Dec. 14, 1926. 1,610,793

L. KAUFMAN

RESPIRATOR

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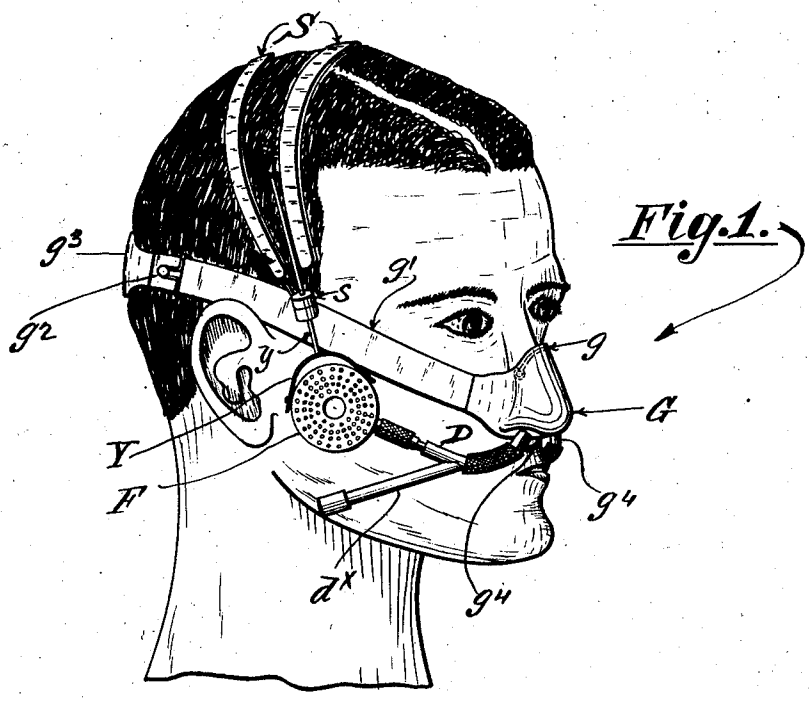


Fig. 1.

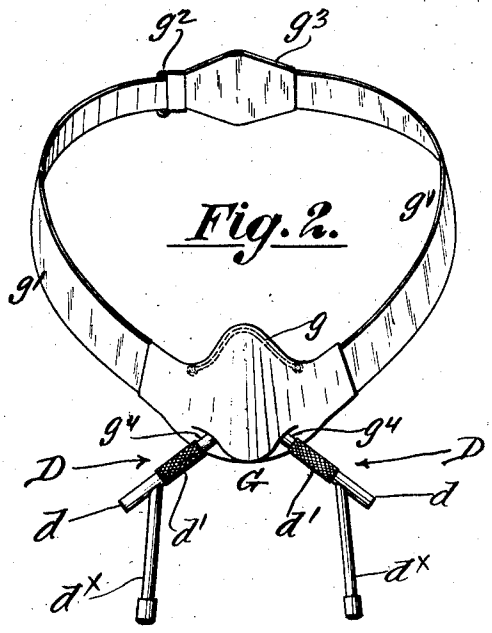


Fig. 2.

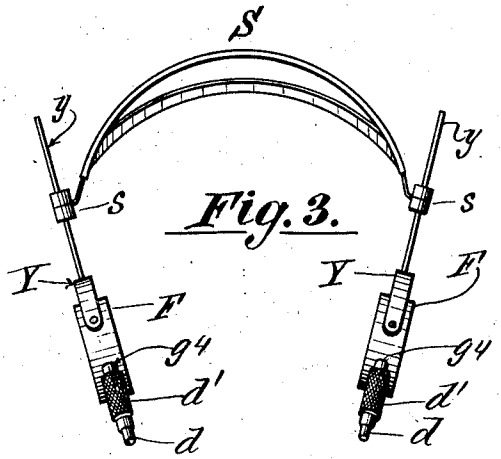


Fig. 3.

Inventor:
Leo Kaufman,
By his Attorney, Leo. Mr. Mia H

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RESPIRATOR

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Fig. 4.

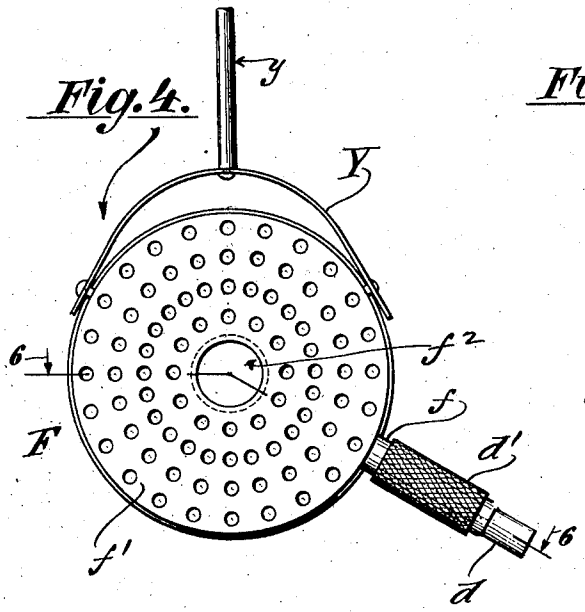


Fig. 5.

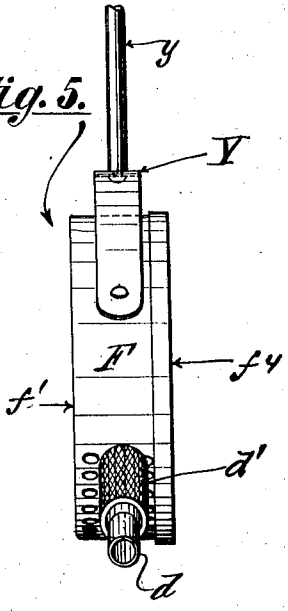


Fig. 6.

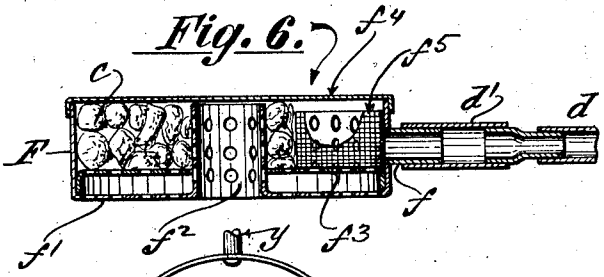
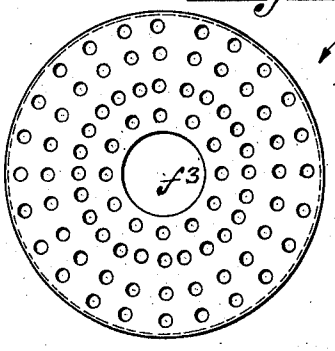


Fig. 8.



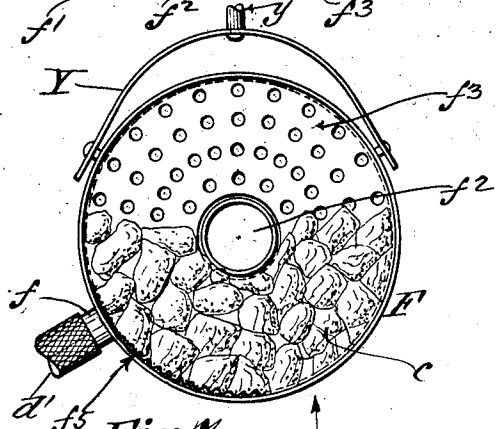


Fig. 7.

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Patented Dec. 14, 1926. 1,610,793

UNITED STATES PATENT OFFICE.

LEO KAUFMAN, OF BROOKLYN, NEW YORK.

RESPIRATOR.

Application filed April 30, 1926. Serial No. 105,652.

While adapted for general use where the inhalation of screened and purified air is a desideratum, my respiratory apparatus is designed especially as protective means for the use of furriers and others handling and working on fur goods,—the object being, primarily, to insure the elimination of hair, dust, microbes, germs and other possible contaminations of air prior to inhalation, and, secondary, to purify the filtered air by contact with charcoal which acts as a disinfectant and as an absorbent of chemical impurities in the atmosphere involved, all as hereinafter fully set forth; the invention consisting essentially in the specific construction, combination and arrangement of the component parts of the apparatus described and claimed, whereby the above named results and other incidental advantages are attained.

In the accompanying drawings I illustrate a practical embodiment of the essential features of my invention in a respirator designed primarily for the use of furriers, although I do not limit myself to such use exclusively, nor to the identical construction and arrangement of component parts shown by way of exemplification, since changes may be made in minor details, and equivalent mechanical expedients resorted to, with like results, and without departing from the spirit and intent of my invention in this respect.

With this understanding:—

Fig. 1 may be designated as a perspective view illustrating the positioning of my respirator on the head of a user;

Fig. 2 is a perspective view of the nose guard and supporting band;

Fig. 3 is a perspective view of the cranial suspender, filter boxes, etc.;

Fig. 4 is a broad-side elevation, full size, of one of the perforate filter boxes;

Fig. 5 is a narrow side elevation thereof;

Fig. 6 is a section taken upon plane of line 6—6, Fig. 4;

Fig. 7 is a broad-side elevation of one of the filter boxes with the cover removed, with the charcoal contents removed in part;

Fig. 8 is a detail view of one of the filter box partitions.

The nose guard G, is formed of chamois leather or other suitable soft pliable material, and is provided with a stiffener g, imbedded therein to straddle the bridge of the nose of the wearer. The said nose guard G, is held on the head of the wearer by an elastic supporting band g', provided with an adjustive buckle g^2, and with a pad g^3, for the back of the head,—the side members of the band g', being designed to rest on the ears of the wearer behind the helixes thereof, as indicated in Fig. 1, of the drawings.

F, F, are the filter boxes, shown in full size detail in Figs. 4 to 8 inclusive. To each of these boxes F, F, is pivotally attached a yoke Y, having a medial suspender rod y, which is slidably supported in a frictional sleeve s, on one extremity of the cranial suspender S, designed to straddle the head of the wearer as illustrated in said Fig. 1, of the drawings, the filter boxes F, F, being thus positioned against the cheeks of the wearer.

The filter boxes F, F, are connected with the nose guard G, below the nostril portions thereof by means of ducts D, each duct consisting of a medial pipe section d, provided with rubber coupling tubes d', d', by which it is attached to a filter nipple f, at one extremity and to a nose guard nipple g^4, at the other extremity.

Drain tubes d^x, for the reception of condensed moisture resultant from exhalation, are connected with the medial pipe sections of the ducts D, as shown in Figs. 1 and 2, said drain tubes d^x, being provided with removable end closures as indicated.

The outer or base plate f', of each filter box F, is perforated, and is formed with a central perforated cylindrical partition f^c, for the inlet and outlet of air, the removable disc partition f^3, being also perforated for the same purpose. f^4, is an imperforate back cover plate for the retention of the charcoal filling c, within the compartment between it and the partition disc f^3, as shown more particularly in Fig. 6, of the drawings. f^5, is a reticulated screen which is interposed between the charcoal c, and the filter nipple f, as illustrated in Figs. 6 and 7, of the drawings.

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

A respirator of the character designated

comprising a nose guard and elastic supporting head band provided with an adjustive buckle and rear head pad, perforate filter boxes, ducts connecting said filter boxes with said nose guard, drain tubes pendent from said ducts, each filter box being formed with a central perforate tubular air inlet, with a perforate partition and an imperforate cover and containing a charcoal filling, a reticulated screen interposed between the said charcoal filling and the duct-connection with the nose guard, a cranial suspender and means for adjustably supporting said filter boxes thereon, substantially in the manner and for the purpose set forth.

LEO KAUFMAN.