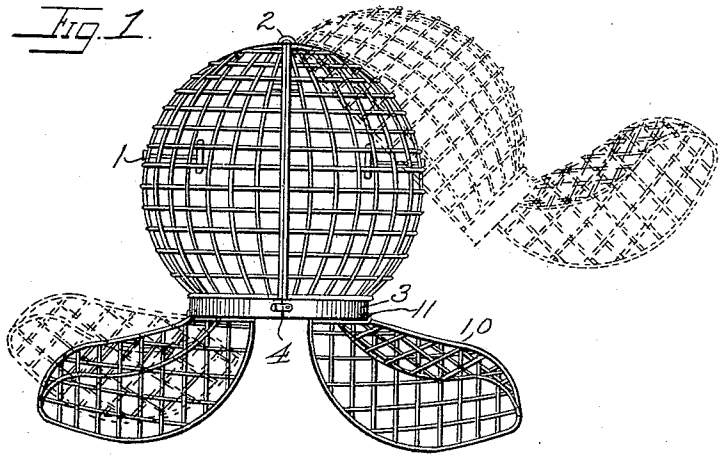
J. L. McGREW.

HEAD GUARD.

APPLICATION FILED MAY 29, 1915.

1,163,247. Patented Dec. 7, 1915.

Fig. 1.



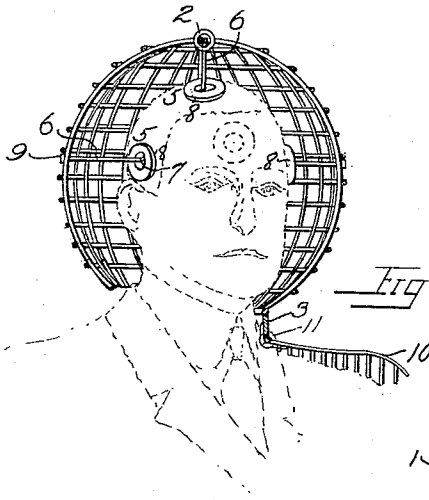


Fig 2

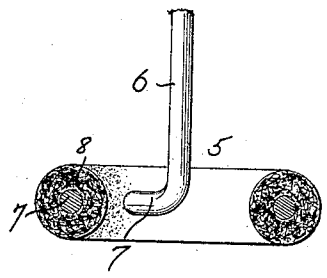


Fig. 3.

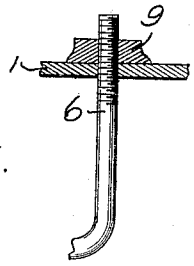


Fig. 4.

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HEAD-GUARD.

1,163,247. Specification of Letters Patent. Patented Dec. 7, 1915.

Application filed May 29, 1915. Serial No. 31,171.

To all whom it may concern:

Be it known that I, JOHN L. McGREW, a citizen of the United States, residing in Washington, District of Columbia, have invented certain new and useful Improvements in Head-Guards, of which the following is a specification.

This invention relates to improvements in apparel, and more specifically to head guards.

The object of my invention is to provide a guard primarily for the protection of the head, though having wings adapted to protect the shoulders of the wearer from projectiles which might otherwise inflict serious injury were my guard not worn. While my guard may be used for a variety of purposes, yet it has been designed as a protection for bowling alley pin boys who must, of necessity, occupy a position of danger in connection with their work of setting up the pins in the game known as "duck pins." In this game, both the pins and balls used are quite small, and the balls are thrown with such force as to cause both the balls and pins to be hurled through the air in all directions. It is a well known fact that the boys engaged in resetting the pins after they have been knocked down are frequently struck by the pins or balls, and that where the injury inflicted is not positively serious or dangerous, it is at least painful. This constant danger of being struck by flying pins and balls, and the necessity for dodging them by reason of the fear of being struck, greatly affects the efficiency of the boys. My device is therefore designed to overcome this danger by amply protecting those parts of the body most exposed in this particular line of work, and also most vulnerable to serious injury.

A further object of my invention is to provide a head guard that will be light in construction, durable, so cool that it may be worn for long periods without discomfort, and with wings, for the protection of the shoulders, that are so constructed as to permit absolute freedom of motion of the arms and shoulders.

Other objects of this invention not at this time more particularly enumerated, will be clearly understood from the detailed description and drawings forming a part of this specification.

Furthermore, this invention consists in the novel arrangements and combination of parts more particularly described in the following specification and embodied in the claims appended hereunto and forming a part of this application.

Referring now to the drawings, which are merely illustrative of my invention, Figure 1 is a front elevation of my guard showing the operative positions of the parts in dotted lines, Fig. 2 is a fragmental sectional view of my device in operative position, Fig. 3 is a detail sectional view of one of the padded stops, Fig. 4 is a detail sectional view of the adjustable connection between the inwardly projecting stops and the outer covering.

Referring further to the drawings, wherein similar reference characters designate similar parts throughout the respective views, 1 designates a substantially spherical member, formed of wire mesh and divided into two equal parts vertically thereof, said parts being hinged together at 2 at the top thereof. Said spherical member is provided with a collar 3 around the lower edge thereof, said collar being formed of two semi-circular bands, which are fastened together at the front and rear points of contact between the said bands, by means of catches 4. The said spherical member 1 is adapted to entirely cover the head of the wearer and is maintained in spaced apart relation thereto by means of a plurality of stops generally designated by 5. Said stops are formed of a wire having a screw-threaded stem 6, and having the other end bent in a circle 7 disposed at right angles with respect to said stem. The circular portion of said stop is covered with a padding 8 which is adapted to contact with the head of the wearer. The stem 6 of each of said stops is mounted within a boss 9 formed upon said wire mesh member 1 and threaded centrally thereof to receive the threaded end of said stem. Said stops are disposed radially from the sides of said spherical member toward the center thereof, and may be adjusted with respect to the head of the wearer by means of the screw-threaded mounting.

Outwardly extending wings 10 are formed of wire mesh and are mounted upon opposite sides of said collar at the bottom edge thereof.. Said wings are mounted upon said collar by means of hinges 11 having a limited downward movement. Said wings are adapted to cover the shoulders of the wearer, and the particular form of hinges are adapted to maintain the wings in spaced apart re-

lation with respect to the shoulders of the wearer and at the same time permit freedom of movement in raising the arms and shoulders.

It is obvious from the construction as described that the two halves of the spherical member may be swung apart on the hinged mounting, as shown in Fig. 1, in order to place the guard over the head of the wearer, and that it is locked in position by means of the catches 4.

The utility, adaptability, and advantages of my improved form of head guard being obvious, it is unnecessary to further enlarge upon the same herein.

Having now described and pointed out the new and useful features of my invention, I do not limit myself to the shape of certain parts where the shape is not essential, nor do I restrict myself to the exact details of construction shown and described, but mean and intend to claim all equivalents and variations thereof not departing in principle from my invention, and falling within the purview of the appended claims.

What I claim as my invention and desire to secure by Letters Patent is:

1. In a head guard, the combination with a wire mesh head covering, of wings independently hinged upon both sides of said covering.

2. In a head guard, the combination with a wire mesh head covering, of means mounted upon said covering whereby it will be retained in spaced apart relation with respect to the head of the wearer, and vertically movable wings independently mounted upon both sides of said covering.

3. In a head guard, the combination of a substantially spherical wire mesh member, said member being formed in sections, said sections being hingedly secured together, and wire mesh wings independently hinged upon both sides of said member.

4. In a head guard, the combination of a substantially spherical wire mesh member, said member being formed in sections, said sections being hingedly secured together, means mounted upon said sections whereby they may be locked together, and wire mesh wings independently hinged upon both sides of said member.

5. In a head guard, the combination of a substantially spherical wire mesh member, said member being formed in sections, said sections being hingedly secured together, means mounted interiorly of said member whereby the same may be retained in spaced apart relation with respect to the head of a wearer, and wire mesh wings independently hinged upon both sides of said member.

6. In a guard of the character described, the combination of a pair of semi-spherical head coverings, said coverings being hingedly secured together at the top thereof, independently movable shoulder guards pivoted to said coverings, and means whereby said coverings are held spaced apart from the head of the wearer.

7. In a guard of the character described, the combination of a pair of semi-spherical head coverings, means whereby said coverings are spaced apart from the head of the wearer, a pair of independently movable shoulder guards pivoted to said coverings, and means for holding said guards spaced apart from the shoulder of the wearer.

8. A head guard consisting of a substantially spherical wire mesh member, said member being formed in sections hingedly secured together at the top thereof, a plurality of independently mounted stop members projecting centrally from the interior wall of said spherical member, a pad secured upon the free end of each of said stop members, means mounted upon said sections whereby they may be locked together, and wire mesh wings independently hinged upon said spherical member adapted to protect the shoulders of the wearer.

In testimony whereof I affix my signature hereto.

JOHN L. McGREW.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."