

The largest of the stalactites were about the size of a lead pencil and about 10 inches long. All were quite fragile.

As to the time required for these depositions no definite statement can be made. The fort was in use during the Civil War, and it is likely that the roof remained in fair condition for thirty years longer. The impression received was that the rate of deposition had been much greater than is commonly thought to be the case in the growth of limestone cave deposits. It is thought that the stalactites had not very recently been disturbed, as the floor deposits were fairly commensurate with the amount of material still hanging to the ceiling. The rate of deposition may have been an inch a year. And the entire deposit came from the meager supply of limy material contained in the mortar of the brick roof.

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#### THE LANGUAGE OF CLERGYMEN

I HAVE read the article entitled, "The Language of Scientists," by the Reverend George W. Lay, with a great deal of pleasure. Some of the mispronunciations to which he calls attention are really delightful. Certainly every scientist should be meticulous in the use of scientific terminology. But I wonder if it is not equally important for theological scientists to be somewhat careful of the structure of sentences. In Mr. Lay's amusing castigation of his fellow members of the Association for the Advancement of Science, I see this amazing statement: "An example of ignorance or carelessness appeared in an important paper by an eminent scientist that was published in SCIENCE." I want to congratulate the publisher who undertook so stupendous a task as that. We have all heard of books that are published, but this is the first time that I, for one, have ever heard of publishing an eminent scientist. Later in his article, Mr. Lay writes: "These words are practically always derived from the Latin or the Greek . . ." Does he mean that they are *usually* so derived? Still later, the supercritical (or is it hypercritical) Mr. Lay gives us this charming bit of English: "Attention has been called recently to two examples of unscientific confusion in the meaning of words." Perhaps Mr. Lay would be good enough to tell us what *scientific* confusion would be like. One more delightful bit of English meets us near the end of his article. He writes: "Scientists can not even trust each other." Are there, then, but two scientists who are thus antagonistic? Perhaps all scientists distrust *one another*. I have no doubt that Mr. Lay is quite correct in all his pronunciations, but a good rhetoric would

tell him that there is as great a danger in misplaced phrases and misused words as in misplaced accents. If we are to carry culture into the laboratory, by all means let us expand the meaning of the word "culture" to include correct sentence structure.

THEODORE W. DARNELL

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"THE Language of Scientists" was certainly worth publishing. However, it suggests to me two questions. Mr. Lay speaks of a "co-ed graduate student." Are all participants in coeducation female?

He states later that one micromicron is a thousand times greater than another. Is it possible that he meant "a thousand times as great as"? Or, if you will, "999 times greater than"?

EDWARD S. ALLEN

#### BABYLONIAN MATHEMATICS

IN SCIENCE for December 12, 1930, page 601, Professor G. A. Miller writes: "The Babylonian mathematics is of special interest in view of the fact that our division of the circle into 360 parts called degrees, and our division of the degree and the hour into 60 parts called minutes and of the minute into 60 parts called seconds can be traced back thereto." May I suggest that nothing would be of greater interest to readers of SCIENCE than a presentation of references to *sources* where these various statements may be checked? Cantor makes no such claim, nor does he, in his references to Babylonian geometry, give adequate references to sources to check even the statement he does make: "for a certainty we have the division of a circle into 6 parts, then into 360 degrees." Heath reproduces no such statement. Tropfke in the third edition (1930) of Volume 1 of his history does not furnish proof of Professor Miller's claims. In 1928 Thureau-Dangin argued merely that the division of a circle into 360 parts was natural, but that further sexagesimal division was unnatural. During the past year I have given in SCIENCE<sup>1</sup> some references suggesting the difficulty, in the present state of our knowledge, of arriving at any definite conclusion in this regard.

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DECEMBER 13, 1930

#### AN ENGINEER IN AUTHORITY

MOST scientific men were delighted when for the first time since George Washington an engineer be-

<sup>1</sup> SCIENCE, 71, 117-118, January 31, 1930; 71, 342, March 28, 1930. Many more detailed references are given in my "Bibliography of Egyptian and Babylonian Mathematics" in Chace's edition of the Rhind Mathematical Papyrus, 1927 and 1929.

came President of the United States. It is, however, said that Mr. Hoover, as a member of the cabinets of Mr. Harding and Mr. Coolidge, did not support the scientific work under his charge, and there seems to be no evidence since he has climbed to the presidency that he realizes the dependence of our civilization on scientific research and its applications.

As secretary of commerce Mr. Hoover indeed appointed a commission on highway safety, but he allowed the members to pay their own traveling expenses and took no notice of them, though he managed to have it called in the extensive newspaper publicity the "Hoover Commission."

Every president in recent years has welcomed to Washington the members of the National Academy of Sciences, which is the official scientific adviser of the government and of which President Hoover is perhaps the only member elected for reasons other than eminence in scientific research. It is said that at receptions at the White House Mr. Roosevelt and Mr. Wilson were able to greet by name a considerable percentage of the members. President Hoover apparently has not noticed the existence of the academy.

It is understood that President Hoover was officially invited to address the recent Cleveland meeting of the American Association for the Advancement of Science and the national societies devoted to the social and economic sciences, meeting together for the first time, but refused, though he could have spoken by radio from Washington. He has been more obliging in other instances, as witness the following editorial article from the *Journal* of the American Medical Association:

#### THE PRESIDENTIAL FINGER SLIPS

Norman Baker, of Muscatine, Iowa, who claims to treat successfully cancer, goiter, varicose veins and other diseases by some secret preparations, who uses his radio station to sell cigars and get patients, who attacks most of the reputable educational institutions and scientific organizations of his state and of the nation with billingsgate and vilification, found it necessary to start a newspaper to spread his views because the reputable press of his state exposed his quackery. By some of the strange influences known only to politicians, President Herbert Hoover was induced to apply to a pushbutton in Washington the presidential digit, thereby giving to the presses in Muscatine the electrical juice necessary to induce motion, whereby inked rollers applied to paper aided still further the dissemination of Baker's notions

and nostrums. As an engineering feat, the demonstration must have given joy to the presidential cerebrum. As a demonstration of presidential judgment and a sense of the fitness of things, it gave acute pain to the press, the physicians and most of the people of Iowa. Somewhere, somehow, some secretary succeeded in precipitating the President of the United States into a situation that awaits explanations.

The writer asks that the publication of his name be omitted, for while it is improbable, though highly desirable, that President Hoover should read this communication, it might come to the attention of some member of his kitchen cabinet, and if so there would be no chance of appointment to a vacancy that may occur on the Federal Power Commission.

#### AN 'UMBLE SCIENTIST

[It need scarcely be said that a journal is not responsible for opinions expressed by contributors, least of all in the correspondence columns. It is, however, responsible for the acceptance of contributions, and this anonymous criticism of the President has been printed with some hesitation. It seems, however, that the relations of officers of the government to science should be freely discussed in a scientific journal, and that there may be good reasons, especially for those in the federal service, to withhold their names. SCIENCE will welcome communications describing Mr. Hoover's contributions to engineering and his support of science before and since his elevation to the presidency.—EDITOR.]

#### ANTI-EVOLUTION LAWS

An effort should be made, this winter, in every state, to secure by legislative enactment or vote of the people, a law prohibiting the teaching of the brute origin of man in tax-supported schools and colleges, since the false "science" of evolution is the chief support of infidelity and atheism.

I shall be glad to send free a copy of my "Evolution Disproved" by 50 convincing scientific arguments, to all members of committees considering such bills, and will send a copy free to 5000 lawmakers, if given \$1000 (one-fifth of price) which I shall also donate to missions, doubling all gifts at my cost.

Will you kindly insert this notice for the sake of the truth and the protection of the youth?

REVEREND W. A. WILLIAMS

CAMDEN, N. J.

## SPECIAL CORRESPONDENCE

### EXHIBITION ON THE SCIENCE AND ART OF COLOR

COLORS have come to play so important a part in modern life that this third decade of the twentieth

century promises to be known as the "Age of Color," according to Professor Charles R. Richards, of the Museum of Science and Industry of New York, who has just announced the holding of an "Exhibition on