Dr. Hugh Morgan was promoted from an associate professorship to a professorship of clinical medicine, and Dr. Horton Casparis was made professor of pediatrics and head of the department.

AT Yale University, Elliott Dunlap Smith, of the Dennison Manufacturing Company, has been appointed professor of industrial engineering in the Sheffield Scientific School; Dr. John Rodman Paul has been appointed assistant professor of medicine, and Dr. Roland Charles Travis has been appointed research associate in psychology, with the rank of assistant professor, in the institute of psychology.

PROMOTIONS which have been recently announced in the department of chemistry, University of Wisconsin, are: from associate professor to professor, Homer Adkins and Farrington Daniels; from assistant professor to associate professor, George J. Kemmerer, S. M. McElvain and H. A. Schuette.

DR. FLORENCE PEEBLES, lecturer for the extension department of the University of California at Los Angeles, has been appointed professor of biology in the California Christian College in Los Angeles.

A. BRAZIER HOWELL, of the U. S. National Museum, has been appointed lecturer in comparative anatomy in the department of anatomy at the Johns Hopkins Medical School.

DR. ERICH VON GEBAUER-FÜLNEGG, assistant professor at the University of Vienna, has received a similar appointment on the chemistry staff of Northwestern University.

R. A. WARDLE, lecturer in economic zoology in the University of Manchester, has been appointed to the chair of zoology in the University of Manitoba, Canada.

DISCUSSION AND CORRESPONDENCE

AN OLD EXPERIMENT ON COLLISIONS OF THE SECOND KIND

THIRTY-SEVEN years ago, in the course of an investigation on the spectroscopic determination of potassium, F. A. Gooch and T. S. Hart[1] made the interesting observation that the presence of sodium in a flame tends to increase the intensity of the red potassium doublet. A small helix of platinum wire was dipped in a solution of potassium and sodium chloride, dried and introduced in the outer cone of the flame of a large Bunsen burner. The potassium line was observed in a small spectroscope with the telescope set so that the yellow sodium doublet fell outside the field of view. The effect of varying the amount of sodium was roughly studied. The phenomenon began to be noticeable when the ratio of sodium to potassium was about ten. With twenty times as much sodium as potassium the potassium line was "much stronger" than in the absence of sodium. The greatest enhancement was observed when the ratio of sodium to potassium was one hundred. A further increase in the amount of sodium decreased the effect, but this decrease may be psychological, due to the strong sodium light scattered into the field of view.

The explanation of this phenomenon, which Gooch and Hart attribute to some, not specified, chemical reaction, is undoubtedly to be found in the so-called atomic collisions of the second kind.[2] Since the resonance potential of sodium is greater than that of potassium, it is possible for an excited sodium atom, colliding with a normal potassium atom, to transfer enough energy to excite the latter. The presence of a large number of excited sodium atoms will, therefore, increase the number of excited potassium atoms and thus enhance the intensity of the potassium doublet.

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ANOTHER WILD LIFE PRESERVE NEAR ITHACA

IN 1919 through the generosity of the late Mr. C. G. Lloyd, of Cincinnati, Ohio, Cornell University obtained what is now known as the Lloyd-Cornell Wild Life Reservation near McLean, N. Y. This preserve comprises an area of slightly over 80 acres and includes several very interesting cold upland sphagnum-heath bogs, grass bogs and an open mud pond, which is now in the process of being slowly filled in. Each year various classes in the biological sciences of Cornell University make excursions to this preserve and in 1926 a report was published on a preliminary survey of the fauna and flora of this preserve.[1]

In 1924 Mr. Lloyd purchased another tract of more than 400 acres of wooded land near Slaterville, N. Y., some 12 miles to the southeast of Ithaca and this has been designated as the Lloyd-Cornell Wild Flower Preserve. This preserve consists of a wooded hilly upland area which is traversed by several streams as well as by a cold spring brook and affords another bit of area in which Nature will be allowed to function without interference from man.

Just before his death Mr. Lloyd made arrangements for the purchase of still another tract of land near

[1] F. A. Gooch and T. S. Hart, *Am. J. Sci.*, 42, 448 (1891).

[2] O. Klein and S. Rosseland, *Zeitschr. f. Phys.*, 4, 46 (1921); J. Franck, *Zeitschr. f. Phys.*, 9, 259 (1922).

[1] A Preliminary Biological Survey of the Lloyd-Cornell Reservation, by members of the Scientific Staff of Cornell University. Bull. Lloyd Library, No. 27, Ent. Ser. No. 5, 1926.