to all. What more can psychology tell us than that these inventions were thought out by somebody. So when a culture complex has been analyzed and found to rest upon the association of two or more ideas, we do not thereby raise a specific psychological problem at all. The problem we do raise is as to where and at what relative points in man's career did these ideas appear, and the solution is to be sought in the historical relations of the people among whom they originated and not in innate psychological characters.

Our purpose is not to deny the existence of a psychological problem in culture; far from it. We are only pointing out what aspects of the problem can consistently be subjected to psychological methods and calling formal attention to the very crude method of taking learned activities for innate ones and thereby explaining cultural phenomena. Psychology can be of the very greatest service to anthropology by discovering the relations between man's innate and cultural equipments.

CLARK WISSLER

THE AMERICAN MUSEUM
OF NATURAL HISTORY

CHARLES RENÉ ZEILLER

LORRAINE has produced many men who have adorned the annals of the sciences, arts and politics of France. None are more worthy of honor than Professor Zeiller, the dean of paleobotanists, who passed away at his home in Paris on November 27.

Born at Nancy on January 14, 1847, he was educated at the École Polytechnique and École des Mines, so that naturally he was a member of the auxiliary corps of engineers during the Franco-Prussian war. His father was engineer-in-chief of bridges and highways of Lorraine and on the maternal side he was descended from the sculptor Guibal.

Although the illustrious mantle of Brongniart and Saporta has long rested on Zeiller's shoulders his earliest contributions were not paleobotanical, but metallurgical and geological, and published in the *Annales des Mines* in 1870 and again in 1871, both devoted to the Eifel region. In 1873 he published a memoir on the eruptive rocks and metalliferous veins of the Schemnitz district. His first paleobotanical contribution was an analysis of Schimper's great work, "Traité de Paléontologie végétale" and published in the *Revue scientifique* in the spring of 1874, thus indicating the trend of Zeiller's mind at that time and foreshadowing the field of endeavor to which he was to so successfully devote the mature years of a reasonably long but never robust life.

As an engineer of mines the fossil floras associated with the coal were the subject of his chief professional interest, although Zeiller was not a narrow specialist, but a contributor to all phases of paleobotanical activity. With a rare facility he was equally effective in describing the histology of *Sphenophyllum* and *Lepidostrobus* or the impressions of plants of the Paleozoic, Mesozoic or Cenozoic. The last paper from his hand that I have received was an account of the Wealden flora of Peru, and in his last letter, written just before the end, he asked me to send him a copy of Walcott's recent paper on Algonkian Algæ. It was this world-wide interest combined with a philosophical temperament that made the many annual reviews of the progress of paleobotany published in the *Annuaire universel de Géologie* and the *Revue bibliographique* of such lasting value.

Zeiller's first original contribution to paleobotany was an account of the flora of Ternera in Chili published in 1875, and the wide interest and facility of treatment are shown in a succession of works whose stratigraphic range is from the Devonian of Pas-de-Calais to the Tertiary of Tonkin-China, embracing discussions of floras of the Carboniferous, Permian, Triassic, Jurassic, Cretaceous and Tertiary. Outside his native land he contributed to the paleobotany of Spain, India, the Vosges, the Balkans, New Caledonia, Indo-China, Madagascar, Central and South Africa,

Brazil, Peru, Chili, Persia, Russia, Asia Minor (Heraclée) and China.

Professor Zeiller was one of the first to demonstrate the precision with which fossil plants can be used in stratigraphic geology and in the numerous large memoirs on the Carboniferous and Permian floras of the coal basins of Grand-Combe (1884), Valenciennes (1888), Commentry (1888–1891), Epinac (1890), Brive (1892), Blanzey and Creusot (1906), as well as in his work on the fossil plants, which forms part 2 of Vol. 4 of "Explication de la carte géologique de la France" (1879), he displayed a philosophic interpretation that had never been equalled. Since 1878 the mining engineers of France have had the benefit of his annual course in paleobotany at the École nationale des Mines, the excellence of which is attested by his "Éléments de Paleobotanique" published in 1900, which remains not only the best but the only well balanced text-book on this subject that has ever been written.

Professor Zeiller was not only a voluminous contributor to his chosen science, but a life-long teacher and a conscientious and efficient administrator, having been for more than twenty years the secretary of the National Board of Mines, Inspector General since 1884 and Vice-president since 1902. He had charge of the *Annales des Mines* from 1874 to 1910. For a period of forty-five years he was an honored member of the *Société géologique de France* and its president in 1893. Honors came to him freely both at home and abroad. He was a commander of the Legion of Honor and a member of the French Academy since 1901. Cambridge conferred its Sc.D. on him at the time of the Darwin Centennial.

Professor Zeiller was a sort of father-confessor to the younger paleobotanists of all races, and they found in him a wise and kindly critic, always painstaking and helpful, as well as a generous and inspiring friend. His rare ability was combined with an equally rare modesty that endeared him to a wide circle on this side of the Atlantic, and wherever fossil plants are studied his name will ever be honored. This is neither the time nor the place for a critical analysis of his contributions to science—our grief is too recent. That he upheld the high traditions of French paleontology there can be no doubt. His epitaph might well read *Nil nisi bonum.*

E. W. B.

RECOMMENDATIONS OF THE PAN-AMERICAN SCIENTIFIC CONGRESS

The Second Pan-American Scientific Congress at its final session before adjourning to meet again at Lima in the year 1921, which will be the Peruvian centenary, adopted by unanimous vote thirty-six recommendations. Those relating to the sciences are as follows:

I. That it is highly desirable that the various American republics arrange for the appointment of delegates for joint action in the matter of archeological exploration, in order to formulate generally acceptable and substantially uniform laws relating to the survey, exploration, and study of archeological remains to be found in the several republics, and that laws shall be enacted which will effectively safeguard these remains from wanton destruction or exploitation and which will serve to aid and stimulate properly organized and accredited research in archeology.

II. That the government of the United States be requested to bring to the attention of the governments of the other republics participating in the congress and, through their respective governments, to the institutions and the public thereof, the importance of promoting research in the field of archeology, organized surveys for the study of primitive tribes, and the building of national educational museums for the preservation of the data and materials collected.

III. The American republics undertake as soon as possible: (*a*) Accurate, geodetic measurements which may serve to determine limits, national and international, and to contribute to the discovery of the true shape of our planet. (*b*) Magnetic measurements of their respective surfaces, and the establishment of several permanent magnetic observatories in which it may be possible to carry on during long periods of time observations concerning the secular variation of the magnetic characters of the earth. (*c*) To extend their gravimetric measures (obtained by means of the pendulum)