

- [54] **MULTIPLE SURGICAL CUFF**
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[56] **References Cited**
U.S. PATENT DOCUMENTS

2,642,874	6/1953	Keeling	604/101
2,854,982	10/1958	Pagano	604/101
3,173,418	3/1965	Baran	128/207.15
3,411,506	11/1968	Velasco	604/101
4,066,070	1/1978	Utsugi	604/95
4,211,233	7/1980	Lin	604/43
4,230,119	10/1980	Blum	604/101
4,248,221	2/1981	Winnard	128/207.15

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[57] **ABSTRACT**

A multiple surgical cuff for introduction into a body

passage such as a trachea, bladder and urethra opening or artery comprising a tubular base member encircled by proximal, distal and middle double cuff members. The middle double cuff member comprises an inflatable tubular inner cuff member encircled by a distensible tubular outer cuff member, whose wall is multiperforated at spaced points. Separate passage means communicate with each cuff member so that each can be inflated to press against the adjacent portion of the body passage wall. Another passage communicates with the space between the inner and outer cuff members of the middle double cuff member to permit the introduction of a surgical fluid such as an anesthetic in that space, so that expansion of the inner cuff member forces the fluid onto the adjacent portion of the wall of the body passage. Still another passage communicates with the space along the tubular base member between the middle and proximal cuff members and permits the introduction of a surgical fluid, such as a cleansing saline solution, or to suck out loose thicker material from there and also enables continuous cooling and washing by an inflow and separate outflow. A plurality of side window openings in the tubular base member on the near side of the proximal cuff member permits the continued flow of blood when the body passage is an artery and continued flow is indicated.

10 Claims, 5 Drawing Figures

