

material (see illustration). Since this occurred following the change in preparation of the trays everything was rechecked.

At first they thought the problem was created

by having inferior spinal needles. However, repeated sterilization of new needles without the sterilization indicator failed to give any evidence that the needles were at fault. Following the above procedure with the old needles, the rust did not reappear. They concluded, therefore, that the source of the difficulty was with the indicators. Confirmation of this premise was obtained by sterilizing 50 new needles with the indicators. After sterilization each needle was coated with this material.

Correspondence with the manufacturers of the indicators concerning this problem answered the question as to why this should occur. The company stated that for the color change to occur in the indicator during sterilization a small amount of chlorine gas is released. Chlorine is known to attack stainless steel and similar metals. This fact in all probability accounts for the appearance of the rust-like material on the spinal needles.

Fortunately, during this time period they did not encounter any neurologic sequelae following spinal anesthesia.

## GADGETS

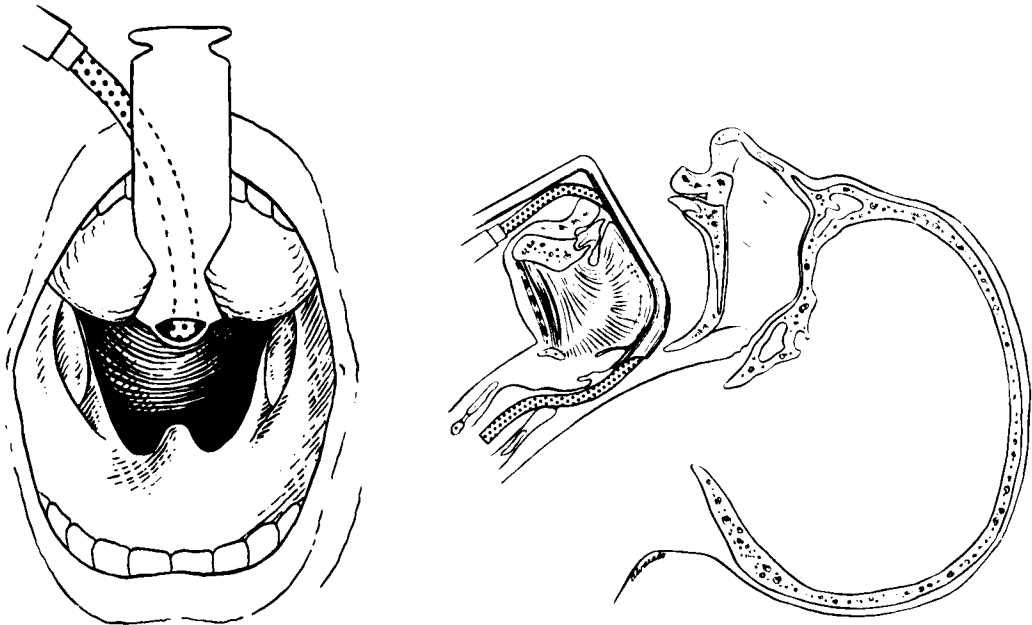
### **Modification of Crowe-Davis Mouth Gag**

Drs. J. B. Rew, A. J. Wyly and G. B. Grant, of the Ochsner Foundation Hospital in New Orleans state that since nasotracheal intubation is not feasible in the small child and pre-adolescent, it is necessary to use the oral route. With the usual methods the tube is vulnerable to dislodgement or kinking during the procedure. To obviate this, a modification of the tongue blade for the Davis mouth gag has been developed which effectively keeps the tube fixed securely between the tongue and the blade and at the same time completely removes the tube from the operative field.

A slot is cut in the tongue blade which extends approximately two-fifths the length of the blade. The slot must also be wide enough to accommodate the tube without any tendency to pinch the tube on the sides. At the distal end of the blade a short, shallow trough is soldered to the prongs leaving approximately

one-fourth inch of the blade protruding. The trough was made of copper tubing in the trial models.





Intubation is accomplished as usual with a coiled wire tube. The tube is taped to the chin in the midline. The mouth gag and blade are inserted over the tube in the usual manner. Some degree of experience is required to perform this maneuver but the procedure is easily mastered and surgeons have been satisfied with the unobstructed operative field. Once the blade is in place, the tube is firmly fixed against the tongue.

The usual selection of blades is necessary to accommodate the varying mouth sizes.

Although this device was originally developed to facilitate endotracheal anesthesia in children, it is equally satisfactory for adults and obviates some of the disadvantages of nasotracheal intubation. The salient ad-

vantages of this method are simplicity and unobstructed operative field. They believe that this has changed maintenance of anesthesia for adeno-tonsillectomy from a formidable procedure to a simple one.

This technique has been used during the past three months in 90 patients. In three cases the endotracheal tube became compressed between the teeth and the tongue blade. This can be corrected by inserting a small bite block between the teeth and blade.

A similar device has been described in the British and Canadian literature (Doughty, A.: *Brit. J. Anaesth.* 29: 407, 1957) but they believe that this is the first report of such a technique in the United States.

### A Device for Artificial Respiration

Dr. John W. Mattick of the Highland Hospital in Rochester, New York, remarks that since the revival of mouth-to-mouth resuscitation in recent years there have been numerous efforts to make the method more acceptable. None have been completely satisfactory. He believes that there is a distinct need for some method of satisfactorily removing the necessity for direct contact between resuscitator and

patient in the expired air resuscitation method.

He has developed a device with which he hopes to eliminate contact. The device consists essentially of a nasopharyngeal airway fitted with an extension tube which is the mouth piece. Two such airways of different sizes may be joined together. The second airway then is used as the rescuers mouth