from further play for the time being, the prominence of that organ rendering it particularly liable to injury and the suffering which any contact therewith would inevitably cause putting such player completely at the mercy of his opponent.

The device herein described is intended to keep the nose uninjured and to protect the nose when injured or broken, and incidentally to protect the forehead and mouth to some extent.

The mask proper or nose-guard A comprises a plate or shield of unyielding material, shaped to the form shown and reaching from the forehead above and between the eyes to just below the mouth of the wearer, the portion $a$ of said guard A between the eyes of the wearer being so narrow as not to obstruct the vision. From the portion $a$ of the guard the central line of said guard is carried forward and downward. From said central line the guard is curved laterally backward on both sides in such a manner as to be out of any possible contact with the nose of the wearer and to leave a clear space $a'$ of, say, at least a quarter of an inch between the nose and said guard, and the rear edges $a^2$ of said nose-guard are so curved as to be about the same distance from the front parts of the face at either side of the nose. The upper part of the guard A is provided with laterally-extending wings $b$ of the same material and made in one piece therewith to form a frontlet B, the same being curved to fit the forehead and serving to protect the eyebrows and the lower part of the forehead. To the outer ends of the frontlet B are secured straps C C', which may be carried on opposite sides of the head and fastened at the back thereof by any suitable means, as by a cord $c$, which passes through holes $c'$ $c^2$, with which said straps are provided, the ends of said cord being tied into a knot $c^3$ at the back of the head, and the frontlet and nose-guard being retained in place by said straps C C' and the mouth-guard D. The great lateral extension of the frontlet also tends to prevent its slipping out of place and tends to prevent any lateral rocking movement of the nose-guard. The vertical depth of the frontlet may be varied to suit individual preferences or circumstances, so as to cover more or less of the forehead and the face in the vicinity of the eyes without departing from the spirit of my invention.

The lower end of the nose-guard from a point just above the end of the nose curves

backward, as shown at $a^6$ in Figs. 1 and 4, and reaches under the nose, and is then bent vertically downward at $a^7$, the vertical part $a^7$ being secured in any suitable manner, as by cement or stitches, or by both, to the convex front side of the mouth-guard D. Said mouth-guard D is a block $d$, of rubber or other elastic material of well-known form, such a mouth-guard having been heretofore used by base-ball catchers, said block $d$ having a curved flange $d'$ on its upper and under surface at the front of the same and having breathing-holes $d^2$. The block $d$ is grasped in the usual manner between the teeth, which are placed against the rear faces of the flanges $d'$, with the lips resting upon the upper and below the lower flange $d'$, thus holding the nose-guard A, with the assistance of the frontlet B and straps C C', immovably in place.

Breathing-holes $a^5$ are formed through the nose-guard A continuous with the breathing-holes $d^2$ in the mouth-guard, and, if desired, other air-holes $a^4$ may be formed through the nose-guard for ventilation and to assist in breathing, although, as above stated, there is a clear space between the nose-guard on the one hand and the nose and adjacent portions of the face on the other.

Without intending to limit myself to the use of any material, I have found that the frontlet and nose-guard may be very satisfactorily constructed of rawhide, wet or steamed, and then shaped and dried upon proper forms, and on the rawhide foundation I prefer to use a covering $a^3$, of leather, partly to improve the appearance of the device and partly to prevent a separation of the pieces of the rawhide in case the latter should be broken, the leather covering being secured to the rawhide by cement and covering the whole convex front surfaces of the nose-guard and frontlet and being turned over the edges of the same, as shown at $a^2$ in Fig. 3. The edges of the covering $a^3$ may be secured to the edges of the rawhide by stitches or sewing or other well-known means. I have also constructed nose-guards of wire bars curved to substantially the shape of the nose-guard shown, transverse bars and longitudinal bars crossing each other and connected together by loops in said bars. Such a construction serves a useful purpose for school-boys, but for young men of greater weight and strength is not suitable, being liable to cut one's opponents, and in match-games of foot-ball, as college games, the use of any metallic guard or metallic fastening therefor is generally prohibited. It will be seen that the nose-guard proper is dome-shaped or arched in all directions, and is therefore of the best possible form to resist external pressure or blows.

I claim as my invention—

1. A nose-guard for the purposes specified, comprising a mask-body provided with a flexible pad adapted to bear against the teeth, substantially as and for the purpose set forth.

2. A nose-guard adapted to protect the front and sides of the nose and having an upper bearing adapted to rest upon the forehead of the wearer and a lower bearing adapted to rest against his teeth, as and for the purpose specified.

3. A nose-guard adapted to protect the front and sides of the nose and having an upper bearing adapted to rest upon the forehead of the wearer and a lower bearing adapted to rest against his teeth and to be grasped thereby, as and for the purpose specified.

4. A nose-guard having a concave inner surface, adapted, when said guard is in position, to remain out of contact with the wearer's nose and having an upper bearing adapted to rest upon the forehead of the wearer and a lower bearing adapted to rest against his teeth and to be grasped thereby, as and for the purpose specified.

5. A nose-guard having an outwardly-convex surface to resist pressure and blows and having a broad lateral upper bearing upon the forehead of the wearer and a lower bearing adapted to rest against his teeth and to be grasped thereby, as and for the purpose specified.

6. A nose-guard having an outwardly-convex surface to resist pressure and blows and having a broad lateral upper bearing upon the forehead of the wearer and a lower bearing adapted to rest against his teeth and to be grasped thereby, said nose-guard having a concave inner surface adapted, when said guard is in position, to remain out of contact with the wearer's nose, as and for the purpose specified.

7. A nose-guard formed of rawhide, adapted to protect the front and sides of the nose and having an upper bearing adapted to rest upon the forehead of the wearer and a lower bearing of elastic material adapted to rest against his teeth and to be grasped thereby, as and for the purpose specified.

8. The combination of the nose-guard, the frontlet secured to the upper part of the same and adapted to rest upon the forehead, a head strap or band connected to said frontlet and adapted to surround the head, and a mouth-guard of elastic material adapted to be held between the teeth and having bearing-surfaces to rest against the front of the teeth, said mouth-guard being secured to the lower part of said nose-guard, as and for the purpose specified.

9. The combination of the nose-guard, the frontlet secured to the upper part of the same and adapted to rest upon the forehead, said nose-guard and frontlet being of rawhide, a head strap or band connected to said frontlet and adapted to surround the head, and a mouth-guard of elastic material adapted to be held between the teeth and having bearing-surfaces to rest against the front of the teeth, said mouth-guard being secured to the lower part of said nose-guard, as and for the purpose specified.

10. A mask-body provided with a forehead-

bearing and with a perforated mouth-guard adapted to bear against the teeth, as and for the purpose specified.

11. The combination of the nose-guard, the frontlet secured to the upper part of the same and adapted to rest upon the forehead, a head-strap connected to said frontlet and adapted to surround the head, and a mouth-guard of elastic material secured to the lower part of said nose-guard and adapted to be held between the teeth and having bearing-surfaces to rest against the front of the teeth and having breathing-holes, as and for the purpose specified.

12. A nose-guard adapted to protect the front and sides of the nose and having an upper bearing adapted to rest upon the forehead of the wearer and a lower bearing adapted to rest against his teeth, said nose-guard also having air-holes above said lower bearing, as and for the purpose specified.

In witness whereof I have signed this specification, in the presence of two attesting witnesses, this 9th day of December, A. D. 1890.

ARTHUR JAMES CUMNOCK.

Witnesses:

ALBERT M. MOORE,

MYRTIE C. BEALS.