

A NEW LARYNGOSCOPE

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ENDOTRACHEAL intubation is not a new idea, but it is now being used more frequently in anesthesia, especially following the widespread use of cyclopropane now observed. With this anesthetic agent, it is no longer necessary to use ether for every patient to be intubated, which formerly was the common practice. The many uses and advantages offered by this type of airway are familiar to most anesthetists. An effort has been made to increase the simplicity, ease, and certainty of this technic by making several changes in the laryngoscope.

Proper anesthesia with adequate relaxation is necessary to facilitate intubation. Difficulties are prone to occur in patients with a deep throat, thick tongue, or prominent upper incisors. Damage to the teeth may occur from undue pressure. Both normal teeth and artificial dentures are especially easily damaged when they are employed as a fulcrum and the laryngoscope as a lever.

The anesthetist's laryngoscope commonly used appears to be too thick at the base, a feature which increases the danger of trauma to the teeth. The tip frequently does not have the proper shape to lift the epiglottis, and the blade is often too short. The curve of the blade is too near the end, while its flat bottom tends to push the tongue into the floor of the mouth. Due to these factors, adequate exposure of the larynx in difficult patients is not facilitated.

The new model* is longer than the old style medium sized blade. (Fig. 1.) It is rounded on the bottom, smaller at the tip, and has an extra curve beginning about two inches from the end. (Fig. 2.) The internal diameter of the base is shallow, but adequate to permit the passage of a 38 catheter. (Fig. 3.) Therefore, it is not necessary for the mouth to be opened as widely as when the older type blade is employed. This allows a freer anterior movement of the mandible which in itself is an aid in obtaining better exposure. The small round end of the blade when pressed against the tongue makes a channel through which the larynx is exposed. (Fig. 4.) The length of the blade is adequate and adaptable for all patients except infants, hence only one blade is required for ordinary use.

To protect the teeth one may mold over them a lead plate $\frac{1}{16}$ inch thick, extending it above the gingival margin and well over the hard

* The laryngoscope may be obtained from the Welch-Allyn Company, Auburn, N. Y.



FIG. 1. Long, narrow blade.

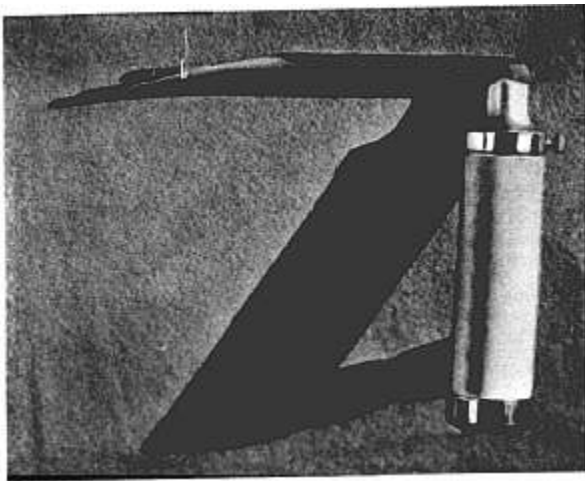


FIG. 2. Round bottom. Curve 2 in. from end of blade. Shadow shows small narrow tip.

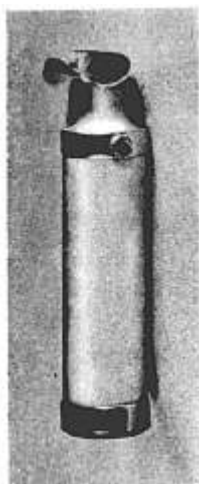


FIG. 3. Shallow base. Curve of blade.

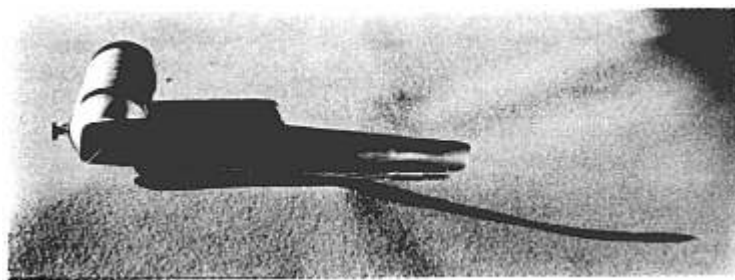


FIG. 4. Round, narrow tip.

palate. This covering will protect the teeth from any accidental pressure, extending the stress to the maxillae instead of on the teeth.

No change from the usual technic of intubation is indicated by the use of this new laryngoscope. When it is in place, however, the anesthetist may notice that the mouth does not open as widely as with other blades and that, consequently, there is usually not as large an area present for manipulation. Therefore, when inserting a larger catheter with a cuff through the mouth it is probably easier to use a stylette than a forceps. When a smaller tube can be used, the nasal route is probably easier. When the nasal tube is well lubricated and passed through the

nose into the pharynx, the cords may easily be visualized through the laryngoscope, and by rotation, the tube can usually be inserted with or without the aid of a forceps.

| <i>Other Blades</i> | COMPARISON | <i>Miller Blade</i> |
|------------------------|------------|--|
| High base | | Shallow |
| Flat bottom | | Round |
| Wide end | | Narrow |
| Curve at the tip | | Curve two inches back |
| Large and medium sizes | | One size (useful in all patients except infants) |

SUMMARY

A new laryngoscope blade is described which has overcome most of the difficulties of intubation for the writer and therefore has made intubation an easier procedure.

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