were elected honorary members. Professor Millikan told of the activities of the scientific committee of the League of Nations, of which he is a member, and discussed what is desirable in international cooperation in scientific matters. Professor Darwin addressed the club on "The nucleus of the atom." The following officers were elected for the ensuing year: *President,* W. L. Hardin, Mt. Washington, Los Angeles; *vice-president,* L. S. Weatherby, University of Southern California; *secretary,* P. W. Merrill, Mt. Wilson Observatory; *treasurer,* E. E. Chandler, Occidental College.

Nature notes the assignment to science of the proceeds of the first performance of a great play by a leading dramatist. The play was the tragedy "Judith," by M. Henri Bernstein, produced at the Gymnase Théatre, Paris, on October 12, before a brilliant and distinguished assembly, which comprised ministers of state and the chief social and intellectual leaders of the city. The receipts were for the benefit of the French Confederation of Scientific Societies, and amounted to about $5,000. M. Bernstein gave his royalty as author, and Mme. Simone, who took the title part and is said to have obtained the greatest triumph of her career, devoted her fee to the same purpose.

WE learn from the *Journal* of the American Medical Association that the national alliance to promote an increase in population in France is planning a competitive contest with prize awards totaling 120,000 francs for the best essays setting forth the critical demographic situation and the best means of combating the danger. The first prize is 50,000 francs; the second, 10,000 francs; the third, 8,000 francs, while the balance of the 120,000 francs will be distributed in small sums. The essay which is awarded the first prize will be printed by the national alliance and 500,000 copies will be distributed throughout the country. The competitors will deal more especially with the following topics, but they will not be confined to these: (A) The evil as it exists: (1) the decrease of the birth rate in France, during the past century; the inevitable further decrease in the future if the most energetic measures are not adopted, and (2) the dangers that lurk in the fall of the birth rate and the catastrophe that threatens not only the life of the nation but also of the individual. (B) The proposed remedies: (1) the respect due to large families and the advantages that they deserve; (2) the reforms needed to raise the birth rate—at the price of financial sacrifices, if necessary; if by the expenditure of certain sums an increase in the number of births can be brought about, no money could be better expended, and (3) instruction in the matter of the moral, social and patriotic duty of paternity and maternity—their joys and their rewards.

UNIVERSITY AND EDUCATIONAL NOTES

THE University of Pennsylvania will receive $200,000 for the establishment of a department of clinical surgery from the estate of Edmund A. W. Hunter. The bequest was made with the provision that the addition to the university be known as "The Agnew and Hunter Department of Clinical Surgery," in memory of Dr. D. Hayes Agnew and Dr. Charles D. Hunter. The latter was the son of the donor.

A FUND of $60,000 for establishing a chair at Tulane University of tropical diseases and hygiene, and one amounting to $30,000 for constructing an isolation building for the Charity Hospital will eventually be available to these institutions under the will of the late William G. Vincent.

THE trustees of Hamilton College have authorized the erection of a biology-geology and museum building to cost approximately $225,000, and the construction of an addition to the chemistry building the estimated cost of which is $60,000. It may be noted further that the board of trustees, by unanimous vote, with twenty-five of the twenty-eight members of the board present, authorized the fixing of four hundred as the ultimate and maximum number of undergraduates in the college, and directed that all building plans take that number into account as the total for which provision should be made.

RUTH OKEY, Ph.D., has resigned from the biochemical laboratory of the University of

Iowa Hospital, Iowa City, to take up the teaching of nutrition at the University of California.

DR. WILLIAM E. BLATZ has been appointed instructor in psychology at the University of Chicago.

LEOPOLDO B. UICHANCO, Sc.D. (Harvard), has resumed his former work in the University of the Philippines, where he has been appointed assistant professor of entomology at the College of Agriculture, Los Baños, P. I. Dr. Uichanco had been on leave for about three years, as a traveling fellow of the University of the Philippines in the United States, spending the larger portion of this period in post-graduate work at the Bussey Institution of Harvard University.

DISCUSSION AND CORRESPONDENCE

WEATHERING UNDER CONSTANT CONDITIONS

DURING the past summer the writer visited a number of the paleolithic caves of southern France and northern Spain, and there had an opportunity to study the effects of weathering upon rocks and upon the works of man where conditions have apparently remained unchanged during a time which is variously estimated at from 18,000 to 30,000 years.

Every geologist from his own observations and reading can give many examples of rapid weathering, such as that on the western front of the Amiens Cathedral probably not an original stone placed there by the builders in the fifteenth century can be found;[1] that the outside stones of Westminster Abbey have been renewed five times over; that the stone of which the British Houses of Parliament are built has crumbled so rapidly that already it has been necessary to replace many of the stone ornaments with cast iron.

On the other hand, so many objects showing almost no evidence of weathering have been taken from tombs in Egypt where they were buried for many centuries that little surprise was evinced when the Metropolitan Museum Expedition of 1919-1920,[2] announced the discovery at Thebes, in the chamber of the tomb of a man of great wealth, of a large number of remarkably preserved small wooden models illustrating the daily life of his household: brewers making beer, cooks making bread, boats with their boatmen, cattle fattening in their stable. These wooden models, which are "practically as perfect as the day they were made," were carved and stored away about 4,000 years ago, but so little have they been affected by the agents of the weather that even the finger and thumb prints of the men who carried the figures up to the tomb are preserved as well as fly specks on the models and spider-webs with dead spiders still in them.

It is perhaps because of the many archeological discoveries in arid countries that we have become accustomed to think of the agents of the weather as working slowly only where there is little or no moisture, but the wonderfully preserved paintings, engravings and clay models which are to be seen in the moist caves of southern France and northern Spain, and which antedate the works of the Egyptians by thousands of years, compel a modification of these views.

When the polychrome paintings on the ceilings of the great chamber of the cave of Altamira, near Santander, Spain, were discovered, careful observers doubted their authenticity because they showed so little evidence of great antiquity: the paint is so fresh that it can easily be rubbed off with the finger, the colors are probably nearly as bright as when first laid on, and there is no conspicuous flaking of the surface. Notwithstanding their modern appearance it is generally agreed that the paintings were made by paleolithic artists thousands of years before the pyramids were built or Babylon founded.

In the cave of Combarrelles and in other caves in the Dordogne region of southern France the same absence of conspicuous weath-

[1] J. W. Gregory, "Geology of To-day," page 91.

[2] *Bull. Metropolitan Museum of Art*, XV, December, 1920, pp. 12-40.