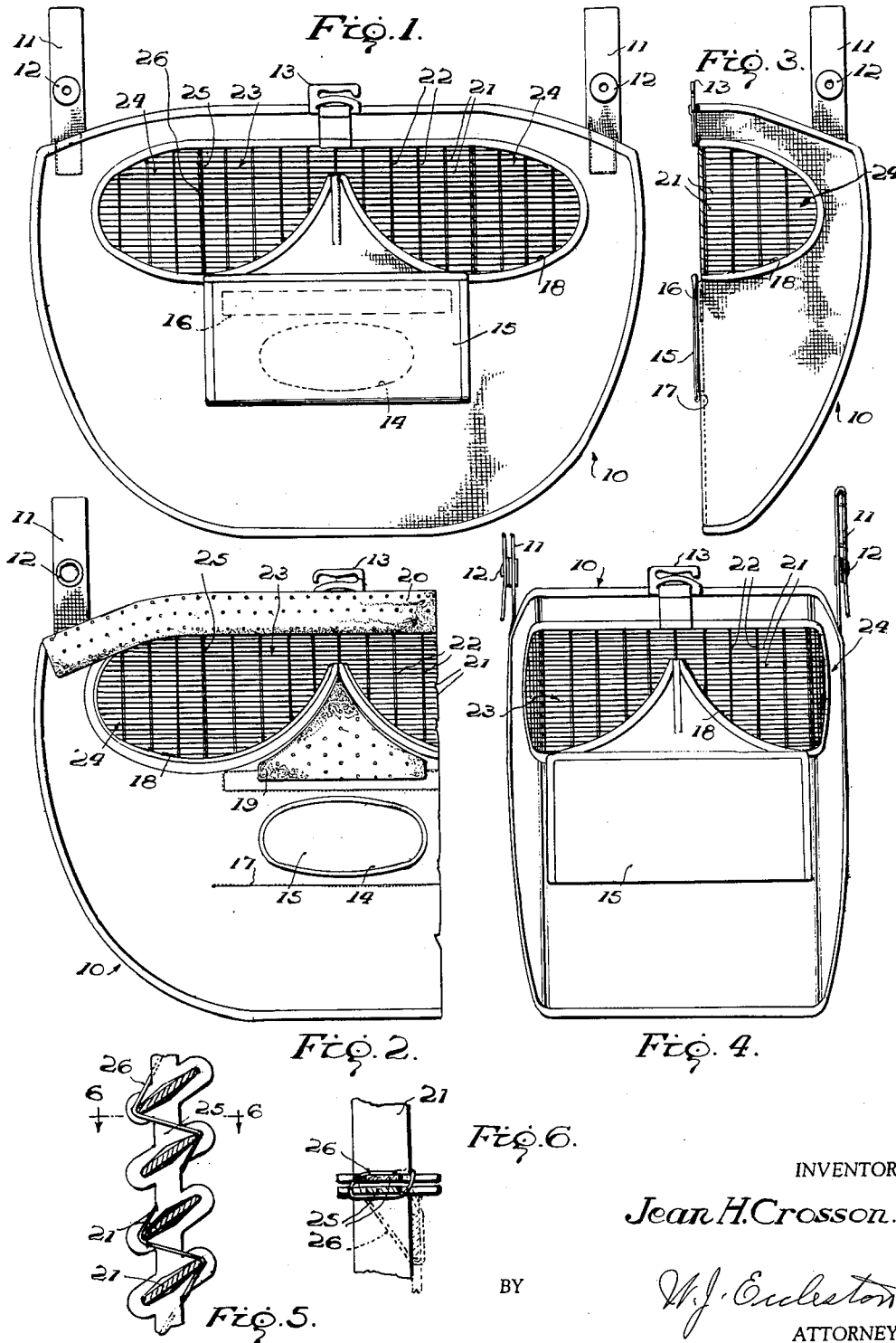


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ANTI-RAY EYE SHIELD

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ANTI-RAY EYE SHIELD

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4 Claims. (Cl. 2-14)

(Granted under Title 35, U.S. Code (1952), sec. 266)

The invention described herein, if patented, may be manufactured and used by or for the Government for governmental purposes, without the payment to me of any royalty thereon.

The invention relates to face masks and more particularly to such masks as relate to protection of the face from radiation whether thermal, glare, radioactivity or any other form of radiation. Ordinary tinted or polarized lens protect from glare but are unsatisfactory against thermal or radioactive rays. The mask of the invention is particularly adapted to protect against glare and radioactive radiation. Typical anti-glare screens utilize a screen formed from rigid louvres as disclosed in the U.S. Patent Nos. 2,232,455 and 2,824,308. The latter utilizing as screens material according to U.S. Patent Nos. 2,078,940 or 2,194,222. The rigidity of the screens of these patents and the nature of the screens which comprise rigid horizontal louvres, prevent the screens from being curved or bent whereby they permit vision only in a forward direction and prohibit any side vision whatsoever.

With the foregoing in view, it is an object of the invention to provide an improved viewing screen for a face mask of the class described.

A further object is to provide an improved viewing screen for a face mask which comprises a plurality of sections or panels hingedly connected together.

A further object is to provide such a screen which includes at least one central panel or section which is hingedly connected to at least one side panel on each side thereof, said central panel or panels having a width corresponding to the span of a pair of adult human eyes.

Other objects and advantages reside in the particular structure of the invention, the structure of the several elements thereof, combinations and subcombinations of such elements with each other and/or a face mask, all of which will be readily apparent to those skilled in the art upon reference to the attached drawing illustrating one species of the invention and to the following specification wherein the invention is shown, described and claimed.

In the drawing:

FIGURE 1 is a front elevational view of a face mask according to the invention, the same being shown in a flattened, inoperative position;

FIGURE 2 is a fragmentary rear elevational view of the same;

FIGURE 3 is a side elevational view of the same showing the parts in the operative positions;

FIGURE 4 is a front elevational view with the parts in the operative positions;

FIGURE 5 is an enlarged fragmentary vertical sectional view of the hinged connection between two adjacent sections or panels; and

FIGURE 6 is a fragmentary horizontal sectional view taken substantially on the plane of the line 6-6 of FIGURE 5.

Referring specifically to the drawing wherein like reference characters designate like parts in all views, 10 designates generally a face mask which is formed of any suitable flexible opaque material and which may include any suitable looped suspension tapes and fasteners 11, 12 respectively and/or one or more suspension hooks

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13 along the top edge for connecting the mask to any suitable headgear, not shown. The mask 10 may also include a mouth opening 14 which is preferably provided with a cover flap 15 which may have its lower edge hingedly secured to the mask body below the mouth opening 14 by any suitable means such as the line of stitching 17. The upper edge of the flap 15 may be readily detachably secured to the mask by any suitable separable fastener means 16 such as the so-called "zipperless-zipper" of U.S. Patent No. 2,717,437. Mask 10 is also formed with a viewing opening 18 which may be of any suitable shape but which is substantially longer than the span of a pair of adult human eyes for a purpose to be apparent hereinafter. The inside of mask 10, FIGURE 2, may be provided with any suitable nose and forehead pads 19 and 20 respectively which may be formed of foam rubber or other suitable material.

The viewing opening 18 is screened by any suitable rigid reticulated material but preferably a material comprising a plurality of rigid horizontally disposed louvres 21 which are maintained in tilted and spaced parallel relation by laterally spaced vertical and parallel twisted wires or the like 22 as disclosed in Patents Nos. 2,078,940 or 2,194,222 aforesaid. In the embodiment illustrated, the viewing screen comprises at least one central section 23 flanked on each side by at least one side section or panel 24. The central panel or section 23 includes vertical side edges which are defined by substantially vertical posts 25 which are suitably secured to the ends of the louvres 21 in any suitable manner, not shown, or the posts 25 may comprise two of the twisted wires or the like 22. Posts 25 of adjacent sections which are juxtaposed as in FIGURE 6, are secured together for hinge movement by suitable hinges 26. In the embodiment illustrated, each of such hinges 26 comprises a single length of spring wire wrapped in a spiral about the juxtaposed posts 25. This arrangement holds the adjacent sections 23 and 24 together in all positions of the same as the resiliency of the wire and its spiral arrangement permits the convolutions thereof to conform to the changing shape of the posts 25 as the section or panels are swung on the hinges 26, as illustrated in broken lines in FIGURE 6.

It is apparent from the foregoing, that the mask of the invention can be packed flat for shipment or storage as illustrated in FIGURES 1 and 2; may be folded into the operative positions of FIGURES 3 and 4 wherein it permits lateral vision in both directions as well as forward vision; or the parts mounting the end panels or sections 24 of the screen may be folded inwardly atop the center section 23 to form a more compact but slightly thicker package than the flat arrangement of FIGURE 1. Also, it is apparent that the arrangement combines the best features of the louvre type of glare shield with the flexibility of a plastic transparent screen.

Moreover, while there has been shown and described what is now considered to be a preferred embodiment of the invention, it should be understood that the same is susceptible of still other forms and expressions. Consequently, the invention is not considered as being limited to the structure shown and described hereinabove, but only as hereinafter claimed.

I claim:

1. A face mask, comprising a plurality of panels of rigid reticulated material disposed in side-by-side relation, substantially vertical hinges hingedly connecting said panels together in edge-to-edge relation to provide at least one central panel providing vision in a forward direction therethrough, said central panel being flanked on each side by at least one side panel, said side panels being adapted to be swung on said hinges from positions in

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coplanar relation to said central panel to rearwardly extending positions providing lateral vision therethrough in both lateral directions.

2. A face mask comprising a plurality of panels of rigid reticulated material disposed in side-by-side relation, there being at least one central panel providing vision in a forward direction therethrough, said central panel being flanked on each side by at least one side panel, said side and central panels including juxtaposed side edges defined by substantially vertical juxtaposed post members, means encircling each juxtaposed pair of post members to provide a hinge connecting each side panel to said central panel, and said side panels being adapted to be swung on said hinges from positions in coplanar relation to said central panel to rearwardly extending positions providing lateral vision therethrough in both lateral directions.

3. A face mask according to claim 2, wherein each of said last named means comprises a coil spring.

4. A face mask comprising a plurality of panels of rigid reticulated material disposed in side-by-side relation, there being at least one central panel providing vision in

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a forward direction therethrough, said central panel being flanked on each side by at least one side panel, said side and central panels including juxtaposed side edges defined by substantially vertical juxtaposed post members, an elongated flexible member coiled about each juxtaposed pair of post members to provide a hinge connecting each side panel to said central panel, and said side panels being adapted to be swung on said hinges from positions in coplanar relation to said central panel to rearwardly extending positions providing lateral vision therethrough in both lateral directions.

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