

the vertical diameter, and shorter in the length between the shield and the curve than the one adapted for tracheotomy.

If the transverse incision is found to be too limited, it may be extended by a median vertical one downwards through the cricoid, or upwards through the thyroid, or both, as the exigency of the case may require.

The operations of tracheotomy are performed respectively above and below the isthmus of the thyroid body, the former being the preferable, as it involves the fewest dangers during and after the operation, trachea is more superficial, consequently more easily reached, and the nearer you get to the larynx, the steadier laterally does the trachea become and the easier to fix and penetrate.

A vertical incision about two inches in length in the median line of the neck is made, the sterno-hyoid and thyroid muscles exposed, and the areolar interval indicating the meeting of the latter cut through, and the muscle held aside; the fascia investing the thyroid gland and connecting it with the trachea is now seized and cut through horizontally, the end of the knife handle is then placed under the isthmus, and made to push it downwards, and at the same time to separate it sufficiently from the trachea, so as to permit of the division of the three upper rings. The fascia covering the fibro cartilage, or upper cartilaginous spaces, is seized as low down as possible, and a little on one side of the median line, with the hooked forceps, the tooth of which projecting well downwards will bite easily into its substance. The scalpel is then passed down, guided by the interval between the blades of the forceps and the wind-pipe punctured vertically, and the incision extended upwards as far as the cricoid cartilage, or even through it if sufficient room has not been obtained by the pushing down the thyroid isthmus.

At this stage the inexperienced operator is apt to lose his self-possession, and let go the trachea, but for the satisfactory conclusion of the operation the hold should be firmly retained until the outer part or spring sheath of the tube is introduced; the inner tube should not be introduced until some of the spasm consequent upon the operation have passed away.

In the lower operation, the primary incision should extend downwards nearly to the top of the sternum in a short neck whether infantile or adult.