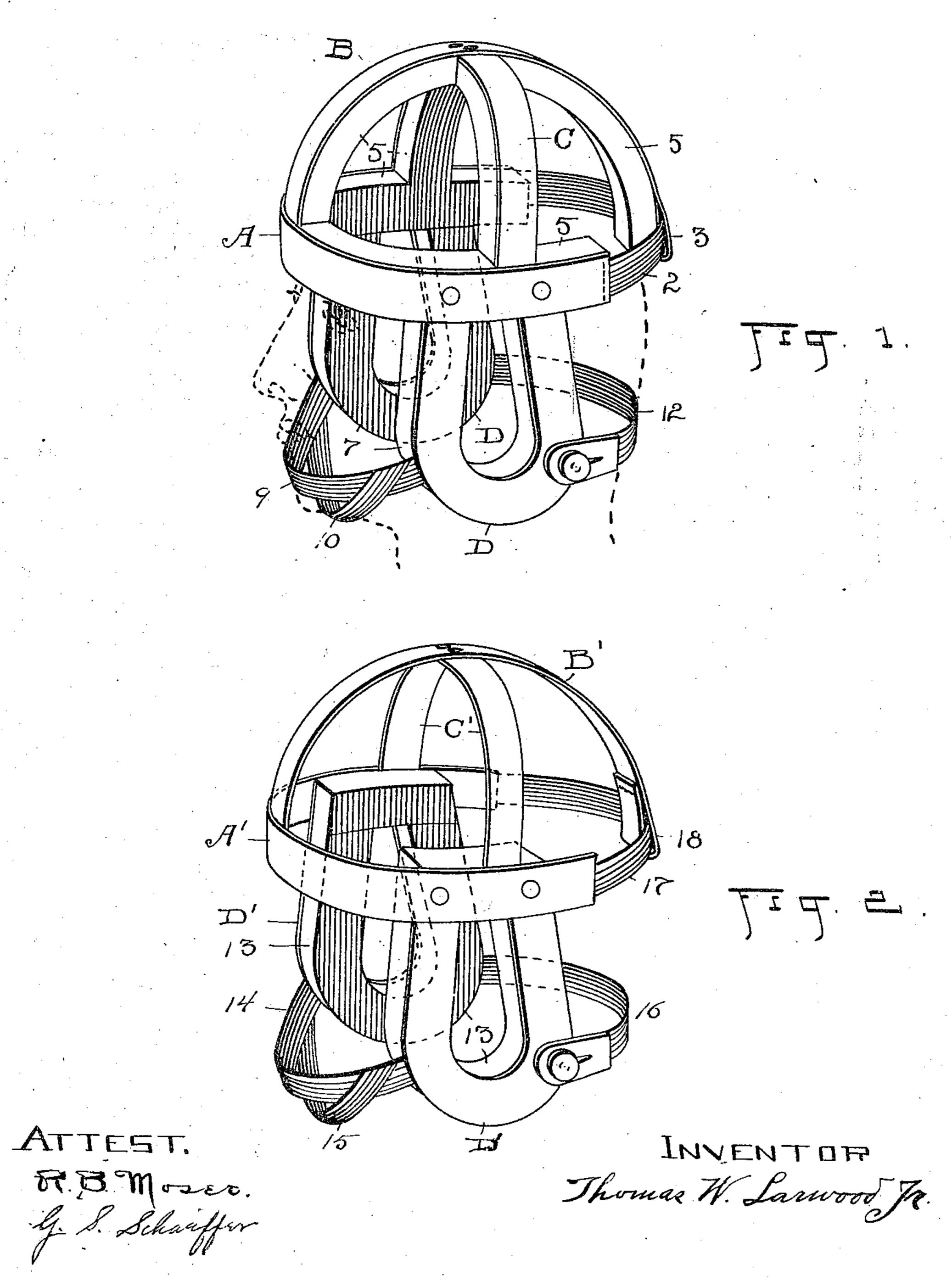
(No Model.)

## T. W. LARWOOD, Jr. HEAD PROTECTOR.

No. 532,567.

Patented Jan. 15, 1895.



By H. J. Fisher.

ATTORNEY

## United States Patent Office.

THOMAS W. LARWOOD, JR., OF CLEVELAND, OHIO.

## HEAD-PROTECTOR.

SPECIFICATION forming part or Letters Patent No. 532,567, dated January 15, 1895.

Application filed September 15, 1894. Serial No. 523,091. (No model.)

To all whom it may concern:

Be it known that I, THOMAS W. LARWOOD, Jr., a citizen of the United States, residing at Cleveland, in the county of Cuyahoga and 5 State of Ohio, have invented certain new and useful Improvements in Head-Protectors; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to ro which it appertains to make and use the same.

My invention relates to head and ear protectors for foot ball players, and the invention consists in a protector or head gear of open-work or skeleton form and adapted to 15 fit the head and having cushioned parts, all substantially as shown and described and particularly pointed out in the claims.

In the accompanying drawings, Figure 1 is a perspective view of my new and improved 20 head gear or protector, in which all the parts that bear upon the head and ears are cushioned. Fig. 2 is a modification of the gear or guards are cushioned and the remaining 25 portions of the gear are plain.

It is well-known to those familiar with the popular sport of foot-ball that whatever its original character may have been it has now become an exceedingly hazardous game to 30 the person of the players, and that players are constantly subjected to more or less severe personal injury and especially about the head, face and ears where there is no clothing to protect. I have therefore conceived the in-35 vention herein described, which is designed to afford a perfect protection especially for the head and ears. At the same time it does in no sense interfere with the most perfect freedom of movement and is sufficiently open 4c to avoid objection on account of heat or closeness about the head and face.

To these ends the said protector or gear has a base portion A, which extends horizontally around the base of the forehead and the sides 45 of the head immediately over or above the ears to the back of the head, and the rear ends thereof are shown here as connected by a piece of elastic -2-, although this might be a non-elastic piece and adapted to button 50 at one end. The connection, however, should be such as to hold the portion A comfortably

rear crown portion B which passes back over the middle of the head starts from the center or middle of portion A and terminates on 55 about the same plane therewith at the rear and has a loop -3—through which the strap -2- passes and to which said end may be fastened if preferred, but is shown here as free to slide thereon. Another crown por- 60 tion C starts from the base A just over the ears and is connected to the crown portion B at its crossing midway on the top. These three portions together constitute what is essentially the head part of the protector, and 65 as here shown are made up with leather straps forming the outside or frame-work of the protector and inside lining —5— of felt or other soft and comfortable cushioning material.

The leather straps on a full sized protector 70 are about one and a fourth to one and a half inches in width and are united by stitching or light rivets, and the lining or backing —5 has the same width and is about half an inch shown in Fig. 1, in which only the ear straps | in depth and is sewed or otherwise secured 75 to the leather.

I do not of course limit myself to leather for the outside material, as a woven strap of suitable thickness and strength might be used. and the cushioning may be of such quality 80 and character as will serve the purpose having in mind all the time the purpose for which it is used. With this construction there remains much of the head that is not covered. and yet by reason of the location of the por- 85 tions A, B and C as shown and their width and depth, a gear is provided which has been demonstrated to be all that is required to shield the head from injuries. This construction may, if desired, be used without the ear 90 guards, but it would still lack a very impartial element of protection. Hence, I have shown the ear guards D. These guards are made of the same material as the other parts of the gear and have the shape substantially 95 of a horse shoe and are suspended from the part A. The cushioning -7—therein is preferably nearly or quite double the thickness or depth of the other cushioning because the ears are very delicate and easily injured organs. 100 These side guards are of such size that they not only inclose the ear within their loop, but extend well forward on the cheek to more or but closely against the head. The front to I less cover the cheek bone and with the por-

tion A unite to protect the temples. The chin straps —9— and —10— are connected with the ear guards at their front edge, and a button strap —12—connects them at the rear. 5 This strap is not fastened until the gear is put on, and when on and all the parts are disposed as shown it is held firmly in place.

In Fig. 2 I show a modification in which the same construction of gear is present, but the 10 parts A', B' and C' are not cushioned and the guards D' alone have cushioning -13-. This affords a slight measure of protection to the head, but a full measure of protection to the ear and is deemed sufficient by some play-15 ers without the cushioning of the upper parts. Chin straps —14—, —15— and button straps -16— are used here as in Fig. 1, and also back straps—17— and loop—18— as therein. What I claim is—

1. A head protector for foot ball players constructed with a base strap of flexible material, a front to rear strap extending from the front of the base strap upward and rearward in a circle and having a flexible con-25 nection therewith at its rear end, a transverse strap connected at its ends with the base strap and to said front to rear strap at its intersection therewith, ear guards suspended from said base strap and means connected with the 30 said ear guards to engage about the chin and neck and hold the protector in wearing position, substantially as set forth.

2. As a new article of manufacture, a closefitting head protector for foot ball players, 35 consisting of a flat base strap of flexible material, the curved flat front to rear strap fixed to the base strap at its front end and having its rear end substantially on a plane with the front end, the flat cross strap curved to a 40 semi-circle and having its ends fixed to the base strap opposite each other and to the

front to rear strap, all said straps cushioned on their inside, a flexible connection between the ends of the base strap and the rear end of the front to rear strap, the cushioned ear 45 protectors suspended from said base strap and connecting guard straps at the front and the rear of the ear protectors, substantially as set forth.

3. As a new article of manufacture, the 50 head protector described, consisting of a base portion A and the cross portions B and C, and all said parts cushioned on their inside, the elastic band -2 -- connecting the rear end of the strap B with the base strap A, the cush- 55 ioned ear protectors, the chin straps connected with said ear protectors, and the back neck strap -12-, connected with the rear of said protectors, substantially as set forth.

4. A head protector for foot ball players, 60 consisting of a flat flexible base strap A, a If front to rear strap B fixed to the base strap at its front end and curved to a semi-circle, a curved flat flexible strap C at right angles to the strap B and secured at its middle to said 65 strap B and at its ends to the base strap A, a flexible connection between the rear end of the base strap B and the ends of the base strap A, said straps A, B and C having cushions of uniform thickness over their inside and straps 70 suspended from the sides of said base strap and parts connected therewith to engage under the chin and at the back of the neck, whereby the protector is held on the head, substantially as set forth.

Witness my hand to the foregoing specifi-

THOMAS W. LARWOOD, JR.

Witnesses:

H. T. FISHER, GEORGIA SCHAEFFER.