WASHINGTON A. ROEBLING, the engineer, builder of the Brooklyn Bridge, died in Trenton, N. J., on July 21, aged eighty-nine years.

A. M. HERRING, designer of airplanes, at one time associated with the late Professor Samuel P. Langley, died on July 17, aged sixty years.

PROFESSOR CLARENCE AUSTIN MORROW, of the division of agricultural biochemistry of the University of Minnesota, died on July 1, aged forty-five years.

, FRANK MORLEY WOODRUFF, an authority on taxidermy, for many years curator of the Academy of Sciences and Museum of Natural History in Lincoln Park, Chicago, died on July 21, aged fifty years.

THE REVEREND T. R. R. STEBBING, F.R.S., the eminent zoologist and one of the foremost authorities on the Crustacea, has died at the age of ninety-one years.

THE death is announced of Professor Edward Babak, dean of the medical faculty and professor of physiology at Masaryk University, Czechoslovakia, on May 29, aged fifty-three years, and of Dr. F. B. Hofmann, professor of physiology at the University of Berlin, at the age of fifty-six years.

THE eleventh annual meeting of the Optical Society of America will be held at Philadelphia, Pa., Thursday, Friday and Saturday, October 21, 22 and 23.

THE Society of Chemical Industry held its fortyfifth annual meeting and Congress of Chemists in London, from July 19 to 23, in cooperation with the Chemical Society, Institute of Chemistry, Association of British Chemical Manufacturers, British Association of Chemists, British Chemical Plant Manufacturers' Association, Bio-Chemical Society, Coke Oven Managers' Association, Institute of Brewing, Institute of Metals, Institution of the Rubber Industry, Institution of Chemical Engineers, Institution of Petroleum Technologists, Oil and Color Chemists' Association, Society of Leather Trades' Chemists, Society of Public Analysts and the Chemical Industry Club.

THE Brooklyn Botanic Garden has succeeded in meeting the requirements of a pledge of Mr. John D. Rockefeller, Jr., to contribute \$250,000 to the permanent funds of the Botanic Garden to be used for its educational and scientific work, provided the Botanic Garden authorities secure a like amount before the close of the year 1926. A small amount not subscribed has been underwritten by a friend of the Botanic Garden in order that the institution may benefit from the income of the entire fund for the remainder of the year. Contributions are still being received and it is hoped that the entire unsubscribed balance will be met in this way before December 31.

THE name of the chemical element whose symbol is

Al is to be found in the literature spelled "aluminum" and "aluminium." The former spelling is almost universal in common usage whereas the latter spelling has predominated in scientific literature. The committee on nomenclature, spelling and pronunciation of the American Chemical Society, of which E. J. Crane, of the Ohio State University, is chairman, has announced that it favors the spelling "aluminum." This is in the interest of uniformity. The decisions of this committee are always considered as tentative for one year and criticism is welcomed.

IN the article on William Chauvenet, SCIENCE, page 24 (Vol. LXIV, No. 1645, July 9, 1926) replace the seventh line by the following words: "Chauvenet was born on May 24, 1820. As an only"

UNIVERSITY AND EDUCATIONAL NOTES

At the commencement of Brown University it was announced by President Faunce that a million of dollars had been pledged to the endowment fund of the university, \$500,000 given by the Aldrich brothers of Providence provided the university raised the same amount. The condition had been met.

AT the recent celebration of the bicentenary of the foundation of the medical faculty of the University of Edinburgh, the new rooms for the surgical department, fully equipped for research by a gift of \$250,-000 from the Rockefeller Foundation, were dedicated.

MEMBERS of the administrative board of the School of Public Health of Harvard University for the year 1926–27 are: President Abbott Lawrence Lowell, David Linn Edsall, Milton Joseph Rosenau, Ernest Edward Tyzzer, Edwin Bidwell Wilson, Hans Zinsser and William Lorenzo Moss.

PROFESSOR KURT KOFFKA, of the University of Giessen, has been appointed professor of psychology in the University of Wisconsin for the academic year 1926–1927.

DR. KARL HERZFELD, professor of physical chemistry in the University of Munich, has been called to a professorship in the Johns Hopkins University.

DR. HOMER B. LATIMER, of the University of Nebraska, has been appointed professor of anatomy in the medical school of the University of Kansas, at Lawrence, Kansas.

DR. E. A. BOYDEN, of the Harvard Medical School, has been appointed an associate professor of anatomy in the medical department of the University of Illinois.

THE department of biology of University College, New York University, announces the following additions to its teaching staff for the next academic year: Dr. Richard P. Hall, Ph.D., University of California, and for the past three years at Rice Institute, Houston, Texas, to be assistant professor of micro-biology; Dr. F. L. Campbell, Harvard University, to be assistant professor of general physiology, and Mr. H. A. Charipper and Mr. F. J. Novotny to be graduate assistants in biology.

DR. RICHARD DOUGLAS PASSEY, lecturer in pathology in the Welsh National School of Medicine, Cardiff, has been elected to the new chair of experimental pathology in the University of Leeds and will also be director of cancer research. Dr. Bryan A. McSwiney, who was assistant professor of physiology at Trinity College, Dublin, and subsequently lecturer in experimental physiology at the University of Manchester, has been appointed to the chair of physiology, in succession to the late Professor W. F. Shanks.

DISCUSSION

GEOLOGIC AGE CALCULATIONS

In view of the recent publication of two articles under the auspices of the Committee on the Extension of Geological Age by Atomic Disintegration in which the age of the Black Hills pitchblende is in one case referred to as fifteen hundred million years and in the other as sixteen hundred and sixty-seven hundred million years, it may be well to remark that the work of Davis¹ of course precedes that of Richards and Hall² and his estimate is the closer calculation, while the figure in the article by Richards and Hall is simply a round number to show the importance which this particular sample and the age determination thereof seem to have.

It may be well to say that even though no great exactitude can yet be claimed for the numerical figures for age, the relative ages are of great geological value and significance. In this case, for instance, a much greater age is indicated for the Precambrian age of the Black Hills than was previously supposed on what were realized to be very insufficient grounds.

The physicists are hardly yet agreed on the second figure of the numerical constants necessary to compute time from the lead: uranium ratio, and moreover it is by no means universally accepted that the rate of decay of radioactive atoms is uniform in time. Of the eight or more conceivable factors that might affect it, not all have been eliminated as unimportant within the ranges of conditions that occur in the outer rind of the earth.

It does not seem likely that any of them will affect the relative ages. If so it may probably be found out by comparing ages thus obtained with ages derived in other ways.

This has recently been done by A. Holmes.³ In time we may hope to correlate the periodic and progressive, the hourglass and pendulum methods of estimating time.

In this work C. W. Davis has added important facts, for his paper includes not only an analysis of the Black Hills pitchblende, but that from Katanga, and of a mineral from Utah which may be a recent representative of the Swedish Kolm and the pre-Cambrian anthraxolites.

Alfred C. Lane

AERIAL MUSIC IN YELLOWSTONE PARK

THE very interesting article in your issue of June 11 on a mysterious sound heard in Yellowstone Park brings to mind the fact that I heard sounds like that described many times in July, 1890, when, in the company of Professor Edwin Linton, then of Washington and Jefferson College, Pennsylvania, I was making a biological study of the waters of the park under the auspices of the U. S. Fish Commission. Linton and I heard these sounds with wonder and delight in different places and under different conditions—once I remember when we were riding on horseback through the woods, but never when they could be explained as due to anything in our immediate neighborhood.

I was so interested in this perplexing phenomenon that I made the following footnote reference to it in my report of our operations, made to the commissioner, Colonel Marshall McDonald, and published in the Bulletin of the U. S. Fish Commission for 1891. Referring to Shoshone Lake, I wrote:

Here we first heard, while out on the lake in the bright still morning, the mysterious aerial sound for which this region is noted. It put me in mind of the vibrating clang of a harp lightly and rapidly touched high up above the tree tops, or the sound of many telegraph wires swinging regularly and rapidly in the wind, or, more rarely, of faintly-heard voices answering each other overhead. It begins softly in the remote distance, draws rapidly near with louder and louder throbs of sound, and dies away in the opposite distance; or it may seem to wander irregularly about, the whole passage lasting from a few seconds to half a minute or more. We heard it repeatedly and very distinctly here and at Yellowstone Lake, most frequently at the latter place. It is usually noticed on still, bright mornings not long after sunrise, and it is always louder at this time of day; but I heard it clearly, though faintly, once at noon when a stiff breeze was blowing. No scientific explanation of this really bewitching

³ Geological Magazine, Nov.-Dec., 1925, xii: 505-515, 529-544.

¹ Am. J. Science, 1926, xi: 201.

² Journal Am. Chem. Soc., 1926, xlviii: 704.