and such a lotion is unsuitable for the particular bacillus with which they are infested.

EXTENSION OF SUPPURATION OF THE MIDDLE EAR.

The significance of suppuration in the middle ear is at once apparent when we consider that the tympanic cavity has on its inner side the labyrinth, below it the jugular vein, above it cerebral dura mater, and, posteriorly, openings into the mastoid process, and that the only safe outlet for pus, except by perforation of the membrana tympani, is through the Eustachian tube, through which, however, it finds its way with extreme rarity. When, owing to chronic suppurative otitis, caries of the tympanic walls is set up, pus, if it penetrates upwards, causes meningitis or abscess of the brain, if downwards septic thrombosis of the jugular vein, or pyæmic abscess of the lung, and possibly also of the liver. Again, if it proceeds inwards, the facial nerve and carotid artery are jeopardised. Attacking the mastoid process, pus may occasion thrombosis of the lateral sinus, meningitis, or abscess of the cerebellum. Pneumonia, pleurisy, Bright's disease, and amyloid degeneration are among the possible more remote effects of persistent aural suppuration.

THE "PERFECTED" URETHROSCOPE.

By WILLIAM K. OTIS, M.D.,
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In spite of the great advances made by the introduction of the incandescent electric lamp as the source of illumination, the modern urethroscope still possesses several decided disadvantages. It is heavy, somewhat complicated in construction, and expensive. To overcome these objections I have devised an instrument on an entirely different principle from that of former urethroscopes, using a lens as a condenser instead of the reflected light from a concave mirror.

the lens. A thumb-screw "switch" in the handle places the lamp under control so that it may be turned on or off at pleasure.

This instrument consists of a metal tube or cylinder one inch and a quarter in length by one half inch in diameter, closed at one end. One quarter of an inch from the open end of this tube is a plano-convex lens, so arranged that it may be easily removed for cleaning. On the interior surface near the closed end of the tube an elbow is let in, one quarter of an inch in length and one half inch in diameter, through which the source of illumination (a small incandescent electric lamp) is introduced, a row of holes being bored at its base to allow of ventilation. The handle of the instrument consists of a piece of hard rubber, one inch long by one half inch wide, the electrical connections running through it to the lamp which is placed on top. This handle fits into the elbow by means of a bayonet joint, bringing the lamp immediately behind the plane side of

The instrument is attached to the urethroscopic tube by means of a stout wire one inch and a half in length, with hinged joints at each end, which swing in opposite directions and are furnished with set screws, thus allowing the instrument to be put in any position, though when once adjusted it will rarely be necessary to change it. If the ordinary urethroscope tube is used, the distal end is provided with a simple ring-sliding joint, but as I greatly favour the use of the tube devised by Dr. Hermann G. Klotz, I have adapted the instrument to this form of tube by placing at the distal end a small flat foot, at the outer extremity of which is a smooth pin. This pin fits into a hole in the tube plate, and on revolving the instrument a quarter circle the foot swings under a shoulder riveted to the plate, and is securely fastened. This joint is firm and easy of manipulation, readily allowing the illuminator to be attached or removed at any time during the examination.

When the instrument is in position and the lamp illuminated, a strong beam of light is thrown directly down the urethroscopic tube, and the urethral mucous membrane more easily and clearly observed than with any other form of urethroscope with which I am familiar.

The advantages of this instrument are: (1) The exclusion of all extraneous light, the presence of which is a most annoying fault both in the urethroscope of Leiter, and in my own improvement on it; (2) a very much more ready access to the urethral field, both to the eye and for instrumental applications; (3) increased illumination; (4) by abandoning the funnel and sliding joint, one inch and a half in distance is gained from the source of illumination to the distal end of the urethroscopic tube, increasing the illumination, and allowing the eye to be placed just so much nearer the mucous membrane to be examined; (5) its extreme compactness and lightness, weighing less than one ounce, even when constructed of brass; (6) its great simplicity of construction, which should insure a moderate cost.

MEMORANDA:

MEDICAL, SURGICAL, OBSTETRICAL, THERAPEUTICAL, PATHOLOGICAL, Etc.

CASE OF CYSTIC TUMOUR OF THE LARYNX IN A WOMAN EIGHTY YEARS OF AGE: INTRA-LARYNGEAL REMOVAL: RECOVERY.

THE following case is of interest on account of the extreme age of the patient, the rapid development of the tumour, and the completeness of the recovery which has ensued after intra-laryngeal removal.

Miss M., aged 80 years, was brought to me on August 13th, 1892, by Dr. Robert Stirling, Perth, suffering from great dyspnoea and almost complete suppression of voice. Her voice had been more or less affected for about a year, and the larynx had been repeatedly examined up to April last by Dr. Stirling, who on each occasion found merely the appearance of chronic laryngitis. From April to August 12th the larynx had not been examined, nor had the patient been seen. On the last-mentioned date the patient again consulted Dr. Stirling, who now readily detected a large growth or tumour in the larynx. The tumour had thus undoubtedly developed within a period of from five to six months. The case being now one of great urgency on account of the marked respiratory impediment, Dr. Stirling travelled with the patient to Edinburgh, and placed her in my hands.

On laryngoscopic examination a large tumour was seen in the larynx, growing from the left side, probably from the ventricle, and completely obscuring the left vocal cord. The right vocal cord was partly hidden, and the glottis was almost completely blocked. The tumour was firm, smooth, red, and slightly movable, and was partially concealed by a broad and somewhat pendulous epiglottis (Fig. 1). Respiration was performed with great difficulty, and it was quite apparent that unless the tumour could there and then be removed tracheotomy would, in the first instance, require to be performed.

After the application of a 15 per cent. solution of cocaine, I