

North Carolina College of Agriculture and Mechanic Arts, for the year 1909-10: Dr. L. F. Williams promoted from an instructorship to an assistant professorship; Burton J. Ray, A.B. (Wake Forest, Ph.D., Cornell), instructor in organic chemistry and assistant chemist in the Experiment Station; Frank W. Sherwood, B.S. (North Carolina A. & M.), assistant chemist in the Experiment Station.

REGINALD E. HORE, of Toronto, formerly instructor in the University of Michigan and in Queens University, has been appointed instructor in petrography in the Michigan College of Mines, Houghton.

DR. E. B. HUTCHINS, Ph.D. (Wisconsin), has resigned the professorship of chemistry at Carroll College to accept the position of manager of a manufacturing establishment in Fond du Lac, Wis. S. B. Hopkins, Ph.D. (Johns Hopkins), has been elected to the position at Carroll College.

DR. A. H. GIBSON has been elected professor of engineering at University College, Dundee, to succeed Professor Fidler, who has resigned.

PROFESSOR H. KOSSEL, director of the hygienic institute at Giessen, has received a call to Heidelberg. His brother, Dr. A. Kossel, is professor of physiology at Heidelberg.

DR. F. HARTMANN, of the Astrophysical Observatory at Potsdam, has been appointed professor of astronomy at Göttingen and director of the observatory.

#### DISCUSSION AND CORRESPONDENCE

##### NATURE STUDY

TO THE EDITOR OF SCIENCE: In the advertisement of a new book on "Nature Study" I find the following statement:

There is a great deal of talk about nature study by persons who have only the haziest idea of what they mean by it.

With this I am in cordial agreement. Why the term "nature study" should be appropriated as applying to that partial range of the phenomena of the physical universe which is the particular province of the biologist I have never been able to see. I believe that the

word *φύσις* is the equivalent of the Latin *natura*, for which the English is *nature*. The derivation of the word physics is apparent. The old term "natural philosophy" is an excellent one, sanctioned by the best use from Newton to Thomson and Tait, and serving as a contrast to "natural history" or the purely descriptive part of that science of nature which does without philosophy. The term physics is shorter and belongs to other languages than English, and it seems to me that if the biologists desire a correspondingly convenient term it is for them to invent one, and not to preempt the whole of nature, which is greater than any part.

ARTHUR GORDON WEBSTER

##### NEON AND ELECTRIC WAVES

TO THE EDITOR OF SCIENCE: Professor J. Norman Collie, F.R.S., recently discovered that when perfectly pure neon is enclosed in a glass tube with a globule of mercury and shaken, it glows with a bright orange-red color, and when the globule rolls it appears to be followed by a flame. This phenomenon takes place at ordinary pressure.

Sir William Ramsay has found that neon is the best conducting of the gases and that it readily becomes luminous under the influence of electric waves. Professor J. A. Fleming, F.R.S., uses a neon tube as a detector for the wave-length of Hertzian waves in his apparatus for measuring them.

During a recent visit to Sir William Ramsay I had the pleasure of seeing the astonishing quantity of over 500 c.c. of pure neon which he had obtained from about 120 tons of air. While there, Professor Collie very kindly presented to me a tube of neon, under about one half an atmosphere pressure, containing a globule of mercury which showed the "Collie effect" very strikingly.

Returning from Liverpool, July 2, on the steamer *Baltic*, I was given opportunity during the voyage, by Mr. Bates, the chief operator of the wireless, to try the neon tube as an instrument for the visual reading of the wireless message. We experimented with it during two nights and found that the neon glowed beautifully in response to the waves sent out,