

affection and describe a case. They found the best results from the use of the galvanic current, negative pole (12 square cm. of surface) on the back of neck, and the positive (3 square cm. surface) just in front of the tragus. The current was gradually increased from 10 to 15 milliampères, stopping at the first sign of vertigo. The treatment was continued for five weeks, twenty-four sittings in all, with progressive improvement and practical cure, except as regards subjective noises. *James Donelan.*

THERAPEUTICS.

Gwathmey, James T.—*The Vapour Method of Anæsthesia.* Medical Society of the County of New York, September 25, 1905.

He reviewed the evolution in the administration of anæsthetics from the time when chloroform was given "powerfully and speedily," and when an unmeasured quantity of ether was poured into the open cone, up to the present, when each drop of these powerful drugs is both measured and timed. Snow, Clover, Paul Bert, Junker, followed in succession and assisted in eliminating the unknown, and placing anæsthetics on a firm and solid basis. The Harcourt chloroform inhaler in England, the Braun chloroform-ether inhaler in Germany, and the Gigliementi oxygen-chloroform inhaler in France, represent the very latest contributions towards the accurate administration of anæsthetics. The objection to the English and French inhalers is, that they are for chloroform alone and have closed masks with valves. The Braun inhaler is the best, but the mask is undesirable. Dr. Gwathmey then exhibited his own inhaler, the unique features of which are—that chloroform or ether can be given singly or combined in any desired proportion; the ability to increase or decrease the air or oxygen without at the same time increasing or decreasing the anæsthetic; the mask, an anatomically correct fitting face-piece, the rim of which is hollow and perforated around the inner margin to allow the vapour to escape, otherwise identical with a folding Esmarch mask. This is covered with four layers of gauze, over which is placed a piece of oiled silk or rubber tissue. A small opening is cut in the middle of this gauze, so that during the induction period a few drops of chloroform may be added, as with vigorous alcoholics. Dr. Gwathmey's inhaler gives a maximum 2 per cent. chloroform vapour, with a minimum of $\frac{1}{10}$ per cent.

The inhaler, which is made by the Kny-Scheerer Company, consists of three ounce bottles in each of which are four tubes, varying in length from one that reaches the bottom of the bottle to one that penetrates only the stopper. These tubes represent four degrees of vapour strength; the longest, with the mask just described, has an estimated 1 per cent. vapour strength; the shortest, representing a very attenuated vapour, $\frac{1}{10}$ per cent. As the mask is not air-tight, the vapour cannot be compressed, thus avoiding the danger of an overdose. The advantages claimed for this form of anæsthesia are: (1) A pleasant induction stage; (2) stage of excitement absent; (3) pulse and respiration normal, no mucous r le or billowy breathing; (4) complete relaxation; (5) absence of unpleasant after-effects on account of the attenuated vapour used; (6) the continued use of an attenuated oxygen or air and chloroform vapour of known percentage, to which an attenuated ether vapour can be added or substituted when conditions require a change; (7) a possible change in the vapour percentage, with the same flow of oxygen or air, by a change of tubes or by varying the pressure in the same tube, or by a combination of the two methods.