UNIVERSITY AND EDUCATIONAL NEWS

A CONTRIBUTION of $50,000 from Mrs. E. H. Harriman to the endowment fund of Barnard College, Columbia University, is announced toward the million dollar fund now being raised for the twenty-fifth anniversary of the institution $550,000 is now pledged.

DR. J. B. JOHNSTON, professor of neurology in the department of anatomy of the University of Minnesota, has been appointed professor in the department of animal biology in the College of Science, Literature and the Arts, and dean of that college from August 1, 1914.

RICHARD LABAN ADAMS, a graduate of Massachusetts Agricultural College and M.S. of the University of California, has been appointed assistant professor of agronomy in the University of California. James Alexander Armstrong, a graduate of 1910 of the University of California, and now chief chemist of the Union Sugar Company at Betteravia, California, has been appointed field assistant in agricultural extension in the university.

DR. E. G. KENNARD, of Cornell University, has been appointed instructor in physics at the University of Minnesota.

MR. A. V. HILL has been appointed to the Humphrey Owen Jones lectureship in physical chemistry, at the University of Cambridge.

DISCUSSION AND CORRESPONDENCE

GYROSCOPIC QUANTA

IN the note[1] on gravitationally produced vortices in the ether and their relation to Planck's quantum theory, attention should perhaps have been called to some additional deductions.

For example, that it necessarily follows from the writer's electrostatic-doublet vortex theory of matter,[2] that the energy radiated when a distortional ether wave strikes an atom will be given off in quanta and be proportional to the frequency.

The simplest way of seeing this is to take the well-known experiment in which a gyroscope is held in the hand and the body revolved first in one direction and then in the other. On turning the body in one direction no effect is produced on the gyroscope. On turning in the other direction the gyroscope resists and is upset, and the axis then points in the opposite direction.

It may easily be shown that the amount of work done in upsetting the gyroscope varies directly as the angular velocity of rotation of the body, *i. e.*, in the case of the atom and ether wave, is directly proportional to the frequency.

It will be seen that this type of atom is somewhat different from any of those heretofore proposed. For example, instead of the electrons being numerically equal to one half the atomic weight the electrons can be numerically equal to the atomic weight, but only one half of them affected by any given ether displacement.

In addition, the stable equilibrium conditions of this type of atom are comparatively simple and the positive nucleus may be made to vanish, *i. e.*, can be formed of a number of negative electrons as pointed out in a previous paper.

REGINALD A. FESSENDEN

BROOKLINE, MASS.,
March 1, 1914

[1] SCIENCE, October 17, 1913.

[2] See papers referred to 1889–1900 in previous note.

MULTIPLE FACTORS IN HUMAN SKIN COLOR

A RECENT article by E. C. MacDowell[1] on "Multiple Factors in Mendelian Inheritance" is highly significant in its explanation of cases of apparently "blended" inheritance. The author gives a clear historical summary of experiments made by various investigators, beginning with Nilsson-Ehle's studies on oats and wheat first published in 1909. The original work reported is upon sizes in rabbit hybrids. It is a continuation of Castle's well-

[1] *Jour. Exper. Zoology*, Vol. XVI., No. 2, pp. 177–194, 1914.