

1916 in the University of Sydney, has been appointed to the chair of chemistry in the University of St. Andrews.

DISCUSSION AND CORRESPONDENCE

THE UNIVERSITY OF TENNESSEE AND PROFESSOR SCHAEFFER

THE Board of Trustees of the University of Tennessee has dismissed five professors from the university, among them, Dr. A. A. Schaeffer, professor of zoology. The dismissal of Professor Schaeffer seems especially significant inasmuch as he is president of the local chapter of the American Association of University Professors, and this chapter had made request for an investigation of the case of Professor Sprowls, who was dismissed from the university some months ago. No satisfactory reason for the dismissal of Professor Sprowls has been given, it may be mentioned incidentally, but it is believed that a certain opposition to his introduction of the evolutionary point of view into his educational work contributed to the result. Professor Schaeffer was at the Marine Laboratory of the Carnegie Institution of Washington in the Gulf of Mexico when dismissed. Immediately before leaving Knoxville in June the president discussed with him a special appropriation for his laboratory and was far from showing any dissatisfaction with him. The action of the president seems to be a direct challenge to the American Association of University Professors to show whether it has any potency. Meanwhile the loss of Professor Schaeffer to the University of Tennessee is bound to be the gain of some other university.

CHAS. B. DAVENPORT

THE STREAMS OF LONG ISLAND

THE interesting difference between the east and west banks of the streams of Long Island has been the basis of suggestive comment by contributors to *SCIENCE*. Jennings,¹ who doubts that the westerly deflection of the streams by the earth's rotation is most largely responsible for the steeper west bank and the imperceptibly sloping eastern one, is more inclined to attribute these conditions to the cumulative effects of wind and wind-borne materials, particularly after consideration of the geological history of the region. Hayes² states that because of the earth's rotation, longitudinal rivers in the northern hemisphere erode their right banks, whether they flow north or south, while Davis³ recalls that in the plateau of Launemozen, at the northern base of the Pyrenees, the valley sides facing against the wind are

the steeper, while in Long Island they face with the wind. French physiographers explained the former condition not as a consequence of the earth's rotation, but as the result of the stronger action of rain driven by westerly winds. In this case it is of course conceivable that drifting materials would be held in quantity by the denser vegetation of the moister stream margin only when other conditions enabled vegetation to be present in a quantity sufficient to retain it, and to prevent the erosion of that bank. This presumably finds additional explanation in the downward sweep of the winds.

Following Jennings's suggestion, I have studied cross sections of the banks of four small streams of Long Island, two near Oyster Bay, one below Mineola and one emptying near Glen Cove. Comparative cross sections of the steeper west bank and the eastern one indicated that pebbles of a size easily movable by the wind were by far the most common in the west bank, their place being taken by coarse gravel in the eastern one. In these sections, the black topsoil above the yellow sandy clay was in the western bank usually 2-3 times the thickness of the smaller deposit in the eastern bank. Further, faint lines of stratification could be seen as indicated by coarser vegetable remains. These facts indicate that the cumulative effects of wind and vegetation upon wind-borne materials explain in large part at least the steeper west bank of Long Island streams.

N. M. GRIER

DARTMOUTH COLLEGE

SCIENTIFIC BOOKS

Earth Evolution and its Facial Expression. By WILLIAM HERBERT HOBBS. The Macmillan Company, New York, 1921, 178 pages.

THIS interesting and suggestive book deals with major problems in advanced dynamical and theoretical geology. It represents the results of a long period of thought and study on the part of the author of the "fundamental questions of theoretical geology which are in one way or another connected with the growth of continents and mountains." The book is divided into fourteen chapters.

In Chapter I the field of cosmogony is traversed in a brief and general way. Reference is made to the conceptions of Greek, Latin and other philosophers of antiquity. The views of early modern thinkers are considered, together with the origin and rise of the nebular hypothesis. The author regards the objections to this hypothesis as fatal, and adheres to the planetesimal hypothesis, although in the development of his conceptions he departs markedly from certain postulates of that hypothesis.

¹ Jennings, O. E., *SCIENCE*, LV, p. 291.

² Hayes, E., *SCIENCE*, LV, p. 567.

³ Davis, W. M., *SCIENCE*, LV, p. 478.