which are not justified. It is obvious, as I have already said, that the regents cannot follow any set rule of thumb in this their most important sphere of decisions. Thev may upon occasion err disastrously in either direction. What we hope from the regents is that they shall at all times stand resolutely for the maintenance of quality, and that they shall refuse to permit any student-catching or appropriation-catching expansion which can not justify itself in terms of fundamental social service. If the regents go astray at this point, whether through bad counsel or from their own initiative, nothing can save the university under their control from grave deterioration.

This paper should not conclude without reference to that university which in its early history went to the extreme in the concentration of its resources. I refer, of course, to Clark University. The trustees of that institution believed that they were not justified in founding one more New England college. They had not enough money to found a university where the usual round of departments should be adequately represented. Under the advice of G. Stanley Hall, they resolved upon the unprecedented plan of beginning a university with five departments. The result of this course was that in each one of those departments they secured a group of scholars unsurpassed in the country, if anywhere in the world. They had Whitman, Loeb, Michelson, Nef, Boas, Mall, Story, Bolza, Donaldson, and many other men who then had, or since have, won international standing. They had the only American scholar who has won the Nobel prize. The group of scholars at Clark and the work done there were at once recognized by the university world as of first-rate importance. A change of mind on the part of the founder and other conditions have

modified the later history of Clark. Its example is one which no other university, certainly no state university, can follow in the 'extreme. But the history of Clark proves one thing of the utmost importance—that a university of relatively limited means may go into the front rank by sagacious concentration of its resources.

The members of this association realize well the difficulty of securing money for the university. But, in truth, it is not so difficult to get money as it is to spend it so as to have a minimum of waste and a maximum of efficiency. Our task is to discover and create the university for our century. The discovery demands statesmanlike discrimination between what is essential and what should be pruned away. The creation demands something still more difficult. for it demands a thousand decisions which cut across private interests. The institution which we actually create will depend upon the self-denial, the integrity and the courage with which members of the university day by day make these decisions.

William Lowe Bryan Indiana University

## LECTURES ON THE SMOKE PROBLEM

In the fall of 1911 the Department of Industrial Research of the University of Pittsburgh was provided by a Pittsburgh business man with funds for a thorough investigation of the smoke nuisance. At the present time the investigation is being conducted by a staff of twenty-five specialists, of whom seven are giving their entire attention to this task. Some of these men are studying the effect of smoke and soot on the atmosphere, on the weather, on plant life, on buildings, on the public health; some are investigating the economic damage done by smoke and soot; others are making a detailed study of the mechanical devices for preventing or abating smoke; and still others are inquiring into the chemistry and physics of smoke and soot, into the laws concerning the smoke nuisance, and into the history of the subject as a whole.

Recognizing the interest in the smoke problem manifested by a large number of American cities, and in response to inquiries that have been made, the department announces that the members of its staff are prepared to lecture on the following phases of this problem:

- 1. The Smoke Nuisance (a general presentation of the main phases of the subject).
- 2. Smoke and the Public Health.
- 3. Smoke and the Cost of Living.
- 4. Smoke and Plant Life.
- 5. Methods and Means of Smoke Abatement.
- 6. The Effect of Smoke on Buildings and Building Materials.
- 7. The Psychology of Smoke.
- 8. The Smoke Nuisance and the Housekeeper.

R. C. Benner

DEPARTMENT OF INDUSTRIAL RESEARCH, UNIVERSITY OF PITTSBURGH

## A SCIENCE LIBRARY FOR CHILDREN

In association with the educational work which the Chicago Academy of Sciences has been conducting during the past few years a strong demand has arisen or a Children's Library and Reading Room. In response to this demand the trustees of the academy have furnished one of the rooms in the museum as a Children's Library and about seven hundred books have now been selected as a nucleus. Appropriate periodicals and a picture collection, in part for exhibition on the bulletin board and in part for study at the tables, will also be included. Stereoscopic views have been selected for their importance in geographic studies of foreign lands and for illustrating the agricultural and industrial activities of various parts of the world.

It is proposed to make this a carefully selected library of books suitable for children to read. A few of the books are of a somewhat technical nature, although most of them are in non-technical language. A few biographies of the great scientists, several historical sketches of the progress in pure and applied science, stories based, in part at least, on natural history studies and accounts of explorations which are instructive along scientific lines have been selected. Miss Mary A. Hardman, a member of the academy staff who has been offering courses of instruction to children at the academy during the last two years, has been appointed librarian. This Children's Library will be open to the public on and after August 5, 1912.

## SCIENTIFIC NOTES AND NEWS

AMONG the degrees conferred by the University of Michigan at its recent celebration was the doctorate of laws on Dr. William H. Howell, professor of physiology at the Johns Hopkins University, and the doctorate of science on Dr. John J. Abel, professor of pharmacology.

At the annual commencement of Lehigh University, the honorary degree of doctor of laws was conferred upon Charles Leander Doolittle, professor of astronomy and director of the Flower Astronomical Observatory of the University of Pennsylvania.

DR. HARVEY W. WILEY received the degree of doctor of science from Lafayette College.

DR. HENRY PRENTISS ARMSBY, director of the Institute of Animal Nutrition of the Pennsylvania State College, has been elected a foreign member of the Royal Academy of Agriculture of Sweden.

A BANQUET in honor of Dr. J. A. Witherspoon, president elect of the American Medical Association, was given under the auspices of the Nashville Academy of Medicine and the Nashville Board of Trade, on July 3.

THREE portraits were presented to the University of Pennsylvania at its recent commencement: one of Provost Edgar F. Smith, the gift of the class of 1902 college, painted by H. H. Breckenridge; one of the late Professor Henry W. Spangler, the gift of alumni and students of the mechanical and electrical engineering departments, painted by M. H. Kevorkian; one of the late Professor Joseph Leidy, the gift of his friends, painted by A. P. S. Haeseler.

DR. W. M. DAVIS has retired from the Sturgis Hooper professorship of geology at