

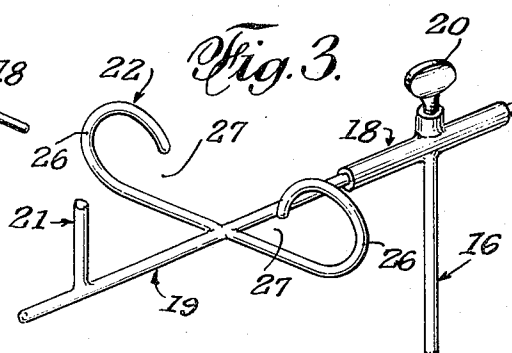
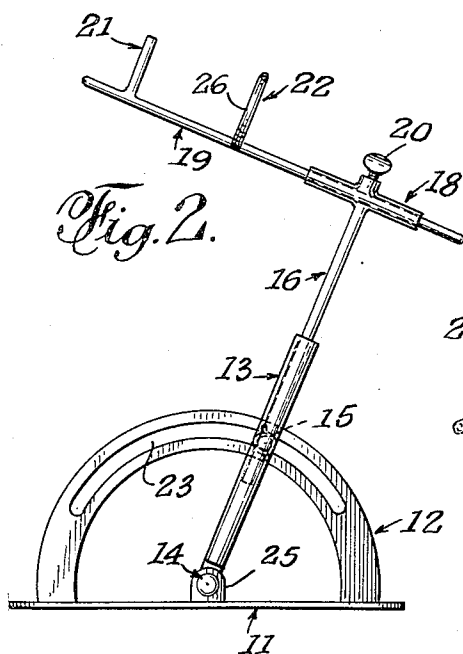
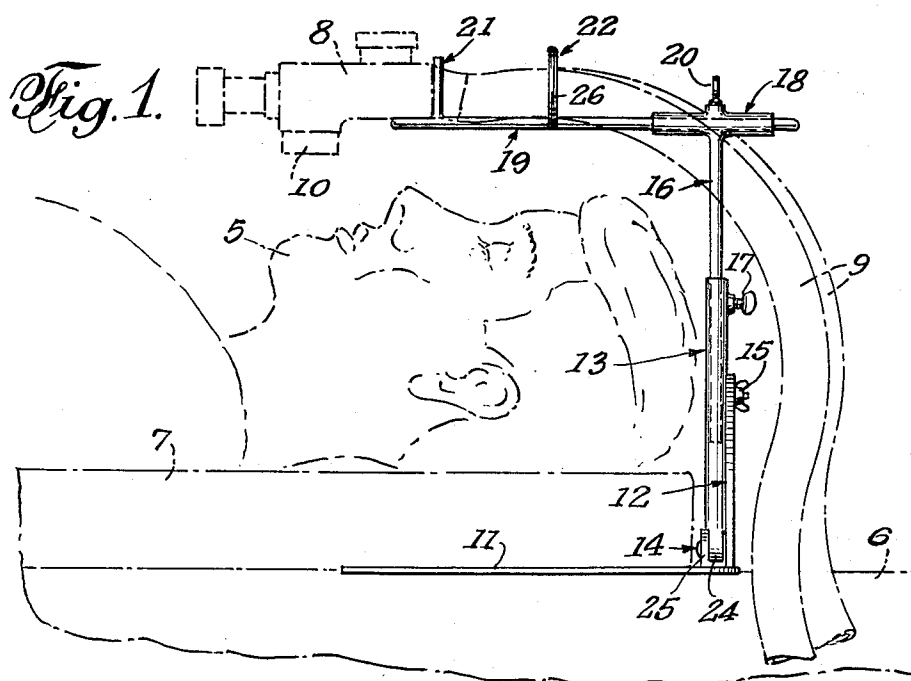
Dec. 6, 1960

G. L. COLLIER ET AL

2,963,247

SUPPORT FOR ANAESTHESIA APPLIER

Filed Jan. 11, 1960



INVENTORS
GEORGE L. COLLIER
MILTON A. YARNELL
BY *C. F. Stratton*
ATTORNEY

1

2,963,247

SUPPORT FOR ANAESTHESIA APPLIER

George L. Collier, 1701 Country Club Drive, and Milton A. Yarnell, 1521 Haley St., both of Bakersfield, Calif.

Filed Jan. 11, 1960, Ser. No. 1,737

7 Claims. (Cl. 248—81)

This invention relates to a support for an anaesthesia applying nozzle.

The positioning, relative to the patient, of a nozzle for administering gaseous anaesthetics has, in the past, depended largely on clamps, adhesive tape and other such items for obtaining some measure of a dependable location of the nozzle. Since such a nozzle is fed, to its inhalation valve, by two flexible hoses, difficulty is frequently encountered in achieving not only a firm location of the nozzle but also such tying down of said hoses as to insure non-displacement of the nozzle while in use. When it is borne in mind that it may be required to direct the nozzle either straight down or at variable angles for efficient administering of anaesthetic gases, it will be realized that prior support methods were not only not safe and efficient but were inordinately time consuming in set up.

An object of the present invention to provide a support for an anaesthetic nozzle and feed hoses that efficiently overcome the above mentioned faults.

Another object of the invention is to provide a support device of the character referred to that is capable of substantially universal adjustability to hold an anaesthetic nozzle and hoses in proper operative position without the need for temporary aids, such as clamps, adhesive tape, tie strings, etc.

Our invention also has for its objects to provide such means that are positive in operation, convenient in use, easily installed in a working position and easily disconnected therefrom, economical of manufacture, relatively simple, and of general superiority and serviceability.

The invention also comprises novel details of construction and novel combinations and arrangements of parts, which will more fully appear in the course of the following description and which is based on the accompanying drawing. However, said drawing merely shows, and the following description merely describes, one embodiment of the present invention, which is given by way of illustration or example only.

In the drawing, like reference characters designate similar parts in the several views.

Fig. 1 is a side elevational view of a support for an anaesthesia applier according to the present invention, the same being shown in one position of use.

Fig. 2 is a front elevational view of said support, showing various adjusted positions of the components thereof.

Fig. 3 is an enlarged perspective view of the upper portion of said support.

Fig. 1 shows a patient 5 in position on a pallet, bed or table 6 with a pad or the like 7 on said member 6. Said Fig. 1 also shows an anaesthesia administering nozzle 8, also called an inhalation valve, and the two hoses 9 that supply gas to the nozzle. The nozzle is forked at its inlet end and the hoses have a side-by-side position and connect to the ends of the fork or bifurcation of the nozzle. The above is a general description of a conventional administering nozzle and it will be realized that, for efficient administering of anaesthesia therefrom, the

2

outlet 10 of said nozzle should be securely located in desired position relative to the patient on the member 6.

The present support comprises, generally, a preferably flat base plate 11, an arcuate member 12 at one end of plate 11 and disposed normal thereto, a tubular standard member 13 carried by a pivot 14 by the plate 11 and in proximate, parallel relation to the arcuate member 12, a screw 15 for adjustably locking the angle of member 13 by clamping the same to the member 12, a rod 16 telescopically fitted into the tubular member 13, a screw 17 carried by the member 13 to lock the adjusted position of rod 16 both as to the degree of its extension from tubular member 13 and the rotational position relative to the latter member (compare Figs. 1 and 2), a transverse tubular portion 18 on the end of rod 16, a support rod 19 telescopically fitted in the socket 18, a screw 20 carried by said portion 18 to lock the adjusted position of support rod 19 both as to its degree of extension from one end of portion 18 and the rotational position relative to the latter portion, a locating pin extension 21 adjacent the end of rod 19 that is remote from the tubular portion 18, and hose-engaging members 22 on said rod 19 between said pin 21 and where the same is engaged in tubular portion 18.

As can be seen from Fig. 1, the base plate 11 is thin and flat, and, therefore, adapted to be inserted endwise between the table 6 and pad 7 or between any two such superimposed members. When so positioned, the plate 11 retains its place especially due to the weight of the patient on the member 7. Said plate is preferably rectangular but may have other outline shapes.

The arcuate member 12 comprises a flat element formed to have a semi-circular shape, the same being brazed or otherwise, fixedly secured to plate 11. An arcuate adjustment slot 23 is formed in said member, although such a slot may be replaced by a series of apertures for the same purpose.

The tubular member 13 is formed with an ear 24 that is apertured for the pivot 14. The latter is carried by fixed ears 25 on the plate 11 in such position that the member 13 is contiguous to the arcuate member 12.

The screw 15 is shown as a wing or thumb screw that passes through the slot 23 and is threadedly engaged with the member 13 to clamp the members 12 and 13 to hold the pivotal adjustment of member 12. Thus, without disturbing the position of base plate 11, the tubular member may be adjusted to be normal to said plate or have a variety of angular positions, one of which is shown in Fig. 2.

The rod 16 assumes the angle of tube 13 in addition to the telescopic and rotational adjustment thereof, as locked by screw 17.

While the rod 19 is indicated as having a round cross-section, the same may have a polygonal cross-section, hexagonal, for instance, or the same may be otherwise provided with flats that are engaged by the screw 20 to firmly hold the rod 19 against accidental rotation in use.

The locating pin 21 is here used to fit the bifurcation in the nozzle 8, thereby insuring that the latter can have but one position on the support rod 19. It will be clear that pin 21 is exemplary of means on the rod 19 for so engaging a nozzle 8 as to locate the same against accidental displacement.

The hose-engaging members 22 are shown as fixed open loops 26 that extend crosswise of the rod 19, are arranged to be above said rod, and are integrally formed on said rod. Each loop 26 has an opening 27 of such size that the hoses 9 may be laterally directed into the loops and held thereby. This is accomplished by manually flattening the hoses, slipping them past the openings 27, and allowing the same to spring back to their

normally-round tubular form after they have entered the loops 26.

It will be noted that the hoses cannot slip from the loops 27 even if they should somehow be flattened, the rod 19 as well as the rod 16 constituting separation means that keeps the hoses on opposite sides of the support, yet said hoses cooperate to locate the nozzle 8 in the position thereof, as located by pin 21.

While we have illustrated and described what we now contemplate to be the best mode of carrying out our invention, the construction is, of course, subject to modification without departing from the spirit and scope of our invention. Therefore, we do not wish to restrict ourselves to the particular form of construction illustrated and described, but desire to avail ourselves of all modifications that may fall within the scope of the appended claims.

Having thus described our invention, what we claim and desire to secure by Letters Patent is:

1. A support for the nozzle and hoses of an anaesthesia administering device, said support comprising a thin flat base plate, angularly adjustable and extensible means extending from said plate adjacent an end thereof, a support member telescopically carried by said means, said member being provided with a nozzle-locating element and a pair of oppositely arranged open loops to encircle the hoses adjacent to the nozzle.

2. A support according to claim 1 in which the angularly adjustable and extensible means comprises, an arcuate member affixed to the base plate, and means to secure said means to said member at an adjusted angle relative to the base plate.

3. A support according to claim 1 in which the openings in the loops are on the sides thereof toward the support member.

4. In a support for the nozzle and hoses of an anaesthesia-administering device in which the nozzle has a bifurcation and the hoses extend from said bifurcation in general parallelism, a horizontal support rod, a pin extending normally from said rod inward of an end of the latter and adapted to engage in the bifurcation of the nozzle with the latter disposed upon the rod, and a pair of open loops fixedly carried by said rod between

said pin and the other end of the rod to encircle said hoses.

5. In a support for the nozzle and hoses of an anaesthesia-administering device in which the nozzle has a bifurcation and the hoses extend from said bifurcation in general parallelism, a horizontal support rod, a pin extending normally from said rod inward of an end of the latter and adapted to engage in the bifurcation of the nozzle with the latter disposed upon the rod, and a pair of open loops fixedly carried by said rod between said pin and the other end of the rod to encircle said hoses, said loops being disposed one on each side of the support rod.

6. In a support for the nozzle and hoses of an anaesthesia-administering device in which the nozzle has a bifurcation and the hoses extend from said bifurcation in general parallelism, a horizontal support rod, a pin extending normally from said rod inward of an end of the latter and adapted to engage in the bifurcation of the nozzle with the latter disposed upon the rod, and a pair of open loops fixedly carried by said rod between said pin and the other end of the rod to encircle said hoses, said loops being disposed one on each side of the support rod, and the openings in said loops being on the side thereof toward the support rod.

7. In a support for the nozzle and hoses of an anaesthesia-administering device in which the nozzle has a bifurcation and the hoses extend from said bifurcation in general parallelism, a horizontal support rod, a pin extending normally from said rod inward of an end of the latter and adapted to engage in the bifurcation of the nozzle with the latter disposed upon the rod, and a pair of open loops fixedly carried by said rod between said pin and the other end of the rod to encircle said hoses, said loops being disposed one on each side of the support rod, and disposed to be above the support rod, and the openings in said loops being on the side thereof toward the support rod.

References Cited in the file of this patent

UNITED STATES PATENTS

831,728	Manfield	Sept. 25, 1906
1,895,036	Haughey	Jan. 24, 1933