

ings and in public schools under the auspices of the museum and a 50 per cent. curtailment of lectures for school children in the museum. All of these measures are designed to cut down expenses for fuel, light, and service, as the minimum appropriation of \$240,000 asked for by the museum, figured to cover regular expenses only without provision for further development, has been cut down to \$200,00 in the city budget.

By the will of the late Major S. Field Thorn, who died recently in San Francisco, the California Academy of Sciences is to receive "Cragthorn Park," near Santa Cruz, California. The place consists of 242 acres and was Major Thorn's country home. After the various specific bequests have been paid the academy is to receive the balance of the estate, which it is thought will be considerable. Major Thorn was at one time manager of the Palace Hotel in San Francisco and was for many years interested in the Academy of Sciences.

IN connection with the spring meeting of the American Physical Society at the Bureau of Standards, Washington, on April 25 and 26, there will be an exhibit of physical apparatus illustrative of war developments in physics. The exhibit was opened on the afternoon of the 24, all day on the 25 and 26, the evening of the 25 and the afternoon of the 28.

UNIVERSITY AND EDUCATIONAL NEWS

HARVARD UNIVERSITY and the Smithsonian Institution receive \$50,000 each by the will of Mrs. Virginia Purdy Bacon. Columbia University receives \$25,000 for scholarships.

By the will of Alexander Cochrane, late of Boston, and head of the Cochrane Chemical Company, Peter Bent Brigham Hospital will receive \$10,000 for the establishment of a free bed, and at the termination of a trust fund created for benefit of the members of Mr. Cochrane's family the principal of the trust is to go to Harvard College.

THE University of California receives by the will of Mrs. Phoebe Hearst, \$60,000, to

continue scholarships and a valuable collection of paintings, tapestries and objects of art.

PROFESSOR WILLIAM A. NOYES, head of the department of chemistry of the University of Illinois; Professor Frank Morley, of the Johns Hopkins University, and Professor William T. Sedgwick, of the Massachusetts Institute of Technology, will be included in the faculty of the summer session of the University of California, giving respectively courses in chemistry, mathematics and public health.

At the agricultural college of the University of Idaho, Herbert P. Davis, dairy husbandman, Dairy Division, U. S. Department of Agriculture has been appointed dairyman of the Agricultural Experiment Station, and vice director of the station, and J. E. Nordby, lately first lieutenant in the Motor Section of the Aviation Service, has been appointed associate animal husbandman of the Agricultural Experiment Station, and will have charge of experimental work in animal husbandry.

CAPTAIN JAMES RIDDICK PARTINGTON, has been appointed to the newly established university chair of chemistry, tenable at East London College.

Nature states that Professor Ludwig Jost, of Strasburg, succeeds at Heidelberg Professor G. Klebs, who died last October in his sixty-first year, and Dr. W. Ruhland, of Halle, succeeds Professor von Vöchting at Tübingen.

DISCUSSION AND CORRESPONDENCE

BASIS OF THE GEOMETRICAL MEAN AS A *B. COLI* INDEX

COULD I have realized that Professor Cairns would honor by mathematical consideration the "Geometrical Mean" (*SCIENCE*, March 8, 1918) method of obtaining a bacteriological index, I should have hesitated to "wander into paths outside my own domain." However, no elaborate discussion of the mathematical relation between the theory of chance variation and the geometrical mean can be expected to induce the empirical bacteriologist to use it as a *B. coli* index. The simplicity of application and practical utility in daily routine will in the end be its recommendation. Still a brief mention of the grounds on which it seemed to