United States Patent [19]

Hale

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[54] **PROTECTIVE HEAD GEAR**

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[52] **U.S. Cl.** **2/9**

[51] **Int. Cl.** **A42b 1/08**

[58] **Field of Search** 2/9, 173, 206, 8, 2/10

[56] **References Cited**

UNITED STATES PATENTS

3,373,443	3/1968	Marietta	2/9
3,220,014	11/1965	Strohm et al.	2/9
3,167,783	2/1965	Wolfe	2/9
3,113,318	12/1963	Marietta	2/9

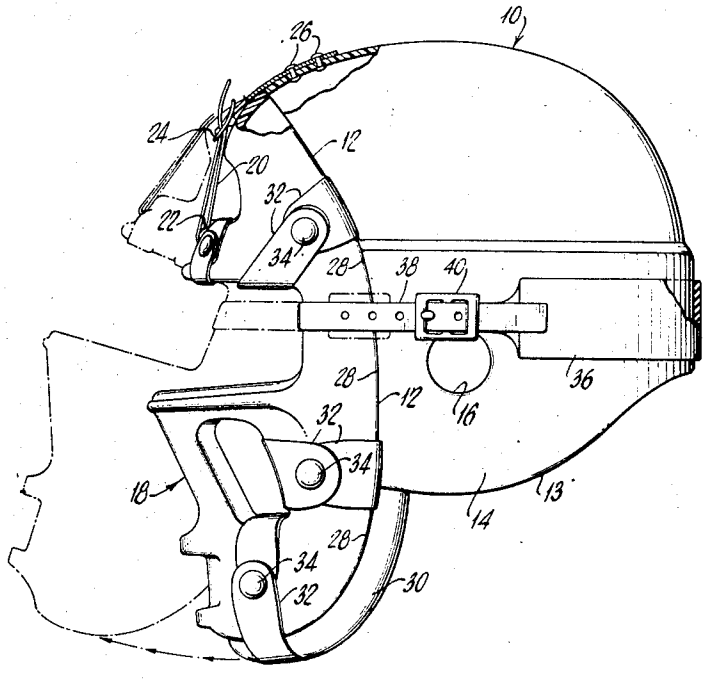
Primary Examiner—H. Hampton Hunter

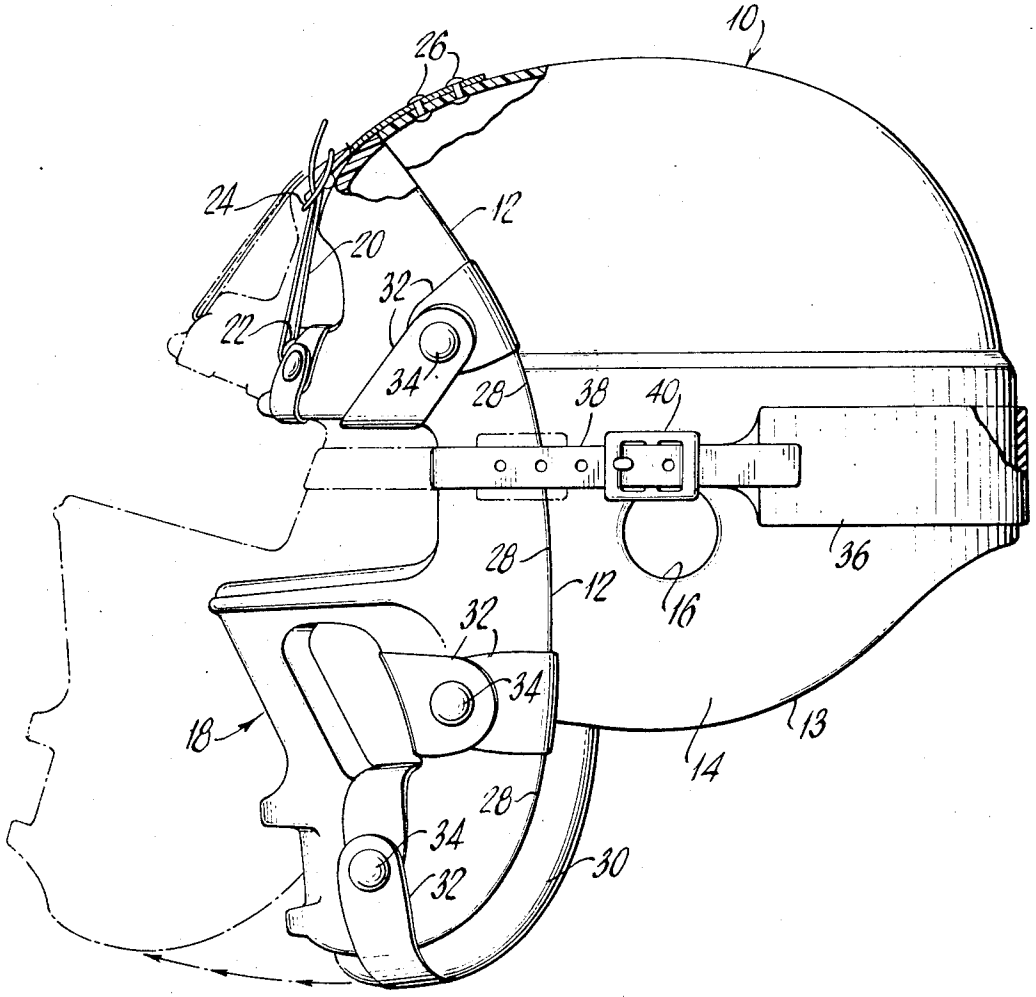
Attorney—Eyre, Mann & Lucas

[57] **ABSTRACT**

Protective head gear comprising a helmet having a face mask hingedly connected thereto at a central upper location, with the forward edge of the helmet being retained in substantial registration with the rear edge of said face mask portion by elastic connecting means.

5 Claims, 1 Drawing Figure





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PROTECTIVE HEAD GEAR

BACKGROUND OF THE INVENTION

1. Field of the Invention

The present invention is directed toward protective head gear which affords protection for both the face and the skull of the wearer from the hazards of sport, and yet will allow quick and easy removal in the course of play. The protective head gear embodying the present invention is particularly adapted for use by a baseball catcher, who frequently must doff his protective head gear rapidly in the course of play of a baseball game, e.g., in order to chase pop fly balls.

2. Description of the Prior Art

Various types of head gear have been constructed for the purpose of providing protection to the wearer in the course of play of various games. For example, U. S. Pat. No. 3,373,443 (Marietta) discloses a combination helmet and face mask hingedly connected at the temple portions and adapted particularly for use in hockey. However, because of the requirements of the game of hockey, this combination is designed to fit as close to the wearer's head as possible so as to provide a close fit to preclude shifting of the head gear during the rapid maneuvers of the player. To effect such stability on the wearer's head, Marietta's face mask portion extends under the wearer's chin, with the helmet portion extending to the base of the neck. Thus, it is apparent that this combination may not be readily doffed, and therefore does not meet the needs of a baseball catcher. U. S. Pat. Nos. 3,132,345 (Keith) and 3,196,458 (Keith) disclose two variations of a protective mask for use in the game of baseball. The first variation connects the transparent protective mask by elastic straps to a sweat band detachably connected to the interior of an ordinary baseball cap and by another strap which passes around the wearer's neck. The second variation utilizes ear hooks hingedly connected to the transparent protective mask with no connection at all to the wearer's head gear. U. S. Pat. No. 3,204,251 (Child) discloses a hockey head protector in the form of a two-piece helmet. The two pieces are connected at their temple portions by adjustably positioned screws in parallel slots in the first helmet portion, and a transverse slot in the second helmet portion through which the two screws extend. There is no face mask portion in this combination.

SUMMARY OF THE INVENTION

Applicant's invention is embodied in a protective head gear formed by a modified helmet and a face mask hingedly connected thereto in such a manner as to maximize the space between the helmet and face mask when hinged apart against the urging of an elastic connecting member.

BRIEF DESCRIPTION OF THE DRAWING

Applicant's novel protective head gear may best be understood by reference to the accompanying drawing, which is a side elevation of the protective head gear, with the broken line showing the position assumed by the face mask relative to the helmet when hinged forward by the chin portion of the mask as indicated by the arrows. The illustrated head gear is symmetrical about a vertical plane parallel to the plane of the drawing and extending through the center of the head gear.

DESCRIPTION OF THE PREFERRED EMBODIMENT

Referring now to the drawing, the helmet **10** is generally constructed in the manner of protective helmets currently worn by professional baseball players, with the exception that the front of the helmet **10** does not include an eye shade, but rather comprises a forward edge **12** which substantially frames the face of the wearer by extending from the top of the helmet and down both sides thereof to the helmet's bottom edge **13** as it extends to the front of the ear covers **14** in which apertures **16** are formed to enhance the wearer's ability to hear. This forward edge **12** extends nearly vertically upward from the bottom edge **13** and curves forward from the top of the ear covers **14.** The helmet **10** incorporates interior padding (not shown) distributed in a conventional manner. Face mask **18** is hingedly connected to the helmet **110** at a central position which divides the forward edge **12** of helmet **10** into two peripheral segments of substantially equal length. This pivotal connection may be effected by a belt strap **20** looped around a securing bar **22** in the face mask **18** and connected to a belt buckle **24** on the belt strap **20** as shown, for example. The belt strap **20** may be connected to the helmet **10** by any suitable means such as rivets **26,** for example. By hinging the face mask **18** to the helmet **10** at the highest possible location on each element, the space created between the two elements when hinged apart is maximized, thus facilitating removal by the wearer. The rear edge **28** of the mask **118** is substantially in registration with the forward edge **12** of the helmet **10.** However, exact registration is not critical, since the face mask **118** includes interior padding **30** removably attached to the mask by straps **32** having snap fasteners **34** at the ends thereof. The forward edge **12** of helmet **10** may abut this padding **30** over certain portions of the length of the edge **12,** and such padding **30** may be deemed effectively to constitute a portion or portions of said rear edge **28** to the extent that said forward edge **12** is in registration therewith. The mask **18** and the helmet **10** are also elastically connected below the point of pivotal connection. This connection may be effected by means of an elastic strap **36** extending around the rear portion of the helmet **10** and connected to each side of face mask **18** by a pair of means such as a belt strap **38** looped through one of the apertures in the mask (such as the eye slot as shown) and connected to a buckle **40** carried on belt strap **38.** The protective head gear thus formed may be readily donned by grasping the face mask **18** at its lower extremity (the chin portion) and hinging same forward to the position indicated by the dotted line. Similarly, in the course of play, the protective head gear may be quickly doffed by again hinging the face mask **18** forward and raising the protective head gear upward and backward to remove same. The rear portion of bottom edge **13** of the helmet **10** does not extend downward so far that removal in this manner would cause this edge portion to bite into the player's neck. The chin portion of the face mask extends downward a sufficient distance to provide the necessary protection for that part of the wearer's face, but does not extend under the wearer's chin to hamper the removal process.

The advantages of the present invention, as well as certain changes and modifications of the disclosed em-

bodiment thereof, will be readily apparent to those skilled in the art. It is the applicant's intention to cover all those changes and modifications which could be made to the embodiment of the invention herein chosen for the purposes of the disclosure without departing from the spirit and scope of the invention.

What is claimed is:

1. Protective head gear comprising:

1. a helmet having a forward edge which substantially frames the face of the wearer;
2. a face mask having a rear edge substantially in registration with said forward edge of said helmet portion;
3. first connecting means hingedly connecting said face mask to said helmet at an upper central position; and
4. second connecting means operative elastically to interconnect said helmet portion and said face mask portion at lateral positions below said point of hinged connection and normally to draw said edges into registration.

2. Protective head gear according to claim 1 wherein said face mask includes padding which effectively constitutes at least one portion of said rear edge of said face mask.

3. Protective head gear according to claim 1 wherein said first connecting means comprises a belt strap on which a buckle is mounted, said belt strap being connected to said helmet by at least one rivet, and said face mask includes a securing bar around which said belt strap is looped and connected to said buckle.

4. Protective head gear according to claim 1 wherein said second connecting means comprises an elastic strap extending around the rear portion of said helmet and including a pair of means connecting the ends of said elastic strap to each side of said face mask.

5. Protective head gear according to claim 4 wherein said face mask includes an eye slot, and each of said pair of means comprises a belt strap looped through said eye slot at opposite sides of said face mask and connected to a buckle carried on said belt strap.

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