Jan. 7, 1958 R. W. PETERSON 2,818,859

PROTECTIVE MASK

Filed Oct. 15, 1956

Fig. 1

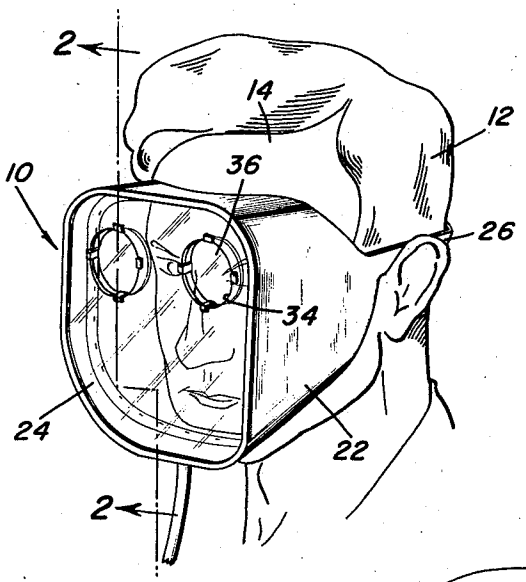
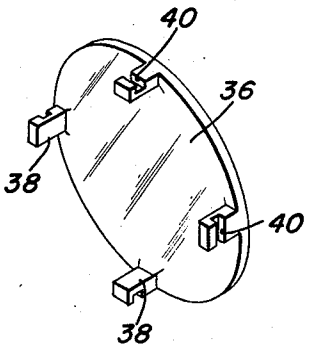


Fig. 4



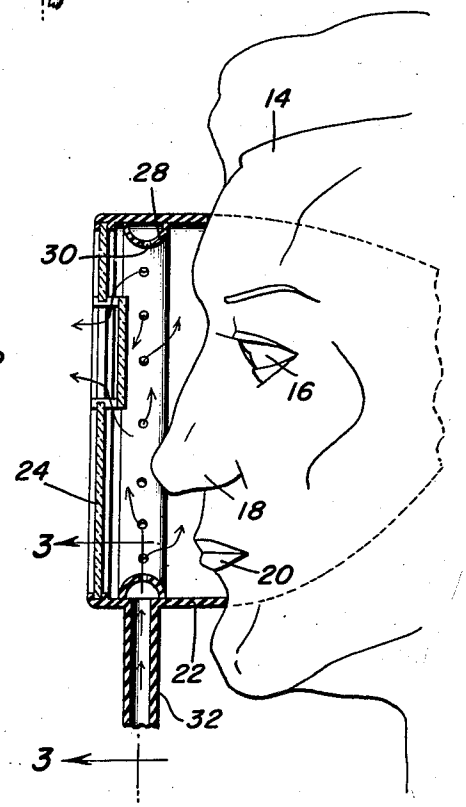


Fig. 2

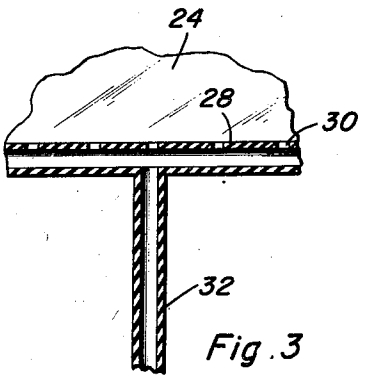


Fig. 3

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PROTECTIVE MASK

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3 Claims. (Cl. 128—146)

This invention generally relates to a safety device and is in the form of a protective mask covering the eyes, nose and mouth of the wearer and is specifically adapted for the use of operators of construction and farm equipment to protect the lungs and eyes against dust, paint, insecticide, or any other material which would possibly become lodged in the eyes, mouth, nose or lungs and cause irritation or damage thereto.

An object of the present invention is to provide a protective mask which incorporates a transparent front piece with inserted lenses in overlying relation to the eyes, together with a source of air which discharges clean air into an enclosed area forwardly of the mouth, nose and eyes, with the lenses having openings to permit passage of air therefrom, thus protecting the lenses from dust or other fine material and at the same time providing an air circulation about the face.

Other objects of the present invention will reside in its simplicity of construction, ease of assembly on the head, ease of adaptation for various purposes, and its relatively inexpensive manufacturing cost.

These together with other objects and advantages which will become subsequently apparent reside in the details of construction and operation as more fully hereinafter described and claimed, reference being had to the accompanying drawings forming a part hereof, wherein like numerals refer to like parts throughout, and in which:

Figure 1 is a perspective view illustrating the protective mask of the present invention in use;

Figure 2 is a vertical sectional view taken substantially upon a plane passing along section line 2—2 of Figure 1 illustrating the details of construction thereof and the relationship of the structural elements to the head and face of the wearer;

Figure 3 is a detailed view taken substantially upon a plane passing along section line 3—3 of Figure 2 illustrating the construction of the air passageway and discharge apertures; and

Figure 4 is a perspective view of one of the lenses.

Referring now specifically to the drawings, the numeral **10** generally designates the protective mask of the present invention for assembly on the head **12** of a wearer and overlying that portion of the face **14** including the eyes **16**, nose **18** and mouth **20**. The protective mask **10** includes a peripheral side portion **22** which is closed at its front end by a transparent face member **24**, both of which may be of any suitable construction, such as plastic, and the side member **22** may be attached to the head **12** by any suitable head encircling strap **26**.

As shown in Figure 2, the face member **24** is in spaced relation to the face **14** of the wearer, and the peripheral side member **22** is provided with a tubular, semi-cylindrical member **28** about the inner periphery thereof, with a plurality of apertures **30** being formed on the inner surface thereof for discharging air into the space between the face **14** and the face member **24**. An intake tube **32** extends from the tubular member **28** to a source of compressed air.

The face member **24** is provided with a pair of openings **34** which are in alignment with the eyes **16** and a circular lens **36** is disposed in each opening **34**. Each of the lenses **36** is provided with a plurality of forwardly projecting lugs **38** having a recess **40** in the outer edge thereof for engaging the periphery of the opening **34**,

thus mounting the lenses **36** rearwardly of the face member **24**, thus providing an air passage around the lenses **36** and between the lenses **36** and the face plate **24**, thus discharging the air from the area between the face **14** of the wearer and the face member **24**, and this air current will protect the lenses **36** from foreign material, such as dust, landing thereon. Thus, the lenses **36** will always remain in a clean condition, and the air pumped into the area adjacent the nose and mouth provides a clean source of air for the person wearing the protective mask. The tube **32** may be attached to any suitable blower which is equipped with suitable filters for removing the foreign material, thereby supplying the person wearing the mask with uncontaminated air for breathing. Due to the spaced relation of the face member **24** and the lenses **36** to the face of the wearer, ordinary corrective eye glasses may be employed. This also permits the use of sun glasses or other types of protective goggles used in certain industries, such as in the welding industry.

The foregoing is considered as illustrative only of the principles of the invention. Further, since numerous modifications and changes will readily occur to those skilled in the art, it is not desired to limit the invention to the exact construction and operation shown and described, and accordingly all suitable modifications and equivalents may be resorted to, falling within the scope of the invention as claimed.

What is claimed as new is as follows:

1. A protective mask comprising a generally flat face member, a rearwardly extending peripheral wall on said face member, means for attaching the peripheral wall to the head of the wearer with the face member disposed in spaced relation to the mouth, nose and eyes of the wearer, means for discharging air into the space between the face of the wearer and the face member, said face member having openings in alignment with the eyes, and lenses mounted rearwardly of and in alignment with said openings, thereby providing an air passage between said lens and said base member, said air passage acting as a discharge outlet of air whereby the lenses will be protected from foreign particles and fogging.

2. A protective mask comprising a generally flat face member, a rearwardly extending peripheral wall on said face member, means for attaching the peripheral wall to the head of the wearer with the face member disposed in spaced relation to the mouth, nose and eyes of the wearer, means for discharging air into the space between the face of the wearer and the face member, said face member having openings in alignment with the eyes, and lenses mounted rearwardly of and in alignment with said openings thereby providing an air passage between said lens and said face member, said air passage acting as a discharge outlet of air whereby the lenses will be protected from foreign particles and fogging, each of said lenses including a plurality of forwardly projecting lugs with recesses on the outer faces thereof for engagement with the periphery of the openings.

3. The combination of claim 2, wherein means for discharging air into the space between the face of the wearer and the face member includes an air inlet tube attached to the inner periphery of the peripheral wall and an intake tube attached on one end to said inlet tube and on the opposite end to a compressed air source.

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