

certain of the developments connected with the natural and exact sciences.—*The Popular Science Monthly*.

COMPULSORY GREEK AT OXFORD AND CAMBRIDGE.

THE discussion of the 'Greek question' by the resident members of Oxford and Cambridge has disclosed so many contradictory views that the average member of Convocation, in despair of definite guidance, may feel inclined to leave things as they are till the experts have made up their minds as to what they want, and why they want it. The limited proposals before 'Congregation' at Oxford were criticized partly because they went too far, partly for not going far enough—the latter, as we gather, being the view of their most formidable opponent, Sir William Anson, as it was of many half-hearted supporters. With all respect, indeed, to the weighty authority of the Cambridge Professor of Greek, Sir Richard Jebb, we can not follow his argument that the adverse vote at Oxford on a smaller proposal made it highly improbable that, whatever Cambridge might do, Oxford would consent to make Greek optional for all candidates for a degree. On the contrary, we are inclined to think that a bolder and more comprehensive proposal would have had a better chance at Oxford than one which raised a great and far-reaching question upon a comparatively small issue; and that Cambridge, if she goes full steam ahead, need not fear being left in the lurch by Oxford, with the result that, as Sir Richard Jebb seemed to fear, the University which retains more Greek will attract the ablest literary talent. The Master of Trinity, Dr. Montague Butler, a classical scholar of the first rank and a teacher of proved experience, regards such gloomy forecasts as baseless, and wholly dissents from Sir Richard Jebb's view that to make Greek optional would be a serious blow to the interests of the highest liberal education in England and throughout the empire. Who, indeed shall decide when such doctors disagree? It is evident, too, from the debates at either university that many who advocate the change do so in the interest of the same liberal education which its opponents think will be im-

perilled. They foresee danger if the universities continue to stand too fixedly upon the old ways, making no attempt to readjust their requirements to new conditions and to enlarged views of what constitutes a liberal education.—*The London Times*.

NOTES ON ENTOMOLOGY.

PROFESSOR A. P. MORSE has published the first entomological paper under the Carnegie Institution of Washington.* The greater part of the work is occupied by a list of the species taken (ninety in number), with notes on occurrence, habits, variations, etc. Before this systematic list there is some very interesting ethological matter comprising a classification of grasshoppers according to habitat, and an explanation of brachypterism in orthoptera. The classification by habitat is first into geophilous and phytophilous divisions, each divided into campestrian and sylvan groups, and the campestrian into xerophile and hydrophile societies. He finds an explanation of brachypterism in the fact that these species 'dwell in an environment of more or less dense, intricate, interlacing vegetal growth, * * * or in burrows, crevices, etc.' The excellent plates illustrate the habits of various species.

Dr. R. W. Hoffmann has published a very interesting article on the morphology and physiology of certain parts of springtails.† He has studied particularly the structure and histology of the ventral tube of these tiny creatures; an organ not found elsewhere in insects, and whose function has never been well understood. Some have believed it to be an organ of generation, others considered it a breathing organ, or an organ to take up water, others thought it an organ of secretion, and still others as used to hold the end of the furcula. Many, however, have thought it was

* 'Researches on North American Acridiidae.' Publ. no. 18, Carnegie Inst. Wash., Oct., 1904, pp. 55, 8 pls., 13 text figures.

† 'Über den Ventraltubus von *Tomocerus plumbeus* L. und seine Beziehungen zu den grossen unteren Kofdrüsen. Ein Beitrag zur Kenntniss der Collembolen.' *Zool. Anz.*, XXVIII., 1904, pp. 87-116.