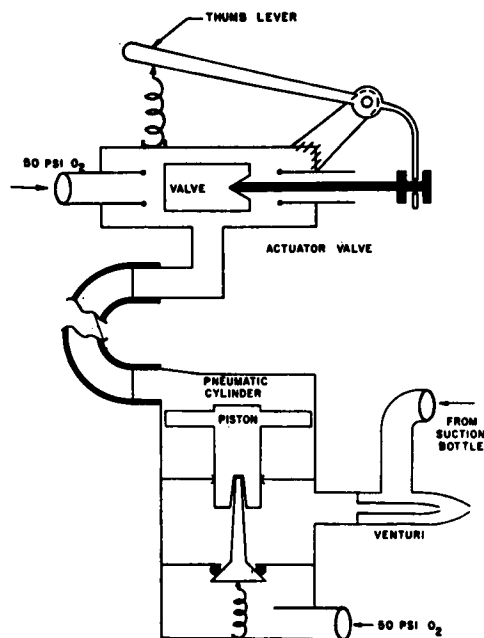


## Remote Control Valve for Aspirator

Dr. Stephen N. Steen and Mr. Arnold Lee of New York have developed a type of venturi aspirator which allows the greater portion of the apparatus to be at a distance from the aspiration site. The separation of aspirator apparatus from the patient is facilitated by a thumb-operated remote-control valve which is



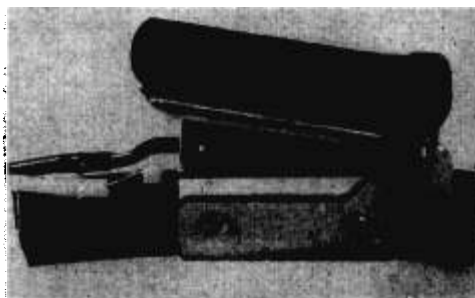
Schematic diagram of remote control valve for aspirator.

attached near the "patient" end of the suction tubing, and serves to instantaneously control the flow of compressed gas through the venturi nozzle.

## Modification of McIntosh Laryngoscope

Dr. Vincent L. de Ciutiis of New York Medical College modifies the McIntosh laryngoscope for particular purposes. One was to facilitate management of the thick heavy tongue in the bull-necked individual. Another was to overcome the difficulties in edentulous patients with small mouths. In these patients and, incidentally, in many patients with small mouths, the part of the mouth lateral to the viewing surface of the laryngoscope interferes with endotracheal intubation.

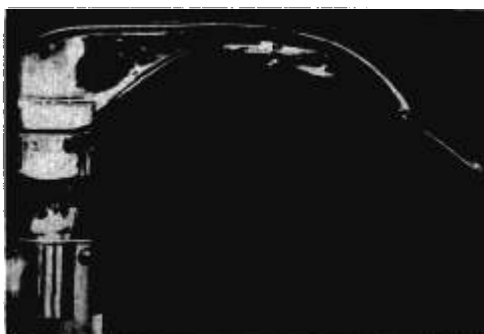
The schematic diagram illustrates the system: ordinarily, the *valve* proper of the *actuator valve* is forced against the 50 psi O<sub>2</sub> input seat by the spring under the *thumb lever* through a linkage. Thus, the *pneumatic cylinder* is open to the atmosphere. When the *thumb lever* is depressed, compressed oxygen is allowed into the *pneumatic cylinder* which forces the *piston* to open the valve to the *venturi*.



Remote control valve for aspirator.

This remote control of the venturi provides definite advantages over presently available systems in that: (1) Compared to systems using a suction bottle and venturi remote from the patient, instantaneous full suction is available with control at the aspiration site, and the usage of gas is economized because the suction may be immediately stopped as desired. (2) Compared to systems using a hand-held suction bottle and venturi, there is considerably more ease of manipulation of the aspiration tube as well as increased visibility, and a much larger suction bottle may be employed.

A lateral view of the laryngoscope demonstrates that the essential physiological curve of the McIntosh blade has been retained. Superior and inferior views show that the blade has been widened, at the oral end and also along the part of the laryngoscope that is against the tongue with a narrowing point towards the vallecula where there is no need for enlargement. This enlargement and curvature of the blade was designed for two purposes, first, to support the so-called "fat beefy



Modification of McIntosh laryngoscope—lateral view.



Inferior view of modification of McIntosh laryngoscope.

tongue” and, secondly, to hold the cheek at a distance and thereby enable the anesthesiologist to pass the endotracheal tube without assistance.

After the initial trial of the laryngoscope and the production of the first pilot model, it was

noted that the laryngoscope could be introduced almost directly toward the larynx without any right to left motion as had been found necessary with the old design of the McIntosh laryngoscope. This has proved to be an advantage for the beginner in endoscopy and especially useful for the thick-tongued individ-



Superior view of modification of McIntosh laryngoscope.

ual in whom, occasionally, the motion of right to left, in order to push the tongue out of the way for introduction to the tube, resulted in a flopping of the tongue into line of vision of the anesthesiologist. This new laryngoscope prevents the tongue from dropping. A new design in similar proportion for infants has been tried and found completely satisfactory. It is recommended that this laryngoscope be used in the stocky bull-necked individual, in edentulous individuals, and in infants.

### Combined Endotracheal-Bronchogram Catheter

Dr. Vincent de Ciutiis also designed an endotracheal catheter to solve a problem with which he was constantly presented during bronchography for children. Prior to the development of this catheter all children were anesthetized with Vinethene and open drop ether. When a sufficient depth of anesthesia was achieved, a urethral catheter was passed under direct laryngoscopy. Too often the following problems were encountered: (1) Dur-

ing the introduction of the dye the child was moved from side to side in a darkened room. Under this particular condition it became difficult, if not impossible, to observe any changes in the child due to airway obstruction. (2) It was very difficult to adequately resuscitate these children if the introduction of the dye precipitated complications such as severe laryngospasm, or what was feared even more, bronchospasm. (3) As the procedure con-