

- [54] METHOD AND APPARATUS FOR REPLACING A PLACED ENDOTRACHEAL TUBE
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[56] References Cited

U.S. PATENT DOCUMENTS

3,039,469	6/1962	Fountain	128/200.26
3,653,689	4/1972	Sapy et al.	285/322
3,948,273	4/1976	Sanders	128/207.15
4,231,365	11/1980	Scarberry	128/207.15
4,275,907	6/1981	Hunt	285/323
4,327,720	5/1982	Bronson et al.	128/207.15
4,328,983	5/1982	Gibson	285/382
4,329,987	5/1982	Rogers et al.	285/322
4,334,534	6/1982	Ozaki	128/207.15
4,398,757	8/1983	Floyd et al.	285/322
4,716,896	1/1988	Ackerman	128/200.26
4,819,664	4/1989	Nazari	128/207.15
4,846,167	7/1989	Tibbals	128/912
4,865,586	9/1989	Hedberg	128/207.14
4,892,095	1/1990	Nakbgevany	128/207.14
4,960,122	10/1990	Mizus	128/207.14

FOREIGN PATENT DOCUMENTS

445218	4/1936	United Kingdom	128/200.26
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OTHER PUBLICATIONS

"Metro Mizus Endotracheal Tube Replacement Obturator Cook ® Critical Care", *Cook Incorporated*, 1988.

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[57] ABSTRACT

Method and apparatus are disclosed for replacing an endotracheal tube. The apparatus comprises an endotracheal tube obturator having an air passageway therein and a removable connector positioned at the proximal end of the obturator tube for ventilating the patient during replacement of the endotracheal tube. The obturator tube also includes a plurality of side ports for further ventilating the patient should mucous block the distal end of the obturator tube passageway. The removable connector includes a ventilator fitting and a removable and lockable obturator tube fitting joined thereto. The obturator tube fitting includes a sleeve having a plurality of flexible members for grasping the proximal end of the obturator tube. Extending into the passageway of the sleeve is a projection from the members for engaging the outside surface of the obturator tube when inserted in the passageway. A collar is slidably positionable about the sleeve between two retaining flanges for engaging a cam surface positioned on the outside surface of the obturator tube. The apparatus is inserted into a placed endotracheal tube for ventilating the patient while the endotracheal tube is replaced. The quick removal connector permits the timely replacement of the endotracheal tube while maintaining ventilation of the patient.

23 Claims, 3 Drawing Sheets

