Next, the effect of various stimuli under artificial conditions were then investigated and summarised, and then the whole series of experiments having been passed in review, the first part of the paper terminates with the conclusions at which the author then arrives. These consist in a relation of the various anatomical parts, the integrity of which Högyes states is essential for the appearance or production of these "involuntary associated movements of the eyes," supported by detailed references to the results of his experimental research.

Two other parts follow in which further experimental work is described and deductions drawn therefrom. The article concludes with a diagrammatic scheme illustrating the source, route, and result of various stimuli.

In addition to the very large amount of time he must have spent in evolving the data on which his account is based, allusions to over forty works in Hungarian, French, Dutch, German and English bear ample testimony to Högyes' untiring efforts to unravel the intricacies of his subject.

To give an adequate abstract of such a work is impossible, and the attempt would be but a poor tribute to its value and the labour it represents. Although those interested in it may find nothing that now is not well known, still it is well worth reading if only from an historical point of view, nor can they help being astonished that a quarter of a century was to clapse before the clinical significance of these experiments came to be generally recognised—and that mainly through the agency of Bárány and the Vienna School.

A. R. Tweedie.

Shambaugh, Geo. E.—On the Origin of Compensatory Tonus after Destruction of the Labyrinth. "Annals of Otology," etc., xxi. p. 697.

Compensatory impulses that develop after the destruction of a labyrinth and which restore the disturbed balance in equilibrium may have two sources. One is the compensatory increase in those tone impulses from the remaining labyrinth which direct nystagmus to the opposite side But it is clear that in most cases the restoration of equilibrium is accomplished by a compensatory tonus which, in part at least, is developed independent of the opposite labyrinth. Shambaugh cannot accept the view that automatic tonus centres exist in Deiter's nucleus. The restoration of the normal extra-labyrinthine tonus is not sufficient to restore the disturbed equilibrium due to unilateral loss of labyrinthine impulses. Its place must be supplied by the development of an additional tonus developed chiefly from the extra-labyrinthine impulses. It is only in cases of long-standing destruction of one labyrinth where the compensatory tonus from the remaining labyrinth supplants completely this compensatory extra-labyrinth tonus.

The restoration of equilibrium which follows the destruction of both laborinths is never a complete restoration of the normal equilibrium.

Macleod Yearsley.

PHARYNX.

Sigmund, Marx.—("On Reflex Cough," etc.) Pharyngeal Cough and its Treatment. "Zeits, fur. Ohrenheilk.," vol. lxv, Part IV.

The writer records eight cases in which, by treatment directed to the tonsils, he was able to entirely relieve a distressing convulsive cough.

The character of the cough is that it occurs in attacks day or night, in the intervals of which the patient is free except for slight clearing of the throat. At the height of the attack copious watery secretion may flow rom the eyes and nose; usually very little expectoration. The cough is trequently initiated by hot or cold drinks, changes of temperature, raughing, etc. In all such cases the tonsils should be carefully inspected, not only by depressing the tongue, but by drawing the anterior pillar forwards with the Killian hook. Frequently this examination will cause an attack of coughing, or at times only when certain crypts of the tonsil are probed is the reflex provoked, and occasionally only when certain very ircumscribed areas are examined. It is important not to confuse the wallowing and retching which occurs in many on disturbing the tonsils with the true convulsive cough. The treatment consisted in finding such rypts in the tonsils as were occluded by plugs and slitting them up. The small operation could not always be completed at one sitting, and in come cases solutions of silver nitrate were applied to the bottom of the rypts after slitting. The superficial use of the guillotine is useless, as the deeper portions of the lacunæ are still left; complete enucleation of he tonsil is regarded as rather too severe a procedure, but might be ecessary when the simple process of slitting up the crypts had failed.

Lindley Sewell.

REVIEWS.

The Medical Annual: A Year-Book of Treatment and Practitioner's Index, 1913. Bristol: John Wright & Sons, Ltd. London: Simpkin, Marshall, Hamilton, Kent & Co. New York: E. B. Treat & Co. Toronto: The J. F. Hartz Co., Ltd. Calcutta: Thacker & Co. Bombay: Thacker & Co. Melbourne, Sydney, Adelaide and Brisbane: G. Robertson & Co. Sydney: Angus & Robertson, Ltd. New Zealand: Whitcombe & Tombs, Ltd. (871 pages.)

"Age cannot wither her, nor custom stale her infinite variety," as aid of Cleopatra, may be said without any great exaggeration of *The stedical Annual*. The last issue keeps well in line with its predecessors regards freshness and fulness

The special branches with which we are mainly concerned have been cutrusted this year to Prof. Chevalier Jackson and Dr. George L. Gehards, both of whom are well known to our readers.

Among the communications emanating from other than oto-larvngogical specialists we find reference to Pirie's advocacy of X-ray examinaon of the temporal bones, which seems to assume a symmetrical condition - normal. Cheatle has shown that there are frequent exceptions to this : de. Abbe's cures of recurrent papillomata in the larynx by means of radium (p. 67) will interest our readers. J. J. Perkins, in his report on whma, quotes Ephraim's reiteration of the value of adrenalin and his conchoscopic observations on its action (p. 115). Ruttin's reference bigation of the internal jugular as giving, in the presence of sinus 1000 rombosis, the highest percentage of optic papillitis is interesting (p. 211). s also Beck's observations on the treatment of otoselerosis by means of verenalin (p. 216). The writings of British as well as American workers icceive considerable attention in regard to the larynx as well as the ear. A valuable paper on "Strictures of the Œsophagus," by Walker Downie, reported in an extensive abstract (p. 367). Charles A. Clark's paper on "The Need of X rays in the Diagnosis of Oral Sepsis" contains a