

No. 893,213.

PATENTED JULY 14, 1908.

W. T. WHITEWAY.
RESPIRATOR.
APPLICATION FILED MAR. 14, 1908.

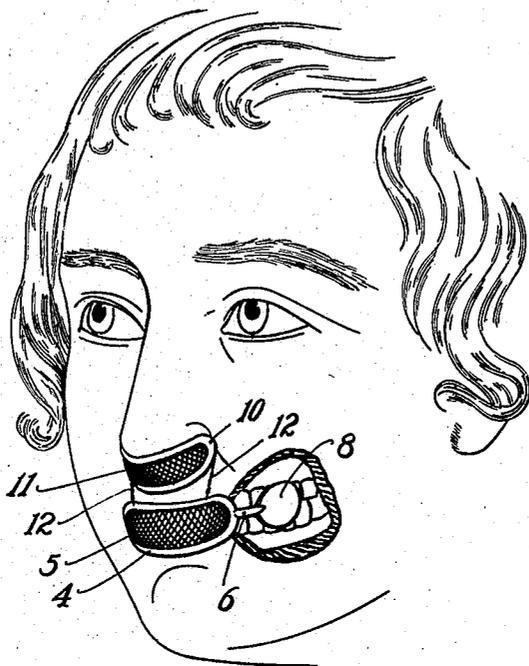


FIG. 1.

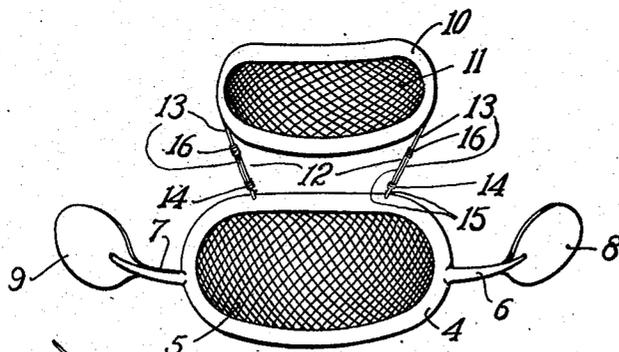


FIG. 2.



FIG. 3.

WITNESSES

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RESPIRATOR.

No. 893,213.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, WILLIAM T. WHITEWAY, a citizen of the United States, residing at Cambridge, in the county of Middlesex and State of Massachusetts, have invented certain new and useful Improvements in Respirators, of which the following is a specification, reference being had therein to the accompanying drawing.

My invention relates to improvements in respirators or inhalers which are adapted to be placed over the mouth or over the mouth and nostrils to prevent the inhalation of noxious substances, as smoke, dust and coal dust; the object being to provide a device of this character of light construction and so arranged that it may be held in place without providing means for passing around a person's head, or over the ears, or held between the teeth or clasping some portion of the face.

Another object is to provide a respirator which is instantly removable for use of miners, metal workers and others, which, although held by means placed within the mouth, will allow of talking or chewing without the inhalation of impure and offensive atmosphere.

A further object is the providing of a respirator so constructed as to be worn at all times, including the hours of sleeping, without inconvenience, and of benefit to invalids especially consumptives, being warmed by the breath, it tempers cold air passing through it, and may also be used for the inhalation of medicated vapors.

Figure 1 is a perspective view showing a respirator embodying my invention and in position. Fig. 2 is an exterior view of my respirator. Fig. 3 is a plan view of the same.

The body of the air-filtering device or respirator consists of an oblong rim 4 of non-corrosive metal, celluloid or other material, of such shape and curvature, preferably forming a segment of a circle as shown, as to properly fit over the mouth. This rim is preferably covered with silk cloth or other material and may be provided with a cushioned rim of soft rubber to prevent injury to the face and to hold it sufficiently far from a person's lips to allow of his talking.

Within the rim and carried by it is the screen 5 of gauze or similar diaphanous material, preferably of silk or other suitable fabric. Extending from the ends of the rim

4 are the two fingers 6 and 7 carrying respectively the disks or oval plates 8 and 9, preferably of silver, porcelain or other suitable material. This mouth respirator just described, is adapted to be used when desired without the nose respirator. When in use the fingers with the disks are inserted in the mouth between the outer side of the teeth and the inner side of the cheeks and the natural pressure of the cheeks against the teeth holds the respirator securely in place. If desired, the finger 6 may be broadened as it extends inward and the disk dispensed with, and if desired the finger may be only on one side. It is obvious that the use of such a respirator will not prevent talking or chewing while it is in position and that the same is quickly removable when necessary.

The nose portion of the respirator consists of a rim 10 of similar material to that of rim 4 but forming a segment of a smaller circle, preferably a small semi-circle. The nose and mouth respirators have connecting portions or links 12 preferably adjustable, so that the nose portion may be moved towards or away from the mouth portion according to the distance of the nostrils from the mouth of the wearer.

In the drawings I have shown the connecting portions 12, which are preferably made of silver wire, as each consisting of a wire 13 having a circular portion 14 frictionally encircling the wire 15 which has a similar circular portion 16 frictionally encircling the wire 13. The wires 13 extending from or just below the ends of the semi-circular rim 10 and the wires 15 extending from the top portion of the rim 4 beneath the rim 10. The rim 10 is provided with a screen 11 of substance similar to that of screen 5.

For treatment of lung or throat troubles or for strengthening inhalation, the gauze may be saturated with any desired medication, such as menthol or with any suitable germicide where the atmosphere may be loaded with germs of disease or otherwise injurious, and many dangers may be avoided by its use by all persons exposed to malarial atmosphere, and by employes in coal-mines, metal or lead-works, and flour mills.

It is to be understood that my invention is not limited to the specific details of construction shown in the accompanying drawing, but that said details may be varied in the practical carrying out of my invention. It is also to be understood that the combina-

tions specifically set forth in the several claims are intended to be separately claimed without limitation to the use in connection therewith of other features and details of construction illustrated.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. A respirator consisting of a mouth portion, a nose portion, adjustable connecting means, and means for holding the said portions respectively against the mouth and nostrils.

2. A respirator consisting of a segmental body portion for the mouth, a semi-circular body portion for the nostrils, adjustable connecting means, curved fingers extending from the ends of the body portion of the

mouth and plates carried by the fingers to be placed in the mouth against the outer side of the teeth and the respirator to be held in place by the pressure of the cheeks against the plates.

3. A respirator consisting of a segmental rim, a screen within the rim, curved fingers extending from the rim, oval plates carried by the fingers, a semi-circular rim, a screen within the rim, and adjustable links connecting the rims, substantially as shown and described.

In testimony whereof I affix my signature in presence of two witnesses.

WILLIAM T. WHITEWAY.

Witnesses:

CHARLES F. A. SMITH,
ARTHUR W. WHITEWAY.