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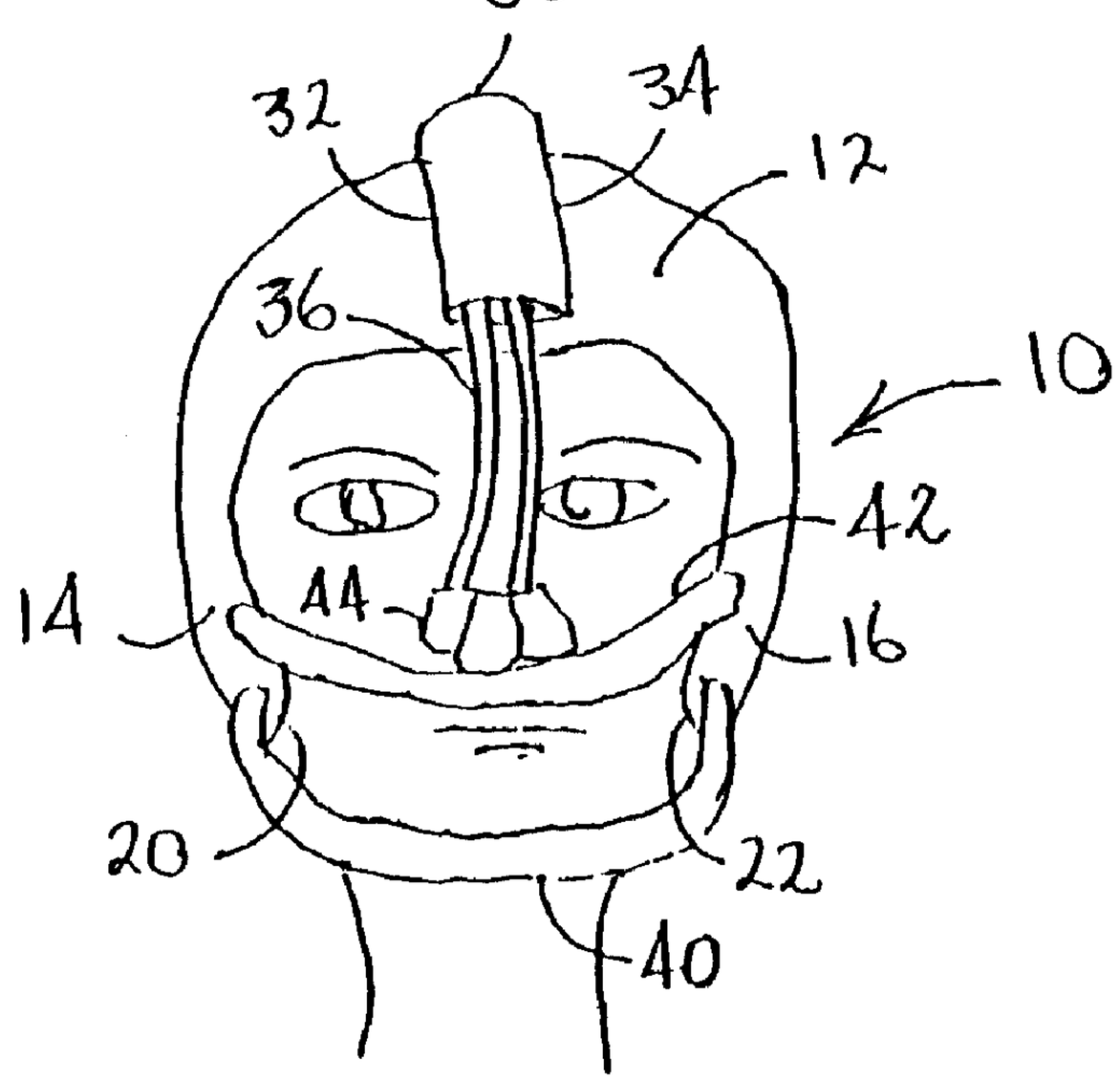
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(54) Titre : BONNET PERMETTANT D'Y FIXER UN TUYAU SOUPLE ET UNE BUSE
(54) Title: NOZZLE- AND HOSE-SECURING BONNET



(57) Abrégé/Abstract:
The bonnet I designed is for a C.P.A.P. (Continuous Positive Airway Pressure) machine. The headgear, which came with this unit did not hold the headgear in place and fell off when in use. My bonnet holds the airhose solidly on top of the head. It has a chin strap and also a nose strap, which assures perfect control of the nose pillows while sleeping and comfort and security for the wearer.

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Abstract according to section 79

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application no.2 393 900

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This invention relates to bonnets for medical purposes and more particularly to a bonnet which secures a hose running from a source of fluid such as air or oxygen to a nozzle attached to a patient's nose.

Patients who require a supply of gases such as oxygen or air frequently receive such gases through hoses which run from a source of such gases to nozzles or nose-pieces which are inserted directly into the noses of the patients. The source of gas may be a breathing apparatus or a nasal CPAP machine.

The patients may be comatose or asleep and should the nozzles accidentally fall off, the patient will suffer as a result There are various ways of attaching the nozzle so that it does not separate from a wearer unless it is intentionally removed. The usual way of doing so is by means of straps which encircle the wearer's head and which are attached to the nozzle and to the hose which runs from the nozzle to the source of oxygen or air.

A shortcoming of such straps is that they tend not to remain in the required position should the patent toss or turn or roll over onto the nozzle. The nozzle frequently separates from the patient's nose when this happens with resulting dire consequences for the patient.

I have invented a bonnet to which the hose which run from a source of air or oxygen to a nozzle is attached. The bonnet is close-fitting and has straps which extend beneath the nose of the wearer of the bonnet in order to hold the nozzle in position. The bonnet serves to attach the nozzle firmly to the patient's nose and to hold it there even though the patient may toss or turn

while he is wearing it or even though he may roll over onto the nozzle.

In summary, the bonnet of my invention is close-fitting and serves to secure a hose running from a source of fluid to a nozzle attached to the nose of a wearer. The bonnet has a top portion which covers the top of the wearer's head, and a pair of side portions which extend downwardly from either side of the top portion across the wearer's ears and which terminate at edges beneath the ears. The bonnet comprises: a flap attached to the top portion of the bonnet and which extends from the back to the front of the wearer's head. The flap has a side which detaches to permit insertion of the hose under the flap and which reattaches to secure the hose to the bonnet. The bonnet also has first and second straps which are removably attached and which extend between the side portions. The first strap is adapted to extend under the wearer's chin in order to secure the bonnet to the wearer's head. The second strap is adapted to extend under the nose of the wearer in order to secure the nozzle to the wearer's nose.

The bonnet of the invention is described with reference to the accompanying drawings in which:

Figure 1 is an elevation of the bonnet from the front in conjunction with hoses which run a source of air or oxygen and a nozzle; and

Figure 2 is an elevation of the bonnet from the side, also in conjunction with a hose and a nozzle

Like reference characters refer to like parts throughout the description of the drawings.

With reference to the Figures, the bonnet, generally 10 is generally close-fitting to the head and has a top portion 12, a pair of side portions 14, 16 and a back portion 18. The top portion covers the top of the wearer's head while the side portions extend downwardly from either side of the top portion, across the wearer's ears and terminate at edges 20, 22 beneath the ears. The back portion extends downwardly from the top portion and terminates at an edge 24 which is adjacent to the back of the head in the area where the head joins the neck.

A flap 30 is attached to the top portion of the bonnet. The flap extends from the back to the front of the wearer's head and has a side edge 32 which is permanently attached the top portion. The other side edge 34 of the flap is attached to the top portion by means of velcro or other fastening means which permits that edge to be detached from the top portion. The flap can accordingly be opened to permit insertion of hoses 34 under the flap and closed to hold the hoses firmly to the bonnet.

First and second straps 40, 42 extend between the two side portions 14, 16. Each strap has an end which is permanently fastened to side portion 14. The other end of each strap is removably attached to side portion 16 by means of velcro, buttons or the like.

The first strap 40 extends under the wearer's chin in order to secure the bonnet to the wearer's head. The second strap 42 extends under the nose of the wearer in order to secure nozzle or nose-piece 44 to the wearer's nose. Preferably the first strap is composed of velcro so that it attaches and detaches readily. The second straps is also preferably composed of velcro.

The burr or rough side should face upward so that it frictionally engages the nose-piece and holds it firmly to the wearer's nose.

The bonnet is preferably composed of a fabric which is soft, light-weight and absorbent so that it is comfortable to wear. The fabric should also preferably be strong, washable and relatively unstretchable so that it remains firmly attached to the head and does not stretch when it is being washed. Preferably the fabric is composed of cotton.

The bonnet preferably consists of six pieces of fabric: a middle top piece, two side pieces, a top flap and two straps, one for the chin and the other for the nose. The pieces are composed of 100 percent rib knit cotton. One strap is ½ inch in width and the other is 1/4 inch in width.. In addition, a double edged cotton bias tape and a piece of 100 percent non-stretch cotton are required.

To make the bonnet, the middle top and side pieces are sewn together allowing an overlap of 1/4 inch for the seams included in patron. The seams are then trimmed and flattened by means of an iron. The double edged tape is placed over the seams by opening the tape and sewing on both sides of it to obtain a smooth seam. The tape should also be sewn around the edges of the bonnet.

For the chin and nose straps, the fabric is doubled and sewn around the perimeter except for 1 ½ inches. The pieces are then turned inside out and flattened. One end of the nose piece is sewn directly to one side of the bonnet and two pieces of ½ inch velcro are sewn onto the strap,

one in the middle and one piece on the end. The straps should have the smooth side of the velcro. The middle velcro fastens onto the burr of the nose piece of the breathing machine and thus holds the nose-piece securely in place. The chin strap has 1 inch velcro 2 ½ inch long on one end of the strap. The other end is fastened on the bonnet under the nose strap, on the bottom end of the bonnet. The smooth side of the velcro goes on the strap. The burr end is sewn onto the bottom end of the bonnet.

The bonnet flap is made of two pieces of non-stretch cotton (6" x 7"), sewn together and turned. Finished size is 5 ½" x 6 ½". A 6 ½" x 1" velcro piece is sewn, one side for the burr and the smooth other side facing in the opposite direction. This flap is then place on top of the bonnet ½" from the top seam of the bonnet. The burr piece of velcro is then sewn around in order to secure it to the top of the bonnet. The smooth side is not sewn on, it is left loose so that when the pieces of velcro are put together, there is space for the hose of the breathing machine. The velcro serves to holds the hose very snugly and firmly.

It will be understood that modifications can be made in the bonnet illustrated and described herein without departing from the scope and purview of the invention as defined in the appended claim.

I claim:

1. A close-fitting bonnet for securing a hose running from a source of fluid to a nozzle or mouth-piece attached to the nose of a wearer of said bonnet, said bonnet having a top portion which covers the top of the wearer's head, and a pair of side portions which extend downwardly from either side of said top portion across the wearer's ears and which terminate at edges beneath the ears, said bonnet comprising: a flap attached to the top portion of said bonnet and which extends from the back to the front of the wearer's head, said flap having a side which detaches to permit insertion of said hose under said flap and which reattaches to secure said hose to said bonnet; and first and second straps which are removably attached to said bonnet and which extend between said side portions, said first strap adapted to extend under the wearer's chin in order to secure said bonnet to the wearer's head and said second strap adapted to extend under the nose of the wearer in order to secure said nozzle to the wearer's nose.

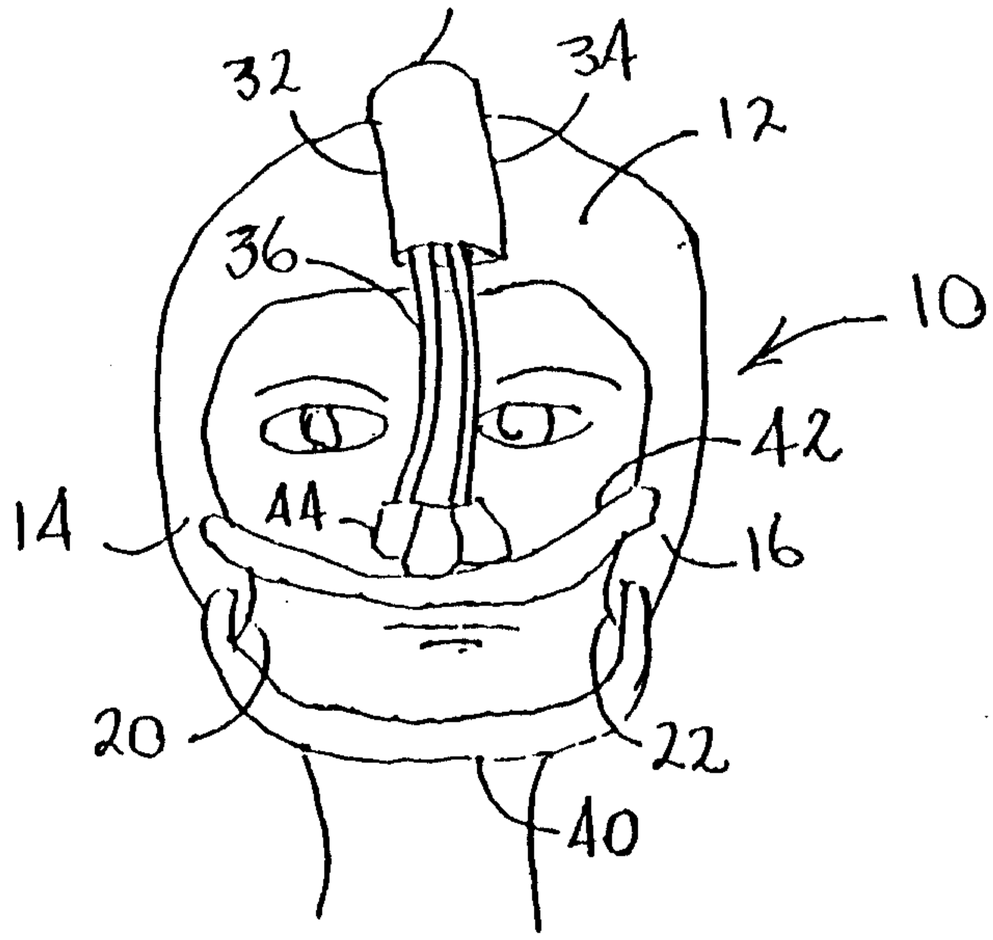


FIG. 1.

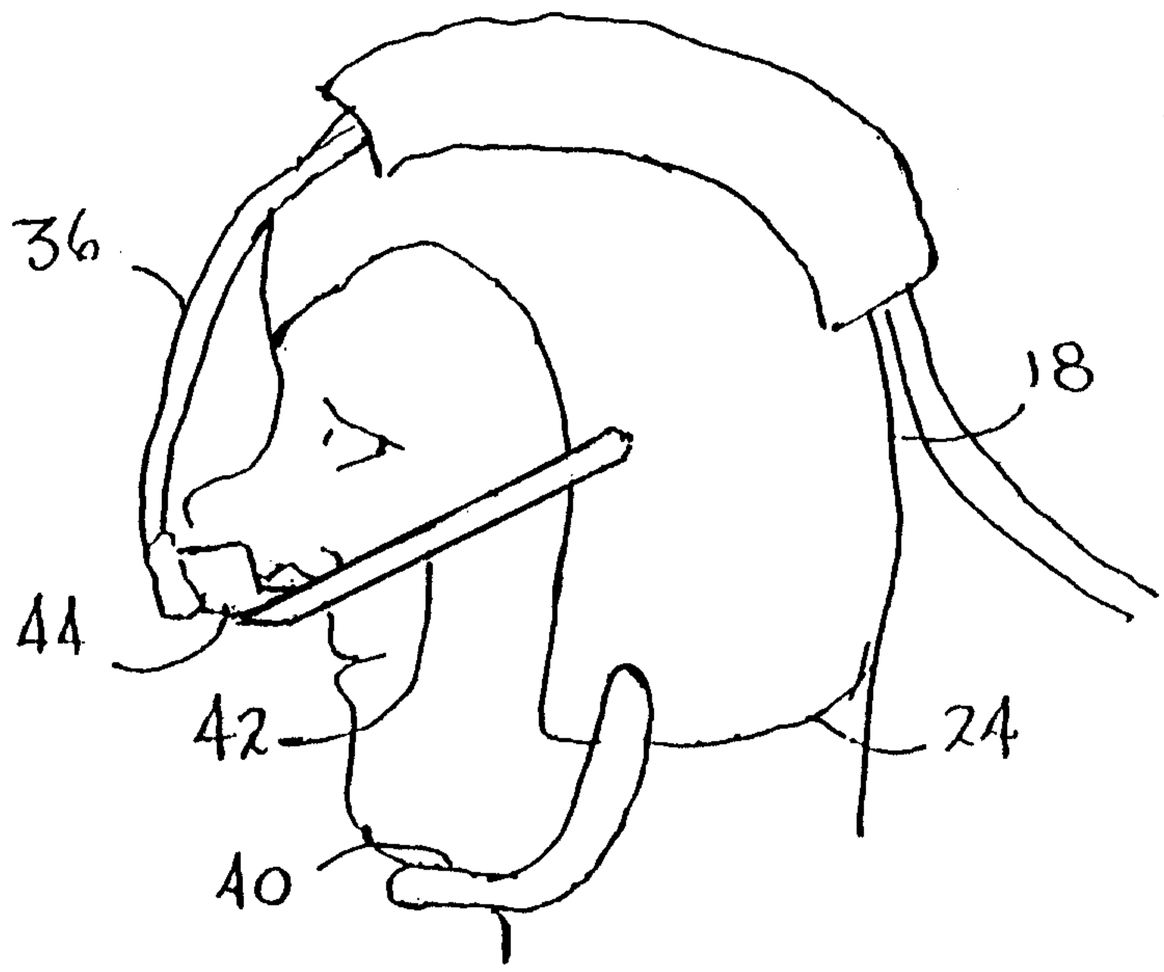
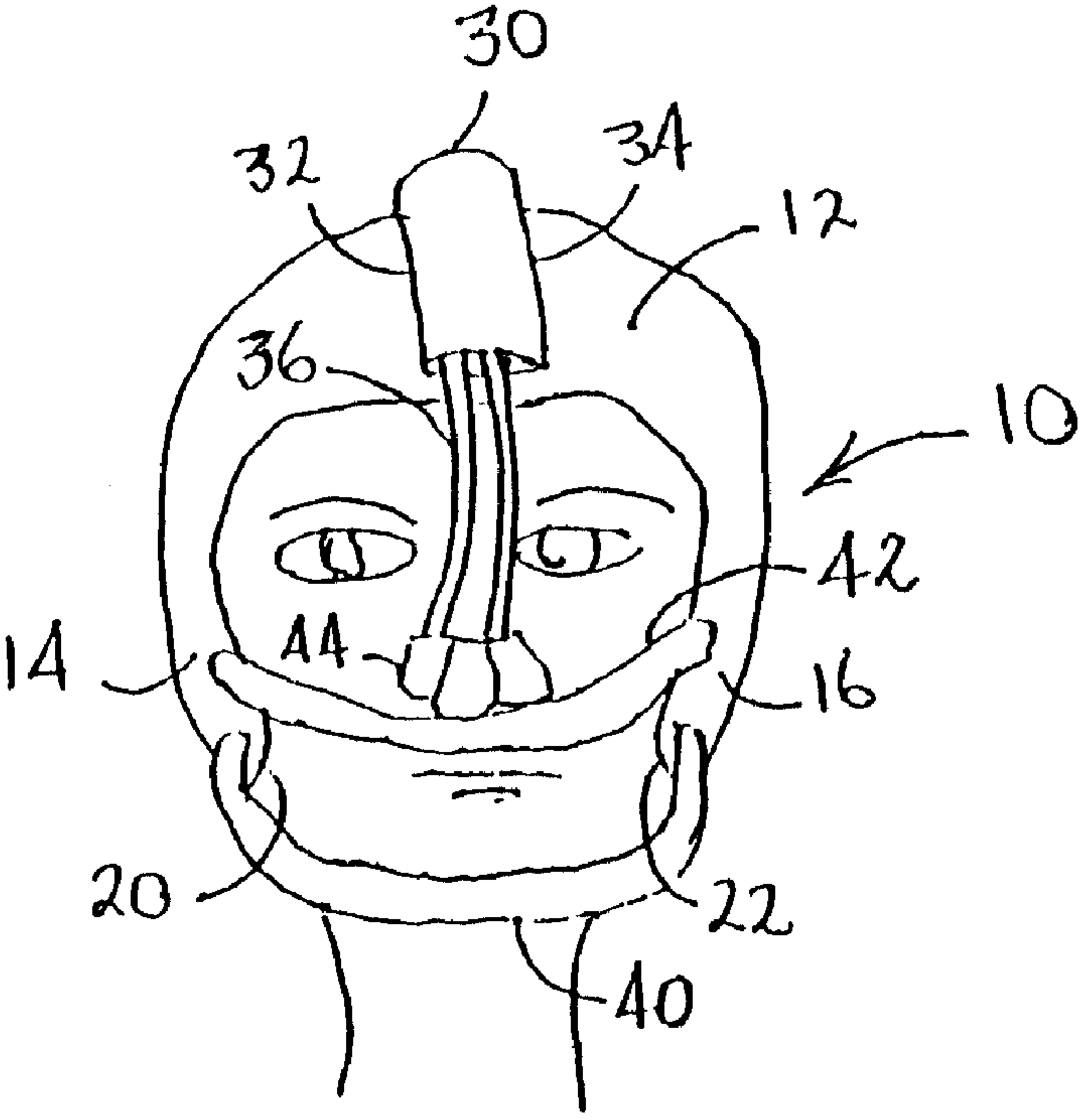


FIG. 2.


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