V. F. MARSHALL.

ANESTHESIA MASK.

APPLICATION FILED OCT. 13, 1909.

955,821. Patented Apr. 19, 1910.

FIG. 1.

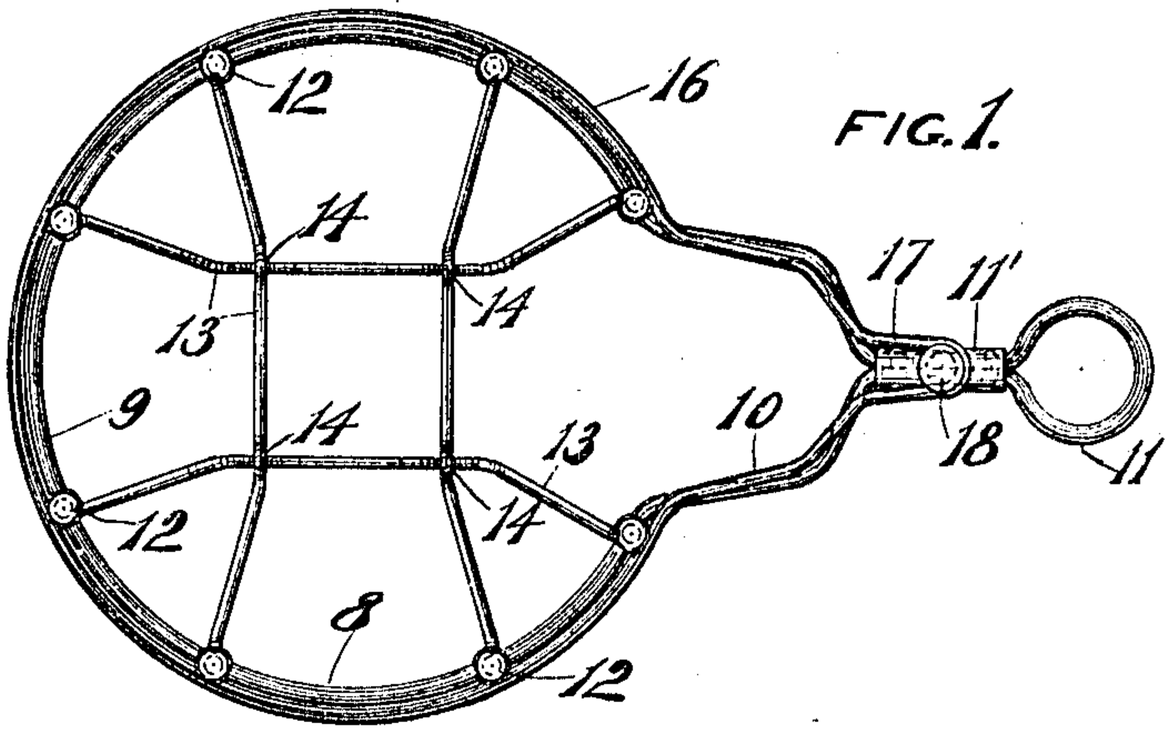


FIG. 2.

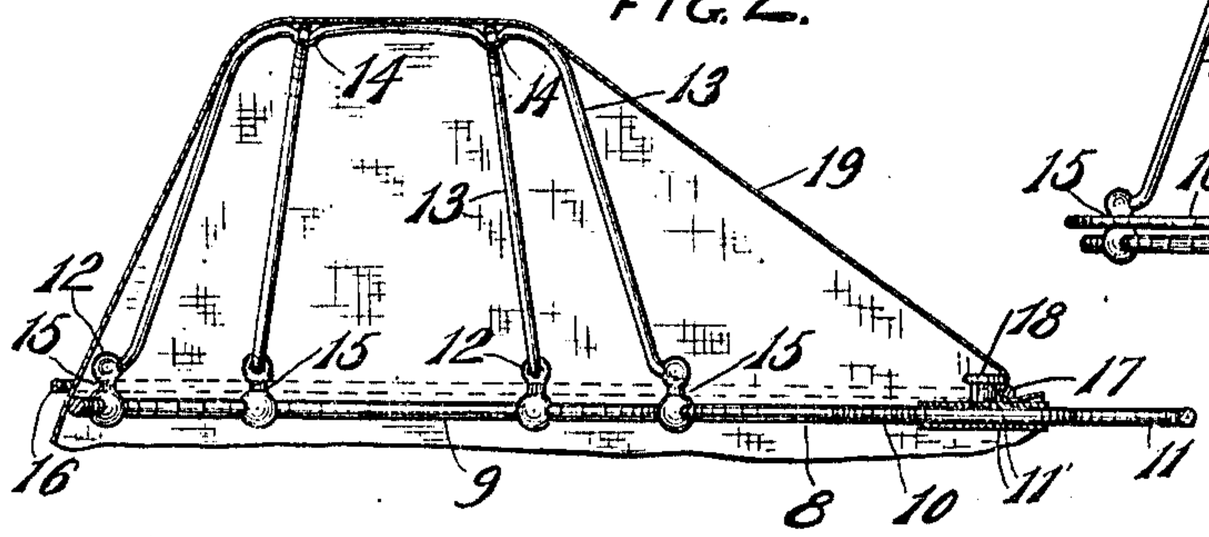


FIG. 3.

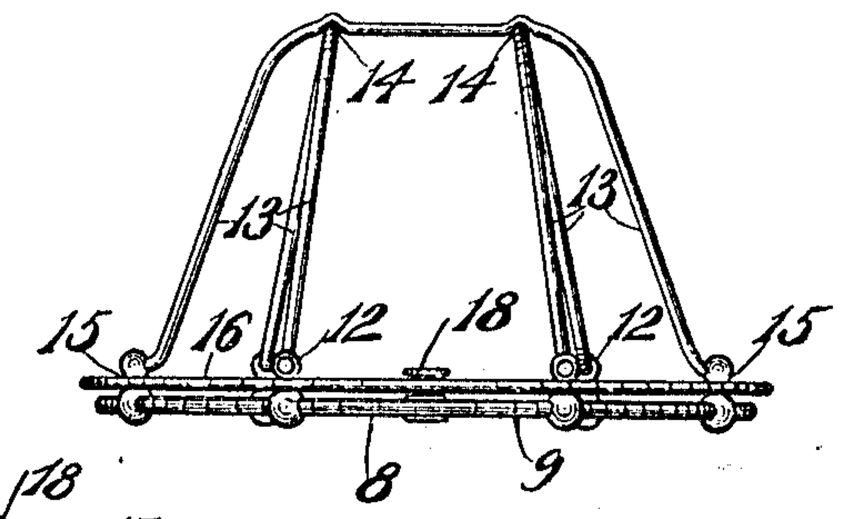


FIG. 4.

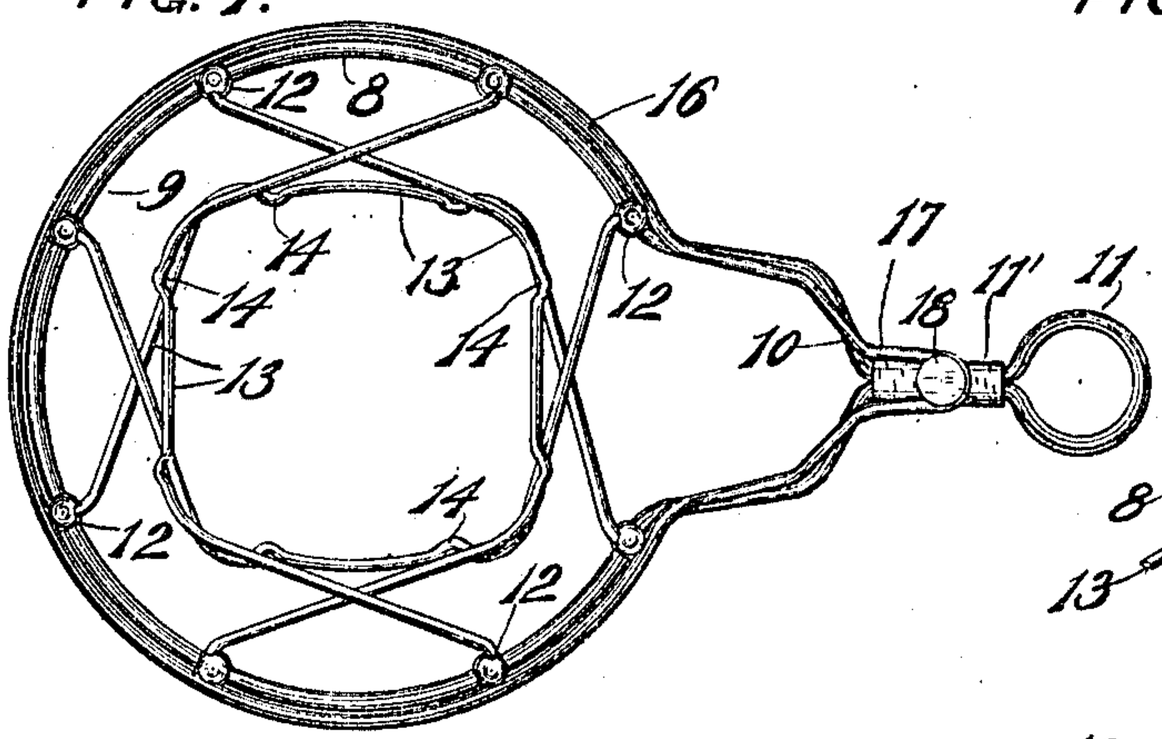


FIG. 6.

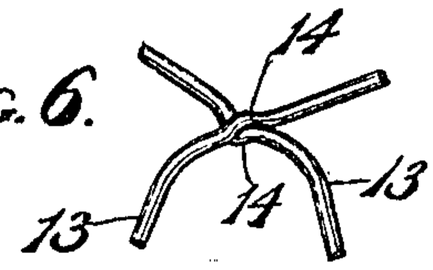


FIG. 7.

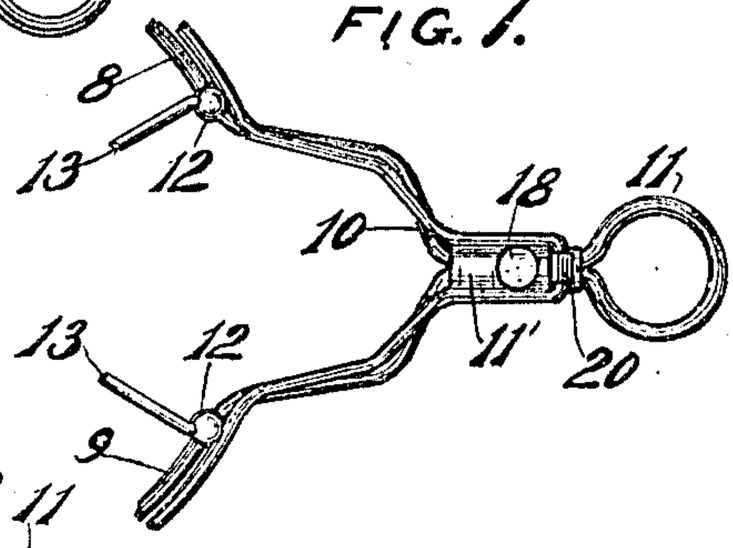
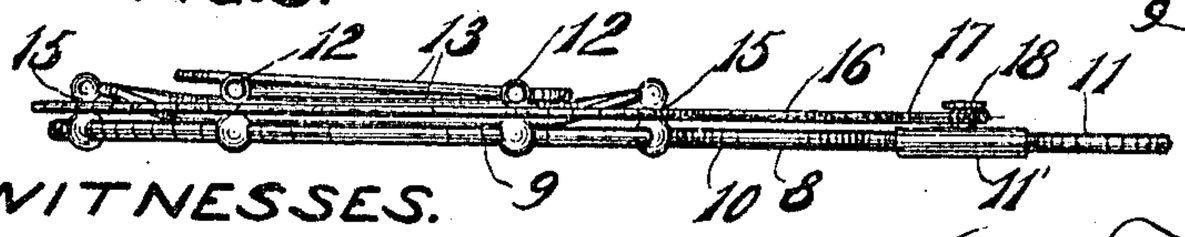


FIG. 5.



WITNESSES.

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UNITED STATES PATENT OFFICE.

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ANESTHESIA-MASK.

955,821. Specification of Letters Patent. Patented Apr. 19, 1910.

Application filed October 13, 1909. Serial No. 522,427.

To all whom it may concern:

Be it known that I, VICTOR F. MARSHALL, residing in Appleton, in the county of Outagamie and State of Wisconsin, have invented new and useful Improvements in Anesthesia-Masks, of which the following is a description, reference being had to the accompanying drawings, which are a part of this specification.

This invention relates to improvements in anesthesia masks for administering anesthetics for surgical and dental purposes.

One of the objects of this invention is to provide an apparatus of the character described which is simple in construction and is efficient in use and which may be folded into small compass to be carried in the ordinary surgical and obstetric bags without occupying considerable space.

A further object of the invention is to provide an anesthetic mask frame with means for easily, conveniently and removably connecting the cloth or covering thereto.

With the above, and other objects in view, the invention consists of the anesthetic mask, its parts and combinations and all equivalents thereof.

In the accompanying drawing in which the same reference characters indicate the same parts in the several views; Figure 1 is a plan view of the complete frame of the improved mask shown in open position and with the cover removed; Fig. 2 is a longitudinal sectional view thereof, with the cover in position; Fig. 3 is an end elevation thereof; Fig. 4 is a plan view of the anesthetic mask frame in a folded or collapsed position; Fig. 5 is a side view thereof in folded position; Fig. 6 is an enlarged fragmentary detail view of the crossed wires in locking position; and, Fig. 7 is a fragmentary plan view of a modified form.

Referring to the accompanying drawing the numeral 8 indicates the base frame of the mask which consists of the mouth portion 9, the nose portion 10 and the handle 11. The base frame is formed of wire bent in circular shape with an offset portion to accommodate the nose of the patient and having a looped extension from the nose portion to form the handle. A band 11′ surrounds the handle extension to hold the adjacent portions of the wire together and to reinforce the same.

The mouth portion of the base frame is provided with upstanding lugs 12 spaced, substantially, equi-distances apart to which are pivotally connected hoops 13 formed of wire. Four of these hoops are connected to the frame, two of which extend longitudinally of the frame and the other two transversely thereof, and when in open position the transverse hoops extend across and over the longitudinal hoops and are held in locked position by means of registering notches 14 formed in all of the hoops at the points of intersection of the hoops. While these notches are formed in the hoops by bending the wires to form half loops it is obvious that they may also be formed by recessing the hoops without bending. The upstanding lugs 12 are reduced in diameter between the base frame and the connection of the hoops thereto to form locking recesses 15 to hold a cover securing ring 16 in locked engagement therewith. This cover ring is formed of wire bent in a shape similar to the base frame and is provided with a looped extension 17 adapted to fit over a button 18 projecting upwardly from the band 11′. The cover 19 formed of cloth or other material is adapted to extend over the wire hoops and the edges thereof are interposed between the cover ring and the upstanding lugs and securely held in position.

In the modified form shown in Fig. 7 the cover securing ring is connected to the band 11′ of the handle by a loop 20, positioned a short distance from the button, to form a hinge joint to prevent the complete separation of the parts.

The base frame is formed to cover the mouth and nose of the patient and fit the face closely in order to get the full effect of the anesthetic dropped on the cover.

In use the hoops are swung upwardly until the notched portions of the transverse hoops are in register with the notched portions of the longitudinal hoops, the engagement of the notched portions serving to hold the hoops securely locked against accidental displacement. The cover is then placed over the hoops and drawn down over the upstanding lugs and the cover ring is placed over the button and then snapped over the cover and lugs into the locking recesses of the lugs. When it is desired to close or fold the mask, the notched portions of the hoops are disengaged from each other and the hoops are folded down and over each other with the cloth and into the mouth por-

tion of the base frame and thus form a very flat compact article which will occupy but a minimum amount of space.

From the foregoing description it will be seen that the mask is very simple in construction and operation and when not in use may be folded into very small compass.

What I claim as my invention is:

1. An anesthesia mask, comprising a base frame, cover supporting members pivotally connected to said frame, some of said members being positioned to intersect other of said members, means formed by bent portions of the members for locking the members together at the points of intersection, and means for removably connecting a cover to the frame.

2. An anesthesia mask, comprising a base frame, cover supporting members pivotally connected to said frame, some of said members being positioned to intersect other of said members, said members provided with engaging recesses at the points of intersection of the members to lock said members together in open position, and means for removably connecting a cover to the frame.

3. An anesthesia mask, comprising a base frame provided with upstanding lugs, hoop members pivotally connected to some of said lugs and positioned longitudinally with relation to said frame, other hoop members pivotally connected to the other lugs and extending transversely across said frame and intersecting the first mentioned hoop members, said hoop members provided with engaging recesses at the points of intersection of the members to lock said members together in open position, and a ring for removably connecting a cover to the frame.

4. An anesthesia mask, comprising a base frame provided with upstanding lugs, hoop members pivotally connected to some of said lugs and positioned longitudinally with relation to said frame, other hoop members pivotally connected to the other lugs and extending transversely across said frame and intersecting the first mentioned hoop members, said hoop members provided with engaging recesses at the points of intersection of the members to lock said members together in open position, and a ring connected to the frame and constructed and adapted to be swung over the lugs to secure a cover to the frame.

5. An anesthesia mask, comprising a base frame provided with upstanding recessed lugs and with an extension provided with a button, hoop members pivotally connected to said lugs and provided with engaging recesses, some of said members positioned to intersect other members at the points of location of the recesses to lock said members together in open position, and a ring connected to the frame by means of the button adapted and constructed to be swung over the lugs and engage the recessed portions thereof to secure a cover to the frame.

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

VICTOR F. MARSHALL.

Witnesses:
IRVING J. HERRICK,
WILLIAM C. PIERCE.