

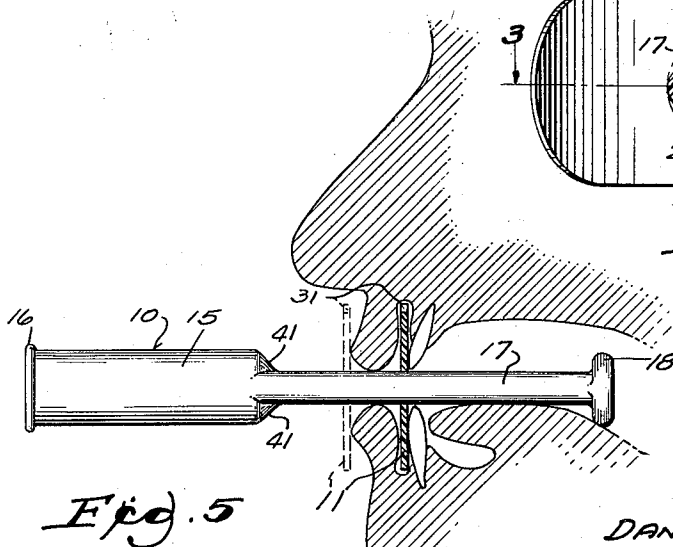
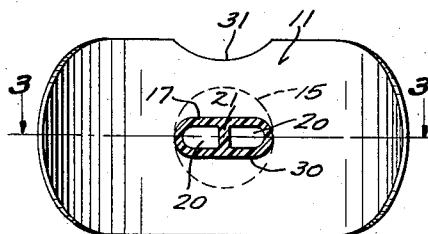
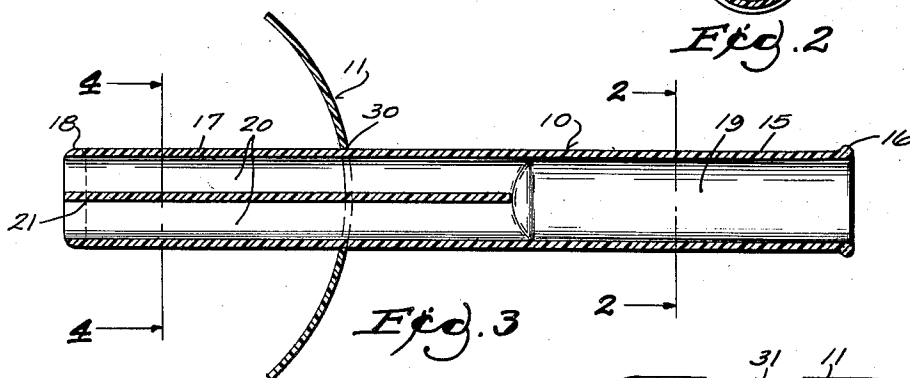
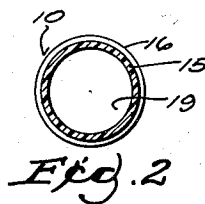
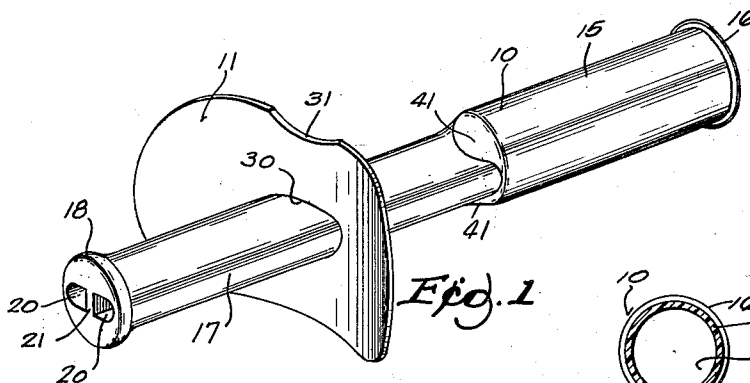
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RESUSCITATION TUBE

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3,106,916

RESUSCITATION TUBE

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This invention relates to a resuscitation tube.

The novel resuscitation tube of this invention consists of a greatly simplified structure consisting of a tube and shield, the tube serving to introduce air into the mouth of a person needing artificial respiration, the tube being strengthened in the portions receivable into the patient's mouth, and the shield slideable on the stiffened portion of the tube to seal against the exterior or interior of the lips of the patient sufficiently to permit inflation of the patient's lungs.

In the drawing:

FIG. 1 is a perspective view of the resuscitation tube of my invention.

FIG. 2 is a cross-sectional view on line 2—2 of FIG. 3.

FIG. 3 is a cross-sectional view on line 3—3 of FIG. 4.

FIG. 4 is a cross-sectional view on line 4—4 of FIG. 3.

FIG. 5 is a view of my device inserted in the mouth of a patient, the oral area of the patient being shown in section, and the sealing flange of my device being shown in full line cross section in one position and in dotted lines in an alternate position.

The resuscitation tube of my invention consists of a tube body indicated generally as 10 and a sealing flange indicated generally as 11. The tube body has a cylindrical portion 15 terminating in a stiffening bead 16, and a heavy flattened portion 17 terminating in a very heavy circular bead 18. The portion 15 of the tube is provided with a single central opening 19, while the flattened portion 17 of the tube is provided with parallel passageways 20 separated by a stiffening wall 21 extending the length of the flattened portion.

The flange 11 is provided with a central opening 30 which is a very close fit on the exterior of the flattened portion of the tube. Flange 11 is curved at its ends toward bead 18 to roughly conform to the curvature of the face of a patient so that only slight pressure is required to seal the flange against the patient's lips. The flange is relieved at 31 in one of its long edges to accommodate the nose of the patient, should such accommodation be necessary. This feature is particularly important in the event that the tube is used upon infants.

The tube of my invention is preferably made of a relatively hard material which, however, retains considerable flexibility in thin sheets to allow for deformation of the flange to fit the patient's facial contours. Polyethylene has been found to be an excellent material and to have the additional advantage that the flange can slide readily upon the flattened portion 17 of the tube 10 even though the opening 30 in the flange is a very tight fit on the tube portion 17. Moreover, nylon is readily sterilized and is not deteriorated by repeated sterilization.

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In use, the flange 11 is adjusted upon tube portion 17 so that the projecting portion of tube 17 and bead 18 acts as a tongue depressor, to prevent the tongue from blocking the flow of air. In adult patients flange 11 is inserted between the lips and the teeth of the patient, as shown in full lines in FIG. 5. In the dotted line position, flange 11 is held against the outside of the lips of the patient by light finger pressure on the flange, or by shoulders 41 between cylindrical portion 15 and flattened portion 17 of tube 10, if the tube is held. The nose of the patient is closed by finger pressure on his nostrils. The operator then places his mouth over cylindrical portion 15 of the tube and blows through tube 10 with just sufficient force to inflate the lungs of the patient, after which he removes his mouth or otherwise releases air from the tube to allow the patient to exhale, this operation being repeated 12 to 20 times a minute until the patient begins to breath independently of the above forceful action.

The stiffening wall 21 and the heavy bead 18 assist in preventing collapse of the tube due to voluntary or involuntary biting on the part of the patient, assuring that the tube will remain effective during the entire period of resuscitation.

I claim:

1. A device for mouth to mouth resuscitation of a person and comprising a straight tube of relatively rigid material having a cylindrical portion and a flattened portion of substantially smaller cross-sectional area than the cylindrical portion, the flattened portion being stiffened by a wall substantially centrally and longitudinally of the entire flattened portion and being of a length to extend to the end of the oral cavity of an adult person and of sufficient stiffness to depress the tongue and to bring the end of the tube toward the top of the oral cavity, and a flange of flexible material curved for conformity with the person's facial surfaces, the flange slidably fitting on and movable over the entire flattened portion and limiting extension thereof into the oral cavity of a person upon bearing of the flange on a facial surface of such person.

2. The device of claim 1 in which the flattened tube portion is further stiffened by a bead at the end thereof, the bead extending substantial distances radially from the two flattened surfaces of the tube.

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