(No Model.)

J. E. LEE.

INHALER.

No. 491,778. Patented Feb. 14, 1893.

FIG. 2.

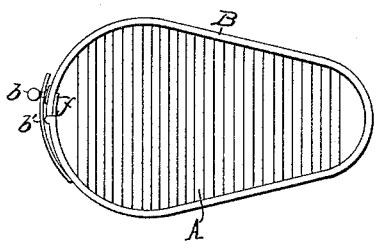


FIG. 3.

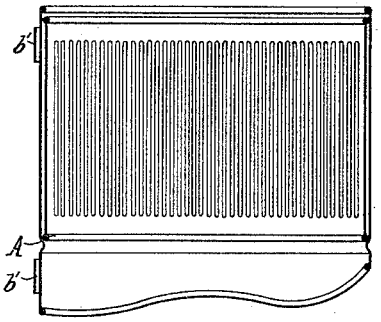
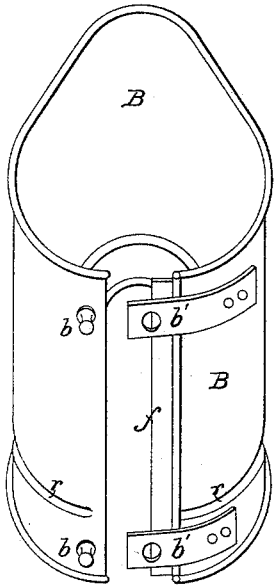


FIG. 1.



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JOHN ELLWOOD LEE, OF CONSHOHOCKEN, PENNSYLVANIA.

INHALER.

SPECIFICATION forming part of Letters Patent No. 491,778, dated February 14, 1893.

Application filed November 8, 1892. Serial No. 451,336. (No model.)

To all whom it may concern:

Be it known that I, JOHN ELLWOOD LEE, a citizen of the United States, and a resident of Conshohocken, Montgomery county, Pennsylvania, have invented an Improvement in Inhalers for Anæsthetics, of which the following is a specification.

My invention consists more especially of certain improvements in the construction of that class of inhalers, which are known to the surgical profession under the name of the Allis ether inhaler. The Allis ether inhaler consists of a wire or slotted metal frame of an oval shape, having woven in through the slots or between the wires a strip of bandage material to form the evaporating surface for the ether or other anæsthetic, and this frame has heretofore been usually inclosed in a strip of stout india-rubber or leather, laced together at the meeting edges, and making a cover for the frame to form the mask. When in use the ether is poured on this bandage, which forms in effect an artificial sponge.

My invention has more particular reference to the inclosing piece or cover for this "artificial sponge." In the Allis inhaler there are two objections to the leather or rubber cover, first, that it cannot be quickly opened for the insertion or removal of the bandage frame or quickly closed, and secondly, it cannot be readily cleansed. I meet these difficulties by making the inclosing piece or cover, which forms the mask, of resilient material bent into shape and provided at the meeting edges with a catch or catches, by which means the bandage frame can be readily inserted and withdrawn from the inclosing piece, and the latter can also be readily cleansed.

In the accompanying drawings, Figure 1 is a perspective view of my improved inclosing piece for the bandage frame showing the resilient cover in the open position, before the bandage frame has been put in place. Fig. 2 is a plan view showing the cover in the closed position and containing the bandage frame: Fig. 3 is a vertical section corresponding to Fig. 2.

The bandage frame or "artificial sponge" A, as it has been termed, may be of any ordinary or suitable construction, and in itself forms no part of my present invention. The cover B is made of spring sheet metal, hard rubber or celluloid or equivalent resilient material of such a character and in such a way that when free to do so, it will tend to spring open, as illustrated in Fig. 1 for the ready insertion or withdrawal of the bandage frame or "artificial sponge." This cover piece is bent around to the usual oval shape, and as illustrated in Fig. 3, has those edges which are to be fitted to the face of the patient, curved to correspond more or less with the curves of the nose, cheek and chin of the human face. I prefer to have the split side of my inclosing casing or cover at the larger end of the oval, as shown in Fig. 1, and I there provide one or more spring catches of any suitable construction. In the drawings I have illustrated the catches as consisting of buttons *b* on one edge, adapted to engage with corresponding perforated tabs *b'* on the other edge when the two edges of the resilient cover B are brought together. A flange *f* on one edge at the same time engages with the underside of the opposite edge. I wish it to be understood however that any other or convenient form of catch may be employed. I prefer to form at a suitable point in the body of this cover, especially if of metal, an internal rib *r*, extending around the cover at a suitable point for the support of the bandage frame A, when the latter is in position and the cover B has been closed, as shown in Figs. 2 and 3.

I claim as my invention:—

1. An inhaler for anæsthetics, consisting of a bandage frame and an inclosing piece or cover of resilient material, with a catch or catches at the meeting edges, substantially as described.

2. An inhaler for anæsthetics, consisting of a bandage frame and an inclosing piece or cover therefor, of resilient material with a catch or catches at the meeting edges, the body of the inclosing piece having an internal rib for the support of the bandage frame, substantially as described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

JOHN ELLWOOD LEE.

Witnesses:
EDITH J. GRISWOLD,
HUBERT HOWSON.