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MOUTH-TO-MOUTH AND NOSE RESUSCITATION DEVICE

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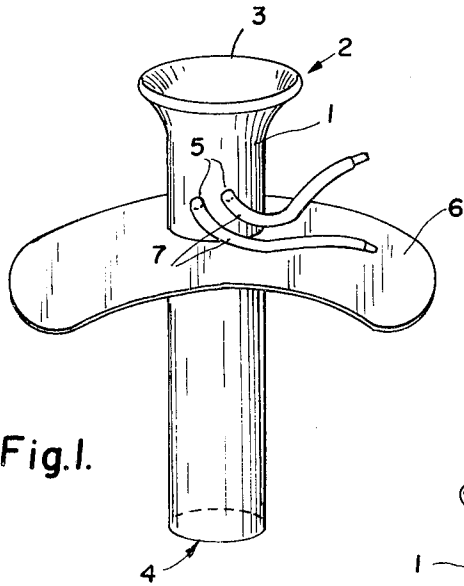


Fig. 1.

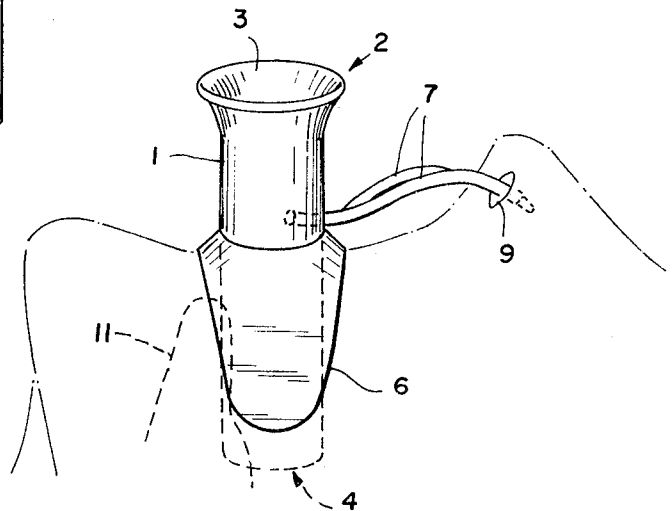


Fig. 2.

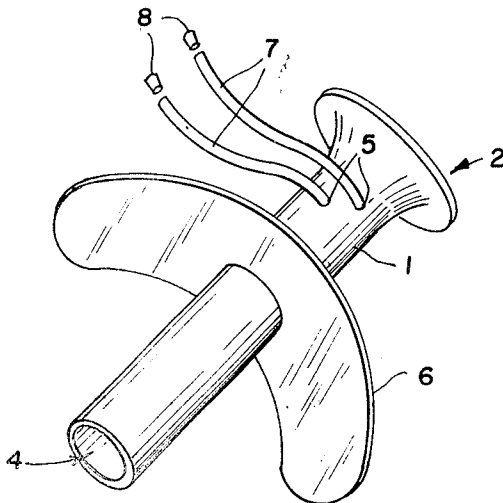


Fig. 3.

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MOUTH-TO-MOUTH AND NOSE RESUSCITATION DEVICE

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5 Claims

ABSTRACT OF THE DISCLOSURE

A resuscitation device having tubes which are placed in the mouth and nostrils of the victim so that a rescuer can quickly and easily blow air into the victim's mouth and nose.

This invention relates to a mouth-to-mouth and nose resuscitation device. More particularly, this invention relates to a resuscitation device which has several interconnecting tubes which are used to breathe into a victim's lungs both through his mouth and through his nostrils.

Even though direct mouth-to-mouth resuscitation has been shown to be a far more effective means of artificial respiration than direct pressure methods, there are several reasons why mouth-to-mouth resuscitation is avoided. There is, of course, a natural aversion to direct mouth contact with a strange person. Frequently the accident also produces blood, foam or other substances around the mouth area of the victim. In addition, same degree of skill and practice is required before a direct mouth-to-mouth technique is effective and so that air does not seep out from the victim's nostrils or from under his lips during the breathing process. A final drawback to using direct means is the possibility of the victim's tongue blocking the air passage making resuscitation impossible.

An object of the present invention is to provide a simple, inexpensive and efficient device which will obviate the above-named disadvantages.

A more specific object of the invention is to provide a device which has tubes to supply air to both a victim's mouth and to his nostrils.

Another important object is to provide a device which can be securely held by the mouth and teeth of the person administering the artificial respiration, especially if he is wearing dental plates which would otherwise be blown out without this device.

Still another object of the invention is to provide a device which can readily be adapted to use on children and infants.

Other objects and advantages will become more apparent from a study of the following description when taken with the accompanying drawing wherein:

FIG. 1 is a perspective view of a resuscitation device which embodies the present invention;

FIG. 2 is a perspective view of the device while in position for use on a victim; and

FIG. 3 is a perspective view of the device showing a modification of the nostril tubes.

Referring more particularly to FIG. 1 of the drawing, main tube 1 has a flared end terminating in a bit portion, generally denoted by numeral 2, which is rounded into lip 3. The other end of the tube has an opening 4 through which air is forced into a victim's mouth and lungs.

A shield 6 is integrally or slidably mounted on main tube 1 at a point which is approximately midway between opening 4 and bit portion 2, and in a preferred embodiment, may be curved away from bit portion 2 so as to fit the contour of the face of the victim.

Both shield 6 and tube 1 are made of plastic or other suitable material which is both strong and flexible. The cost of producing this device is low enough so that it

can be used once and then discarded, thus avoiding the cost and inconvenience of cleaning or sterilizing.

A pair of nostril tubes 7 are connected to main tube 1 through a pair of holes 5 located just below bit portion 2. The other ends of tubes 7 are tapered slightly to permit easy insertion into the nostrils of the victim. The tubes 7 are long enough to extend well up into the victim's nostrils when main tube 1 is positioned in the victim's mouth. Tubes 7 are of a soft, flexible material such as rubber or soft plastic so as not to injure the lining of the victim's nasal cavity. Tubes 7 may also be equipped with plugs (as shown in FIG. 3) at either or both ends to seal them if they are not needed.

In operation, once the victim has been placed on his back, his head tilted backward and his mouth cleared of any obstructions, the lower portion of main tube 1 is inserted into the victim's mouth so as to depress the tongue downwardly and away from the breathing passage. In this position, shield 6 will rest firmly on the victim's mouth to form an airtight seal to prevent the escape of air during resuscitation.

The pair of nostril tubes 7 are inserted into the victim's nostrils and held there by the friction of the skin surface against the tapered ends of the tubes thus freeing both hands to enable the victim to regain breathing by working his rib cage to help expel air is necessary.

The rescuer then turns his face at right angles to that of the victim and places his mouth and teeth over bit portion 2. The rescuer's lips will complete the seal of main tube 1.

The rescuer now blows into the device at a rate which approximates twice normal breathing (the normal rate being about 12 breaths per minute for adults and 22 for children), lifting his mouth away from the bit portion 2 after each breath so as to allow the victim's lungs to expel air through normal contraction. This process is repeated until the victim shows signs of breathing for himself or until competent medical help arrives.

In the event that the victim is a child or an infant, a device of smaller size may be used; if using a device of standard size, shield 6 may be slid toward opening 4 thereby shortening the length of the tube portion inserted into the mouth. Since the ends of nostril tubes 7 are tapered, they will readily fit into the nostrils of even the smallest child.

It should be noted that this device is especially useful in applying artificial respiration to children. Ordinarily, it is difficult for a rescuer having a normal adult's mouth to get an adequate seal on the mouth of a child or an infant. With this device, it is not only possible to obtain such a seal, but the device has the added advantage of providing tubes to breathe into the nostrils as well as the mouth of the child. In this way it is possible to supply an adequate supply of air to a child in distress.

Thus it can be seen that I have provided an efficient, simple and inexpensive resuscitation device which can be readily adapted for use on both adults and children and which avoids the disadvantages of direct contact resuscitation.

While I have illustrated several embodiments of my invention it must be understood that this is by way of illustration only and what various changes and modifications are possible within the contemplation of my description and within the scope of the following claims.

I claim:

1. A mouth-to-mouth and nose resuscitation device comprising
 - a main tube,
 - a flanged bit portion integrally formed at one end of the tube,
 - a shield portion intermediate said tube radiating from its entire perimeter and mounted thereon, and

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a pair of nostril tubes one end of which are inserted in the walls of said tube between said bit portion and said shield portion, said nostril tubes being of sufficient length to be insertable in a victim's nostrils during mouth-to-mouth and nose resuscitation.

2. A resuscitation device as recited in claim 1 wherein said main tube is of a flexible material such as polyethylene plastic.

3. A resuscitation device as recited in claim 1 wherein said shield portion is curved downwardly with respect to said bit portion and is slidably mounted on said main tube.

4. A resuscitation device as recited in claim 1 together with plugs for insertion into both ends of said nostril tubes so that said nostril tubes may be sealed if desired.

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5. A resuscitation device as recited in claim 1 wherein said insertable portions of said nostril tubes are tapered for easier insertion into the nostrils of a victim.

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