tation that produced the characteristic type of tooth growth of the cave bear and is still present in some modern brown bears traces back through roughly a million years, where it may still be studied in the biometric variations of the fossil *U. etruscus.*

The fairly strong allometric growth in both types leads to a diminished fitness of the shape of the tooth crown as the tooth enlarges excessively in size, just as it did in the cave bear toward the time of its extinction. Very likely the existence of the two types of allometric growth of the teeth and the intermediate between them made it possible for bears of different sizes to possess teeth of the optimal shape.—B. G.

News Briefs

■ The State Department on 8 July issued a passport to Martin D. Kamen, former atom bomb project chemist and now an associate professor at Washington University, St. Louis. For the past 8 years, Kamen has been seeking a travel permit in order to accept speaking engagements abroad [*Science* **121,** 758 (27 May 1955)]. On 14 July the State Department formally withdrew its charges that Kamen is a supporter of Communism, and Kamen's suit to force issuance of a passport was dropped.

■ The areas in six southwestern states that are regulated because of the pink bollworm of cotton will be merged into a single continuous regulated area, instead of being divided as now into heavily and lightly infested areas, the U.S. Department of Agriculture has decreed. This change became effective 12 July. At the same time 20 Arkansas counties were added to the regulated area. Merging of the lightly and heavily infested pink bollworm areas became necessary because heavy infestations have been found sporadically throughout the entire regulated area. It was therefore no longer practicable to operate the quarantine on a two-area basis.

■ The Mediterranean fruit fly has been found in almost every part of Costa Rica, it has been announced by the Agriculture Ministry and United States technical aid authorities. The pest, which attacks many forms of ripe fruit, was first detected a few weeks ago by Harold Mowry, acting chief of the technical aid program. Subsequent spot checks have revealed many other infestations. Identification was confirmed by laboratory tests in Washington.

The infestations of Mediterranean fruit fly have not been serious in this hemisphere, except in isolated spots in southern Brazil, since the 1929 infestation in Florida, which did heavy damage to the citrus industry.

The Costa Rican government plans an eradication campaign. In an effort to prevent spread of the infestation, the government of Nicaragua has embargoed imports of Costa Rican fruits, plants, and seeds. Other control measures may be instituted in Costa Rica and elsewhere.

■ The National Society of Professional Engineers has urged a House committee to approve pending legislation that will give more liberal tax benefits to self-employed persons who wish to establish an individual retirement plan.

Paul Robbins, executive director of NSPE, in recent testimony before the House Committee on Ways and Means, stated that present tax rates "do not leave the average self-employed professional person enough to cover living costs and a residue for the relatively high payments which are required for an acceptable private pension plan." Pointing out that salaried employees can receive "substantial tax benefits under existing favorable tax law provisions," Robbins added that the professional man alone "stands in a position where high surtaxes prevent him from leveling his earnings to provide a stable income and retirement benefits."

Robbins testified that "in all fairness the laws should be written to permit those who earn their income by a personal practice of a profession to project some portion of their earnings into the future for tax purposes" and emphasized that the nation can ill afford to discourage young people "from embarking on professional careers by presenting them with a prospect of rewards not commensurate with the risks they are asked to run."

■ Proposed agreements for the exchange of atomic information for mutual defense purposes have been approved by President Eisenhower, signed by representatives of Canada, the United States, and the United Kingdom, and submitted to the Joint Committee on Atomic Energy of the U.S. Congress. According to the terms of the U.S. Atomic Energy Act of 1954, the proposed agreements are to lie before the Joint Committee for a period of 30 days before becoming effective.

Scientists in the News

AUGUST C. HELMHOLZ has been appointed chairman of the department of physics at the University of California. He succeeds RAYMOND T. BIRGE, who retired 1 July. Helmholz has been a member of the Berkeley staff since 1940. ERWIN L. HAHN, now with the I.B.M. Corp. at the Watson Laboratory, Columbia University, will join the Berkeley staff in September. Other departmental changes at Berkeley include the promotion to full professor of WILLIAM B. FRETTER, WILLIAM A. NIERENBERG, and CORNELIUS A. TOBIAS.

On 17 June at the commencement in Berkeley, Calif., the University of California awarded to RAYMOND THAYER BIRGE an LL.D. degree, thereby recognizing his long years of distinguished service as a scientist, teacher, and administrator. Birge retired as chairman of the department of physics on 1 July, 1955, having served in this position since 1933.

After completing his academic training through the Ph.D. degree at the University of Wisconsin, Birge served for 5 years on the physics staff of Syracuse University. In 1918 he came to the University of California as an instructor and rose rapidly to full professorship in 1926. Although he reached the retirement age in 1954, he was reappointed for the year 1954–55. During his period as chairman, the department grew in both numbers and eminence, and his guiding hand was largely instrumental in this rise.

Birge's research interests were originally in spectroscopy; he entered the field at the time that Bohr's quantum theory of the hydrogen atom was first published, and his researches did much to interpret the spectra of molecules in terms of this theory and developments from it. The use of intensities in the rotational structure of band spectra to measure the temperature of emitting molecules was introduced by him in 1921. He was one of the first to employ data on the vibrational and rotational states of diatomic molecules to determine the force law constants and to examine critically their interrelations. Soon after it was realized that the presence of isotopes in diatomic molecules was manifested in their spectra, he was largely instrumental in the discovery of the rarer isotopes of hydrogen, carbon and oxygen. The celebrated Birge-Sponer method of extrapolating vibrational energy levels to evaluate heats of dissociation was discovered in 1926 and has proved to be a powerful method of estimating these quantities for the more stable diatomic gases.

Through his interest in spectroscopy, Birge was led to examine the relationships between the constants of atomic physics—for example, in the Rydberg constant and the fine-stucture constant. In pursuing this line, he became, for many years, the leading authority on the best values of the whole array of general constants. His thorough investigations pointed up many discrepancies in the values of the physical constants then known and stimulated much important work in the resolution of these difficulties. In the course of this work, he developed an interest in the propagation of errors