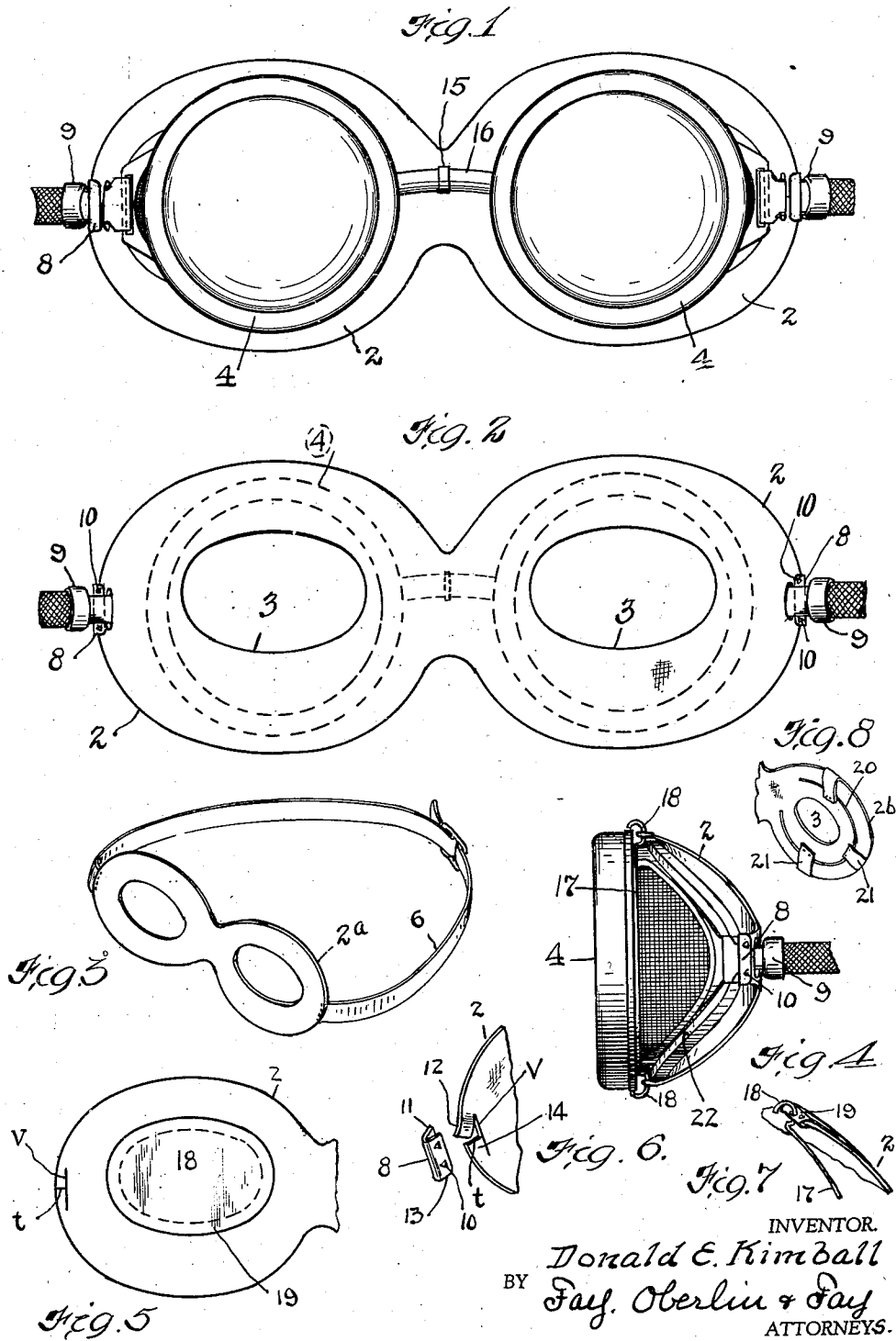


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FACIAL PROTECTIVE DEVICE

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In wearing goggles in hot humid situations engendering perspiration of the face, wearers are handicapped seriously by fogging of the lenses and even by perspiration running on the glasses when the wearer is looking downwardly. Efforts have been made to meet this condition by providing abundant ventilating openings about the periphery of the cups, but this is of only slight help. A construction making possible the comfortable and safe wearing of such devices which extend over the eyes is accordingly of fundamental importance and greatly desired in the art.

To the accomplishment of the foregoing and related ends, the invention, then, comprises the features hereinafter fully described, and particularly pointed out in the claims, the following description and the annexed drawing setting forth in detail certain illustrative embodiments of the invention, these being indicative however, of but a few of the various ways in which the principle of the invention may be employed.

In said annexed drawing:—

Fig. 1 is a front elevational view showing an embodiment of the invention; Fig. 2 is a rear elevational view of the same; Fig. 3 is a perspective view, slightly reduced in scale, showing a modification; Fig. 4 is a side elevational view of a variation of the structure shown in Fig. 1; Figs. 5, 6 and 7 are fragmentary front elevational and perspective details; and Fig. 8 is a fragmentary front perspective view, on reduced scale, showing a further modification.

Arranged to engage against the face of the wearer, and particularly the portions across under the eyes, is a perspiration-absorbent pad, this being of unobtrusive thickness, for instance a sheet like element 2, having openings 3 for vision, and adapted to lie under the goggle cups or the like 4. The sheet member 2 may be of any suitable absorbent material, as textile or felted substance, cellulosic, wool, or mixed, and being in the form of a flexible soft sheet preferably, as well adapted to preclude access of perspiration to the eyes, and also a comfortable pad of contact between the skin and the goggle cups which are customarily made of hard composition, metal or the like.

For general usage, the absorbent sheet member 2a, Fig. 3, is desirably equipped with its own holding means 6, which may be in the form of a head band of convenient character, whose detail may vary, but which should have some convenient take-up means for adjustment. With such construction of absorbent member, goggles or the like can be conveniently put on over the

absorbent member with celerity and advantage. Where it is desired to carry the absorbent member in a one piece attached construction, as more desirable in some instances, it may be directly secured to the goggle or the like. For instance, as shown in Figs. 1 and 4 in particular, the absorbent sheet member 2 may be secured to the goggles by means of sheet metal clips 8, such as to extend across the head band member 9 at the temple side of each goggle cup. The clips 8 are in their initial condition open channel-like members as shown in Fig. 6, and preferably provided with indents or punched in teeth 10. Being of bendable sheet metal, the clip 8 thus may be brought into position with the absorbent cloth member 2 such as to engage by one end 11 a tongue-portion 12 of the absorbent cloth member, and be compressed thereon so that the indent tooth 10 closes down on and bites firmly into the cloth holding securely. The clip 8, the absorbent member 2 having been put into position against the goggle cup as shown in Fig. 4, then bridges across the head band member 9 and the other end 13 of the clip can be similarly compressed onto the tongue-portion 14 of the absorbent member 2 (see Fig. 6) and thus hold the latter closely to the goggle cup, as shown in Fig. 4, also Figs. 1 and 2. By cutting the absorbent sheet 2 with a vertical slit-cut *v* and a transverse slit-cut *t*, as indicated in Fig. 5, the tongue-portions 12 and 14 are conveniently provided, and the vertical slit *v* permits of an accurate fit about the head band member 9. Such a construction is, in use, to all intents and purposes an integral goggle construction, and is put on and off as easily as any goggle. If desired, a fastening means 15 at the nose bridge may also be incorporated, and this may be an unobtrusive clip or a small tape-like member cemented at each of its ends to the absorbent sheet 2, and bridging or looping over the goggle bridge 16, securely anchoring the absorbent pad to the goggles.

As a further refinement in some instances, the vision-openings 3 of the absorbent sheet member may have transparent closures 18, Fig. 5, these serving further to isolate the eyes, without the least interference with vision or full usage of the goggles. Such transparent member 18 may be of cellulosic character, transparent viscose, cellulose acetate or other ester, and may be suitably cemented at the edges 19 to the absorbent sheet member 2. Desirably, the transparent member or diaphragm 18 is slightly cupped or convexed, so as to better fit in the location required within the cup and over the eye.

A spring holding means which allows the absorbent sheet member to be quickly spring-clipped to the goggles is of particular advantage. For this, a spring of arcuate section 17, such as of steel or brass wire, may fit back of the lens ring, as shown in Fig. 4, and have its attachment to the sheet absorbent member 2 in suitable non-tearable form, as for instance by having its hooked ends 18 pass through metal reinforce elements 19 which may be similar to or identical with the clips before-mentioned. Such arcuate spring permits easy and rapid assembly and disassembly, the spring simply clamping over the goggle cup and carrying the attached absorbent sheet. The customary form of head band 9 being removable by a snap action or the like, disengagement of the side clip 8 is a simple matter. Or as illustrated in Fig. 8, a wire spring-member 20 may extend above and below and laterally of the vision-opening 3, and being attached to the sheet absorbent member 2b suitably such as to allow the spring action in holding relation to the goggle cup, and yet not interfere with the assemblage otherwise. Thus, the wire spring 20 may be connected to the absorbent sheet member 2b by small loops 21 of cloth or the like, integral or attached, and the spring is thereby free to be expanded or contracted as desired, and yet securely hold the absorbent member. The spring 20 as seen, is of a shape and dimension to fit against the ledge or bead 22 (Fig. 4) with which goggle cups are customarily provided, and it is a simple matter to appose the absorbent pad sheet member 2b against the back edge of the goggle cup and spread the wire spring 20 sufficiently to snap it over the bead 22 of the goggle cup, in which position it then rides, holding the absorbent member snugly against the back edge of the cup.

In the use of absorbent pad constructions as set forth, the danger of interference with vision from perspiration is thoroughly eliminated, and at the same time comfort in wearing the goggles is attained in a sense heretofore unknown. This is in fact of much importance where operators have to wear goggles for considerable periods. Being relatively inexpensive also, the pads can be discarded and be replaced by fresh pads as often as desired, and wear under such conditions is much more sanitary than where goggles or the like are constantly worn directly in contact with the skin. In some instances as a further refinement, I antiseptically medicate, for instance borate, the absorbent pads, without interfering with the absorbent and cushioning functions, and thus further promote the antiseptic and sanitary conditions of usage.

Other modes of applying the principle of the invention may be employed, change being made as regards the details described, provided the features stated in any of the following claims, or the equivalent of such, be employed.

I therefore particularly point out and distinctly claim as my invention:—

1. In construction of the character described, a perspiration-absorbent sheet member, adapted to extend across the eyes under eye goggles and having vision-openings, transparent cellulosic di-

aphragms on said openings, and means holding said member to the goggles, including spring wire sections attached to the front of the absorbent member and adapted to engage over bead margins on the goggle cups.

2. A device of the character described, comprising a perspiration-absorbent sheet member adapted to extend across the eyes under eye goggles and having vision-openings, transparent diaphragms over said openings, and means holding said member to the goggles.

3. A device of the character described comprising a perspiration-absorbent sheet member adapted to extend across the eyes under eye goggles without obstructing vision, said sheet member being provided with reinforcements spaced substantially from said vision openings in substantial vertical alignment with the eyes, and means for holding said member to the goggles including attachments cooperating with said reinforcements.

4. A device of the character described comprising sheet lining for goggles, said lining having a vision opening, and a looped spring element for releaseably seizing the goggles, said element being mounted on the lining and curved about said opening with the ends of the loop free to move relative to each other.

5. A device of the character described comprising sheet lining for goggles, said lining having a vision opening, and a looped spring element for releaseably seizing the goggles, said element being mounted on the lining and curved about said opening with the ends of the loop toward the nasal portion of the goggles and free to move relative to each other.

6. In construction of the character described, a perspiration-absorbent sheet member adapted to extend across the eyes under eye goggles and having vision openings, said sheet member being cut to receive a portion of the goggles, and a clip for holding together the severed portions of the sheet member.

7. In construction of the character described, a sheet member adapted to fit under an eye goggle without obstructing vision, and a bowed wire lying on the exterior of the goggle and having its ends terminating in hooks for securing the portions of said sheet member substantially in alignment with the eye of the user.

8. A device of the character described, for use under eye goggles, comprising a perspiration-absorbent sheet member adapted to extend across the eyes and absorb perspiration under eye goggles, and a U-shaped holder passed about the end of the goggles with its ends engaging the absorbent member for maintaining said member in underlying relation to the goggles.

9. In a construction of the character described, a sheet member adapted to extend across the eyes as a lining under eye goggles, and means for holding said sheet member in underlying relation to the goggles including spring wire holders passed about the ends of the goggles with their ends engaging outer edge portions of said sheet member.

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