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R. R. MACINTOSH

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LARYNGOSCOPE

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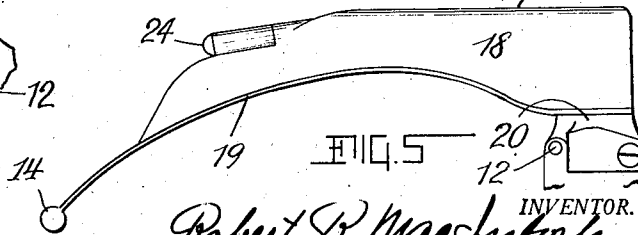
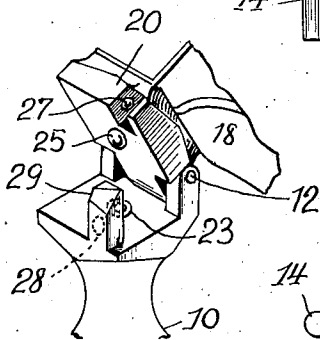
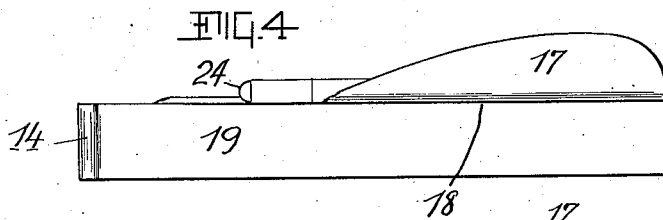
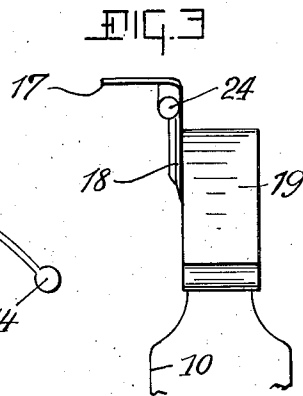
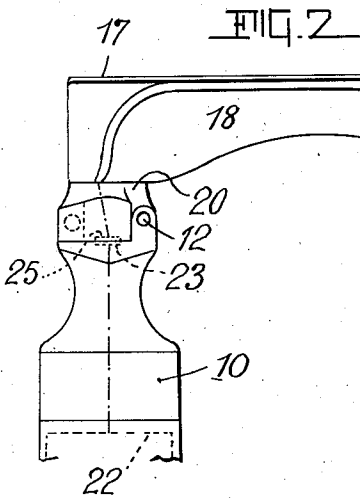
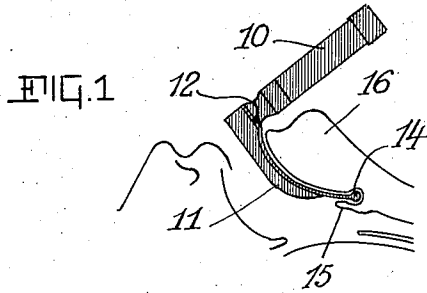


FIG. 6

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LARYNGOSCOPE

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1 Claim. (Cl. 128—10)

The object of this invention is to provide a laryngoscope having a new and improved blade for facilitating the exposure of the larynx to pass an endotracheal tube. Prior laryngoscopes include a long straight blade which is passed beyond the epiglottis in order to evert it. Occasionally the use of the long straight blade jeopardizes and may injure the patient's upper teeth or the posterior laryngeal wall. These and other disadvantages resulting from the use of prior instruments are avoided by using a laryngoscope according to this invention. The improved laryngoscope is provided with a relatively short blade which is curved throughout its length and ends in a rounded tip which is adapted to fit into the angle made by the epiglottis with the base of the tongue. By using a laryngoscope as herein disclosed the larynx is exposed more easily and at a higher plane of anesthesia than with any prior instrument. This is partly because the new blade does not come into contact with the back surface of the epiglottis where the innervation is the superior laryngeal nerve, but comes into contact with the base of the tongue innervated by the glossopharyngeal nerve. The proportions of the blade is such that the tip thereof does not go beyond the epiglottis. The blade is inserted in the mouth of the patient to the right of the tongue which is pushed over to the left.

In the accompanying drawing Fig. 1 is a diagram illustrating the use of the improved laryngoscope. Fig. 2 is a right hand side view of the instrument with parts broken away. Fig. 3 is a right hand end view of Fig. 2. Fig. 4 is a plan view of the blade. Fig. 5 is a left hand side view and Fig. 6 is a perspective view of the hinge between the blade and the handle showing improved holding means.

Referring to Fig. 1 the laryngoscope consists of two main parts namely the handle 10 and the blade 11 hinged to the handle at 12. In use the instrument is inserted in the mouth of the patient and when the blade is in position the tip 14 of the blade fits into the angle made by the epiglottis 15 with the base of the tongue 16. As the laryngoscope is then lifted the base of the tongue will be pushed upwards, the epiglottis, because of its attachment to the base of the tongue, is drawn upwards and the larynx comes into view.

The blade 11 comprises a lateral shelf 17, an upright wall 18 and a blade portion 19 which extends in a direction opposite to the shelf. The blade portion 19 is curved from the base 20 to the tip 14, the latter being in the form of a rounded transverse bar of the same width as the portion 19. The curvature of the blade portion facilitates easy passage over the tongue and is advantageous in that it avoids depression of the tongue which otherwise might result in an appreciable restriction of the visible aperture of the larynx. The tongue is pushed to one side of the wall 18 and restrained in its movements by the shelf 17.

The base 20 of the blade is hinged at 12 to the top of the handle 10. The latter contains a dry battery 22 which is connected to a contact 23 in the upper surface of the handle. The blade carries an electric lamp 24 which is connected to another contact 25 in the base 20. When the blade is swung upwards into operating position as in Figs. 1 and 2, the two contacts engage to close the circuit through the lamp which is lighted to illuminate the interior of the mouth. When the blade is swung downwards alongside the handle the circuit is automatically broken at 23—25 as shown in Fig. 6. The blade is held in operating position on the handle by a spring pressed ball 27 which engages a recess 28 in an upstanding post 29 on the handle. This provides a firm yet easily broken connection between the handle and the blade.

I claim:

35 In a laryngoscope, a laryngeal blade comprising an upright centrally disposed wall, a shelf extending from the upper edge of said wall to one side thereof, a blade portion extending from the bottom edge of said wall to the opposite side thereof, the said blade portion being curved throughout its length, the free end of the blade portion being adapted to enter and fit into the angle made by the epiglottis with the base of the tongue for the purpose of exposing the larynx 45 when the laryngoscope is inserted into the mouth of a patient and a supporting handle hingedly connected to the said laryngeal blade.

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