far back as age forty. In fact, the definiteness and consistency of all the writer's results were truly remarkable when it is recalled that each result—even in the same group—was obtained independently of every other; no smoothing process was used anywhere in the whole investigation—except what was naturally involved in interpolation.

To paraphrase the words of a contemporary humorist, all that I know is what the various statistical data tell me, but, to me, the whole picture, from our earliest records in 1890 to the present time, points consistently and inevitably to a future of a declining average length of life until the American adult wakes up to the fact that the odds are at present heavily against his living as long as his father or grandfather. Some will say—and no doubt truly—that it is all a natural consequence of the great drift to the cities. Others will go farther and say life has become too fast and strenuous and that we do not know as yet how to adjust ourselves to such a life. To the medical authorities the whole problem will loom as one of relieving the strain upon the heart. But little will be accomplished until the American adult himself is duly informed and made to realize that he is in the midst of a decidedly losing fight and that the situation will continue until he applies himself energetically to be superior to his environment. Moreover, each adult must fight his own individual battle, since he usually brooks no interference with his own individual mode of living. Medical authorities and scientists can be depended upon to care for the children and their diseases, but they have little or no chance to interfere with the lives of adults.

It truly looks as if it is going to be a losing fight for some time to come, for although some adults are making a commendable effort to live sane lives the vast majority seem very indifferent and many give apparently no thought whatever to habits which they clearly know are bad and which they know they could easily discard. There is surely no worse influence than that wielded by well-meaning authorities who go around airing their ill-founded beliefs that all is going well and that before long everybody is going to be living seventy-five to a hundred years!

The present recurrence of the "flu" promises to obscure the issue, not only by a further abnormal decline but even by the later reaction or recovery which is pretty sure to occur and which is very apt to produce a false impression of security and health improvement.

OBITUARY

SIDNEY SAVORY BUCKMAN, 1860–1929

SIDNEY SAVORY BUCKMAN, British paleontologist, passed away at his home at Thame in Oxfordshire, England, on the 26th of February, 1929. He was born in 1860, the son of a naturalist and geologist, James Buckman, who will be remembered as the venerable professor at the Royal Agricultural College at Cirencester. Sidney Buckman was early led to take a strong interest in the paleontology and stratigraphy of the British Jurassic. In these fields he was one of the most active and brilliant of investigators throughout his life. His passing is the fall of a leader.

Buckman's first scientific paper appeared in 1878, his nineteenth year. From then on his work, carried on in spite of the cares of business, was prodigious. Possessed of boundless mental energy, the keenest of keen intellects and a philosophical mind of the first order, he soon uncovered weaknesses in existing systems of interpretation. This brought him into controversial contact with the Geological Survey, a contact which produced active research on both sides, and finally a justification of Buckman. This work produced a notable result in the "Monograph of the Inferior Oolite Ammonites," 1887–1907; and it culminated in "Type Ammonites," 1909–1928, his great masterpiece.

In these memoirs, as well as in certain of his shorter contributions, Buckman's improved methods of study and his broader results were worked out. The outstanding principle in his method is his insistence on fine subdivision in both paleontological and stratigraphical analysis as the only means of bringing ultimate, significant details into relief, and of producing thereby a basis for discerning real relationships. This method resulted in a multiplication of genera and species of ammonites, for which Buckman has been adversely criticized. But at least Buckman's names stand for real groups, even though future work may modify their rank. A feature of his work is his development of the principle of classification by descent. This is the keynote of his later work, to be seen especially in "Type Ammonites" and "The Brachiopoda of the Namyau Beds" (1917–1919).

His paleontological studies soon convinced him that the simple stratigraphical principles of William Smith could be applied with much greater precision than had hitherto been attempted. This led to a great deal of stratigraphic subdivision, so that the thirty-three Jurassic zones of Oppel became elaborated into a system of about four hundred zones. Strange as it may seem, criticism of this part of the work has been much less severe. But this, as Buckman points out, is

probably because of the failure of his critics to comprehend his work: the stratigraphical subdivision is dependent on the zoological—criticisms of the one apply equally to the other.

A very important result of Buckman's work came from his recognition of a principle originally perceived by H. S. Williams—the essential independence of faunal and sedimentary history, in spite of the close, and even confused, association of the record of each in geologic formations. This demanded a dual nomenclature for the divisions of geologic time—one for stratal, one for faunal time-units. Working on this principle Buckman produced his biological chronology of the Jurassic Period, in which the period is divided into forty-five ages and about four hundred hemerae or biological time-units.

However, Buckman did not confine himself within the sphere of geology. His brilliant and versatile thought moved into such realms as human evolution, the origin of human customs, biography, philosophy. Some titles—such as, "John Darke's Sojourn in the Cotteswolds and Elsewhere," "Marriage and Mating," "Neglect of Opportunities," "Origin of Human Language," "Human Babies: What They Teach"—show, perhaps meagerly, the spheres which he touched, and touched in no dilettante spirit, but with the hand of a master. His extraordinarily detached point of view permitted his mind to travel freely along avenues of thought from which most minds are unconsciously excluded by the wall of their own prejudice and taboo.

The complete list of Buckman's printed works includes about two hundred items. A full listing and appreciation will be attempted later.

Buckman neither sought nor received honors. However, he was elected to fellowship or association with a number of learned societies both in his own country and abroad. And the value of his work was recognized repeatedly by the Geological Society of London by awards which culminated in 1913 in the Lyell medal.

C. H. CRICKMAY
UNIVERSITY OF CALIFORNIA AT LOS ANGELES

RECENT DEATHS

THE *Geographical Journal*, London, writes, "The many friends whom he made when he came last summer to the Geographical Congress will have been shocked to hear of the untimely death of Colonel Lester Jones, director of the United States Coast and Geodetic Survey, at the early age of fifty-three, after fourteen years' tenure of that important office. He made no claim for himself to scientific distinction; but that he was a most capable director is evident from the recent history of the great organization which he controlled. The output of its scientific divisions has been immense: we look with respectful admiration and a little envy on a department of the public service which can command twenty mathematicians, and realize that even in the United States of America it can be no easy task to obtain the increasing appropriations necessary to support geodetic and hydrographic survey on such a scale. The Director who can take upon his shoulders all the cares of organization and supply, leaving the chiefs of his scientific divisions unfettered freedom to pursue their technical work, does great service to science; and this Colonel Lester Jones performed. Moreover, he was always ready to be helpful to others; he took much trouble to procure for the Society a portable tide-gauge of the U.S.C.G.S. pattern which was wanted in a hurry for the use of our geographers attached to the Great Barrier Reef Expedition, and to answer questions on an interesting point of International Boundary practice. His impressive courtesy as a delegate and kindness of heart as a colleague will be long remembered."

DR. WILLIAM HENRY CARMALT, emeritus professor of the principles and practice of surgery at Yale University since 1907, died at New Haven on July 17 at the age of ninety-two years.

DR. T. W. GALLOWAY, since 1920 associate director of the Department of Education of the American Social Hygiene Association, died on July 16 at the age of sixty-three years. Dr. Galloway was formerly professor of biology at James Millikin University and at Beloit College.

M. J. CORNET, professor in the school of mines, Belgium, and a correspondent of the Paris Academy of Sciences, has died at the age of sixty-four years. M. Cornet was the first explorer of the Belgian Congo.

A SPECIAL cable to the New York *Times* reports that Professor Hans Meyer, explorer and geographer, died at the age of seventy-one years in Leipzig on July 6 from the effects of an infection contracted during his recent trip to the Canary Islands. He was a member of the Bibliographisches Institut, publishers of Meyer's Lexikon.

THE deaths are also announced of Dr. Heinrich Micoletzky, professor of zoology at Innsbruck; of Dr. Friedrich Heincke, formerly director of the State Biological Institute in Heligoland, and of M. Daudois, professor of pathology and clinical surgery in the University of Louvain.