planet accessible in vivid and striking form to our people generally. Their assistants have done hazardous and exceedingly interesting and important work in the wildest of the waste spaces of the world. It has been my privilege to journey through the East Central African wilderness and the Brazilian wilderness in company with outdoor faunal naturalists-Mearns, Heller, Cherrie, Miller, Loring—and myself to witness the hazard and the high value of their work; and last winter I visited in Demerara Mr. Beebe's really extraordinary field laboratory for intimate biological research in the tropics, and I count it one of the privileges and pleasures of my life to have worked with these men.

THEODORE ROOSEVELT

## DEDICATION OF THE CERAMIC ENGI-NEERING BUILDING OF THE UNIVERSITY OF ILLINOIS

On December 6 and 7, the University of Illinois, dedicated its new ceramic engineering building. The dedication exercises were opened at 1.30 p.m. on Wednesday, December 6, by a meeting of the advisory board of the department, followed by a reception in the building, at which all of the laboratories were thrown open to the visiting guests and the university public.

On the evening of Wednesday an introductory session was held in the university auditorium, presided over by Dr. Edmund J. James, president of the university. At this session, Dr. S. W. Stratton, director of the National Bureau of Standards, gave an address on "The Ceramic Resources of America." This was followed by an address on "Science as an Agency in the Development of the Portland-Cement Industries," by Mr. J. P. Beck, general manager of the Portland Cement Association of Chicago. Dr. Stratton discussed the organization and formation of the different types of clay deposits together with their most prominent geological and geographical

positions in the United States. This was followed by a discussion of the reactions occurring during the burning of clay products. A detailed classification of the various clay products fashioned from ceramic materials was also presented. The whole address gave a very clear idea of the great variety and extent of the clay resources of the nation and the multifold products which are manufactured from them.

The second dedicatory session was of a technical nature and assembled on Thursday morning in the university auditorium. opened with an address on "The Manufacturer's Dependence upon Ceramic Research" by Mr. W. D. Gates, president of the American Terra Cotta and Ceramic Company, of Chicago. This was followed by further discussions by Mr. Ross C. Purdy, research engineer of the Norton Company, and by Mr. L. E. Barringer, engineer of insulations for the General Electric Company. Mr. C. H. Kerr, who was to discuss the same topic from the standpoint of the problems of the glass industries, was unable to be present, but sent his discussion for presentation.

The second address of this session was given by Mr. W. W. Marr, chief state highway engineer of Illinois, upon the topic "The Use of Ceramic Materials in Highway Construction." This paper was discussed in a very interesting manner by Mr. Blair, secretary of the National Paving Brick Manufacturers' Association, of Cleveland, Ohio, and by Mr. G. G. Wooley, engineer for the Road Bureau of the Portland Cement Association, Chicago.

A paper on the topic "Ceramic Products as Structural Materials" was presented by Mr. H. J. Burt, structural engineer, of Chicago, and discussed by Mr. A. V. Bleininger, ceramic chemist and head of the clay products laboratory of the United States Bureau of Standards.

The last topic for discussion at this session was "The Use of Ceramic Products in the Artistic Embellishment of Buildings." The discussion was opened with a paper by Mr. Claude Bragdon, author and architect of

Rochester, New York, which was discussed by Mr. G. C. Mars, of St. Louis. Mr. F. Wm. Walker, who was to have discussed the same topic, was unable to be present.

At the close of the forenoon session, the speakers and guests of the university were entertained at luncheon at the University Club by the dean and heads of departments of the College of Engineering. The formal session of dedication convened at the university auditorium in the afternoon. It was presided over by Dean W. F. M. Goss, of the college of engineering. Introductory addresses were made by the Honorable Edward F. Dunne, governor of the state of Illinois, and by Honorable W. L. Abbott, president of the board of trustees of the University of Illinois. The principal address of this session was then given by Professor Charles F. Binns, director of the New York State School of Clayworking and Ceramics, upon the topic "The History of the Ceramic Arts." The exercises were closed with an address by the president of the university, describing the history of the growth of the department of ceramic engineering. After singing "America" the audience marched to the new building where the prayer of dedication was delivered by the Rev. John Mitchell Page.

On the evening of the 7th, an Illinois student branch of the American Ceramic Society was formally installed by Mr. L. E. Barringer, president of the society.

An illustrated booklet describing the department of ceramic engineering, its organization, purposes and equipment was published by the university for distribution at the dedication exercises.

## "SCIENCE" AND THE COST OF PAPER

The price of the paper on which SCIENCE is printed has increased from four and one quarter to ten cents a pound, and this makes the cost of supplying the fifty-two annual copies of SCIENCE to members of the American Association for the Advancement of Science greater than the amount paid for them, apart from editorial expenses and the cost of composition. Under these circumstances it is

necessary to adopt one of three alternatives: (1) To use news print paper, which is difficult to obtain and is not durable; (2) to increase the subscription price, as has been done by the Outlook, the Independent and other journals, but an increase could not go into effect for a year, and it is to be hoped that the abnormal price of paper is temporary; (3) to diminish the size of the numbers. This, although regrettable, appears to be the least unfortunate of the alternatives, as the regular number of pages can be used when conditions become normal.

For the present, therefore, Science will be reduced in size to two sheets with a cover. The cover is used to improve the appearance of the journal, and is feasible because the cost of cover paper has not increased in proportion to the cost of book paper. The cover also permits trimming the copies without injury to the appearance of the journal. Hitherto trimmed and untrimmed copies have been sent to subscribers as requested, but this complicates the subscription list, and there seems to be a general opinion that the copies should be trimmed, in spite of the fact that untrimmed copies are preferred for binding. The most distinguished American efficiency expert remarked this week that if the time of scientific men should be estimated at its true value the cost of opening Science by hand would be over \$10,000 a year.

In order to effect a further saving in paper the index and title page for the volume will be sent to libraries as usual, but only to individuals who apply for them. This plan is followed by other weekly journals, for the index is only of use to those who bind the numbers.

As has been already announced, members of the American Association whose dues are paid later than January 1, will receive the back numbers of Science only on payment of one cent a number to cover the extra cost of mailing. It can not be guaranteed that the copies will be supplied, as, owing to the cost of paper, only so many extra copies will be provided as are likely to be needed. The offices of the permanent secretary of the association and of Science will be greatly assisted by the prompt payment of dues.