July 31, 1923. 1,463,390

A. FERNANDES

BREATH MASK

Filed Nov. 1, 1920

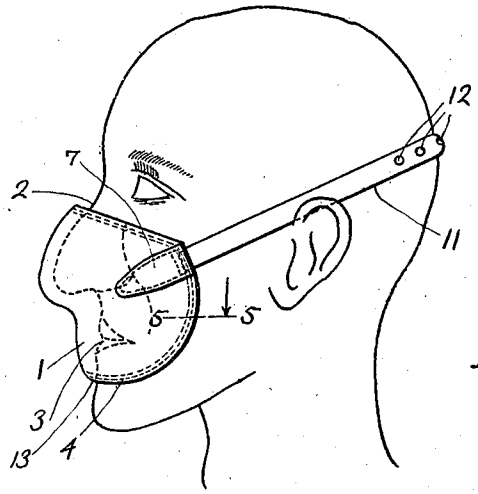


Fig. 1.

Fig. 3.

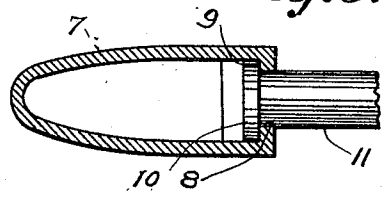


Fig. 2.

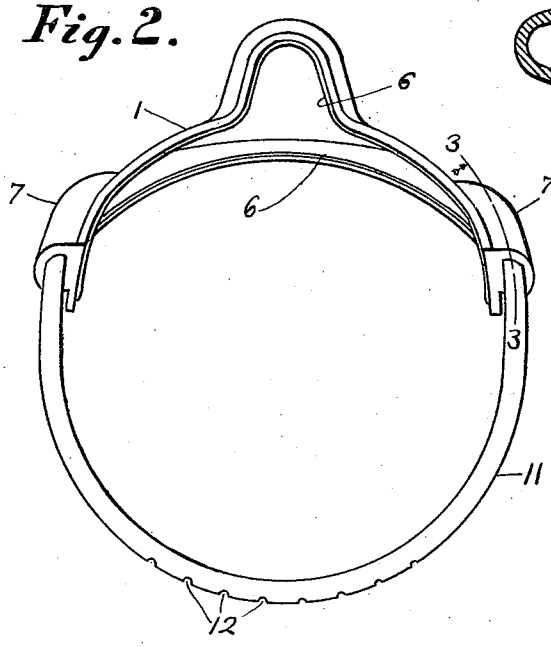


Fig. 4.

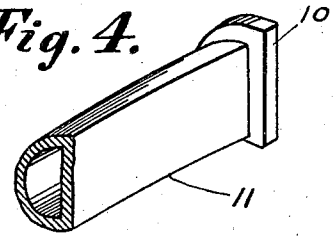




Fig. 5.

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UNITED STATES PATENT OFFICE.

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BREATH MASK.

Application filed November 1, 1920. Serial No. 420,945.

To all whom it may concern:

Be it known that I, ANTONIO FERNANDES, a citizen of the United States, residing at Kansas City, in the county of Jackson and State of Missouri, have invented certain new and useful Improvements in Breath Masks, of which the following is a full, clear, and exact description, such as will enable others skilled in the art to which it appertains to make and use the same.

The invention relates to an improved sanitary breath mask for persons to wear, to protect the wearer from inhaling germ laden air and to prevent the wearer from exhaling germ laden air into close proximity to others who would be compelled to inhale it.

Surgeons, dentists and barbers are usually employed in a relative position to the patient or customer that compels them to exhale breath that must be inhaled by the patient or customer, and the patient or customer exhales breath that must be inhaled by the surgeon, dentist or barber, so that there is an interchange of breath that is very unsanitary and the cause of spreading disease.

Undertakers, chemists and mechanics often work in close proximity to poisonous and germ laden air and vapors that would be rendered harmless if air for breathing purposes could be supplied from the rear of the head instead of from directly in front, as is the natural way of breathing.

It is essential that a mask be provided to enable a person to inhale air for breathing purposes from the rear of the head, and that will not obstrust the vision of the wearer or be bunglesome when working with the face close to the person or object.

The present invention has provided an improved sanitary breath mask by which a person is enabled to inhale free air from the rear of the head of the wearer, that will not obstruct the vision of the wearer, that can be instantly put on or removed, and that can easily be sterilized.

With these and other objects in view, the invention consists in the features of construction, combinations and arrangements of parts hereinafter set forth and more particularly pointed out in the appended claims, the accompanying drawings illustrating a form of the improved sanitary breath mask.

In the drawings:—

Fig. 1 is a view in elevation of the improved breath mask in wearing position on the figure of a person's head.

Fig. 2 is a plan view of the mask.

Fig. 3 is a sectional view on line 3—3 of Fig. 2.

Fig. 4 is a broken perspective view of the inhaling tube.

Fig. 5 is a sectional view on line 5—5 of Fig. 1.

The mask 1 is of thin plate material and formed as shown to fit around the nose 2 and against the face of the individual below the mouth 3 so that the nose and mouth are inclosed against inhaling or exhaling around or underneath the mask.

The edge 4 of the mask is provided with the groove 5 in which the soft gasket 6 is secured, the gasket fitting against the face of the wearer and forming a seal against air entering into or escaping from within the mask 1.

The chambered extensions 7 open to the interior of the mask 1, each of which is provided with the hole 8 and shoulder 9 so that the flange 10 of the soft flexible tube 11 may be depressed and passed through the hole, allowing the tube to assume normal shape when inserted, and the flanges hold the tube securely to the mask 1 and prevent leakage of air into or from the interior of the chambered extensions and the mask.

The tube 11 is sufficiently elastic to allow the mask to be placed as shown in Fig. 1 and hold it in this position, and it will also allow instant removal of the mask, so that the mask may be placed or removed instantly and many times each day, as is necessary.

The holes 12 are provided for the entrance and exit of the air to and from the tube and the mask.

The tube 11 may be easily removed from the mask 1 by depressing flanges 10, so that the tube and the mask may be scalded and sterilized as often as the wearer may choose.

The tube 11 is sufficiently elastic to allow the wearer to lift the lower edge 13 of the mask 1 and expectorate and on releasing the hold on the mask it will be instantly drawn

to place tight against the wearer's face.

It will be understood from the foregoing that the breath is inhaled and exhaled through the holes 12, and that there is no interchange of breath near the face of the wearer.

The improved breath mask is exceptionally advantageous to mechanics in working welding torches, to surgeons when working over poisonous tumors that some times burst and scatter pus and the like, to undertakers when working over corpses, it will protect the patient from the dentist and the dentist from the patient, in the event that either has tubercular or other germs, and it will likewise protect the customer from the barber and the barber from the customer in the event that either is exhaling germs.

What I claim as new, and desire to secure by Letters Patent, is:—

1. In a breath mask, a mask of plate formation shaped to fit over and inclose the nose and mouth of a person, a groove in the inner face of said mask and near the outer edge thereof, a resilient gasket resting in said groove and protruding from the inner face of said mask, chambers opening to the inner side of said mask and extending from each side of said mask and presenting a hole opening rearwardly, an internally facing shoulder around each of said holes, a resilient flexible tube with an annular flange on each end thereof and provided with holes intermediate the ends thereof, and the ends of said tube resting in said holes with said annular flanges bearing outwardly against said shoulders.

2. In a breath mask, a mask of plate formation shaped to fit over and inclose the nose and mouth of a person, a groove in the inner face of said mask and near the outer edge thereof, a resilient gasket resting in said groove and protruding from the inner face of said mask, a resilient flexible tube with the two ends thereof detachably attached to said mask and provided with holes intermediate the ends thereof, and said tube of a length to reach around the back of the head of a person wearing the mask and retain said gasket and mask resiliently in contact with the persons face.

3. In a breath mask, a mask of plate formation shaped to fit over and inclose the nose and mouth of a person, means detachably spread along the inner surface of the inner edge of said mask to bear against a person's face and form an inclosure against the entrance and exit of air, a chamber projecting from each side of said mask and opening to the inner side of said mask and provided with a hole facing rearwardly from said mask, an inwardly facing shoulder around each of said holes, a tube provided with an annular flange on each end thereof, the end of said tube resting in said holes with said annular flanges bearing outwardly against said shoulders and provided with holes intermediate the ends thereof for inhaling and exhaling of a person's breath.

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