

By the will of the late Mrs. Gardiner Green Hubbard the sum of \$50,000 is bequeathed to the Clark School for the deaf at Northampton, Mass.

THE tenth industrial fellowship to be established under the management of Professor Robert Kennedy Duncan has been presented to the University of Kansas. It is for the investigation of the chemical treatment of wood, and is of the value of \$1,500 annually for two years. The donor is a furniture firm.

FIRE started last week in the basement of Culver Hall, Dartmouth College, where the laboratories of the chemistry department are located. Considerable damage was done to the scientific apparatus, and the building is temporarily closed for repairs.

THE entire board of regents of the University of West Virginia will spend two weeks in January studying the University of Wisconsin in its organization, methods of instruction, buildings and equipment.

DR. ERNST J. BERG, of the General Electrical Company, has been appointed head of the department of electrical engineering at the University of Illinois. In this position he succeeds Professor Morgan Brooks, who is at present abroad, and who will return to take up his duties as professor in the department.

THE department of physics and electrical engineering at the Iowa State College has been divided into two distinct departments. Professor L. B. Spinney will continue the head of the department of physics, and Professor F. A. Fish has been appointed the head of the electrical engineering department. A new building has been completed for the work of the electrical engineering department.

THE departments of geology and geography at Cornell University have been reorganized and divided into five coordinate departments. These are geology, in charge of Professor Henry S. Williams, who is also director of the museum; physical geography, in charge of Professor Ralph S. Tarr; stratigraphic geology, in charge of Professor Gilbert D. Harris; economic geology, in charge of Professor Heinrich Ries, and mineralogy and petro-

graphy, in charge of Professor A. C. Gill. Professor Gill will also be chairman of the five departments.

MR. RALPH HOAGLAND has been elected professor of soils at the University of Minnesota.

DR. W. W. DIMOCK has been appointed associate professor of pathology in the veterinary department of the Iowa State University and pathologist to the experiment station. For the last three years Dr. Dimock has been in the employment of the Cuban government.

RECENT appointments at the New Hampshire College of Agriculture and the Mechanic Arts are as follows: T. S. Arkell (B.S., Ontario '07), assistant professor of animal husbandry; Frank C. Moore (A.B., Dartmouth '02), assistant professor of mathematics; T. G. Bunting (B.S., Ontario '07), instructor in horticulture; L. A. Pratt (B.S., New Hampshire '09), instructor in chemistry; W. C. O'Kane (A.B. and A.M., Ohio State), instructor in entomology.

THE following new appointments have been made in the chemical department of the University of Illinois for the current year: *Instructors*: R. H. Jesse, Ph.D., Harvard University, L. L. Burgess, Ph.D., Harvard University, Ellen S. McCarthey, Ph.D., Cornell University; *Research Assistant*: L. P. Kyriakides, Sc.D., University of Michigan; *Assistants*: R. H. Stevens, M.S., University of Chicago, L. F. Nickell, B.S., University of Illinois; *Graduate Assistants*: W. T. Murdock, R. W. Savidge, L. M. Burghardt, F. W. Kressman, C. E. Millar, J. W. Marden, C. J. Baker, R. S. Potter; *Fellows*: A. W. Homberger, C. E. Burke.

DR. ALFRED GRUND, of Berlin, has been appointed professor of geography, in the German university of Prague, to succeed Professor Olenz, who has retired.

DISCUSSION AND CORRESPONDENCE

AUTONOMY FOR THE UNIVERSITY?

America has not yet contributed her share to scholarly creation, and the fault lies in part at the doors of our universities. They do not strive enough in the impressionable years of early manhood to stimulate intellectual appetite and ambi-

tion; nor do they foster productive scholarship enough among those members of their staffs who are capable thereof.

THESE words, indicative as they are of a courageous desire to attempt the mastery of one of the most complex problems of higher education of the day, I heard uttered by President Lowell in his inaugural address in the Harvard Yard.

In some respects the aims of the college and of the university are different or even antagonistic. The college strives to impart knowledge, the university to extend its boundaries. The college is the husbandman, the university the explorer in intellectual fields. Without the explorer's spirit for research knowledge crystallizes into mere erudition, but the college itself is of more fundamental importance, for without its fostering influence culture itself must wither into barbarism.

Indeed, our times demand a broad foundation in general culture for the erection of the pinnacle of special training, and thus it is that our best schools of law and medicine are now demanding that those who enter shall be college graduates. It is the aim of modern education to teach the student to know a little of many things and much of some one thing, and even more important is it for the graduate to realize that he knows but little of all things, and that far beyond the range of his intellectual vision stretches the unknown inviting his exploration. There are, therefore, two sharply contrasted aims in higher education—the foundation in general culture which it is the duty of the college to impart, and surmounting it that special training which only the professional school can give.

In other words, the wealth of modern knowledge has brought about a separation in aims between the college and the university, and necessitates a segregation of their faculties, while at the same time making the university more than ever dependent upon the college for that basic store of learning from whose safe boundaries expeditions into the unknown may be launched. Yet in America to-day our so-called universities are but overgrown colleges, and their graduate departments are still mainly normal schools for the training of

college teachers. Moreover, the historic experiments in education evidenced by Johns Hopkins and Clark Universities have shown that in our country the university can not stand alone without the coordinated support of its preparatory school—the college.

Research suffers grievously in our overgrown colleges through our failure to realize that there are two sorts of intellectual leaders in the world—those who are erudite expounders of learning, and those who advance its boundaries.

In manufacturing and in commercial walks of life it has long been known that the highest results are achieved only through a judicious division of the tasks with respect to the several abilities of those who are to perform them, and in our system of education the greatest efficiency will be attained only when the productive student is not overburdened with elementary teaching, and the erudite is expected to teach rather than to discover. Yet at the present day little or no such segregation is attempted, and indeed the tendency is increasingly to overwhelm the young investigator with pedagogical duties.

Most pernicious to the development of the spirit of research is the extraordinary growth of summer schools in connection with our colleges; and the consequent demand that young instructors forego research and teach throughout the year. In many of our colleges the young men are now forced to teach in summer schools, but even where this is not actually obligatory their small salaries practically necessitate it.

There have been summer schools such as that of Penikese years ago, whose ideal was research and whose aim was discovery, but the hurried and superficial teaching of the present-day college summer school places it not among these. But while it is the proper aim of the college to develop and above all to improve the summer school, its presence in its present form is most hurtful to the progress of university research.

It is the aim of the college to teach, it is the hope of the university to discover; and the demand of the university spirit of the day is

that it be given autonomy to solve its problems in cooperation with, but not under the control of, the college.

The cause of knowledge would be advanced by the establishment of schools of research in connection with our great colleges, and by permitting them, as in Germany, to elect their own faculties from among those college teachers whose genius is for discovery rather than for exposition of knowledge.

ALFRED G. MAYER

NATIONAL EDUCATIONAL RESPONSIBILITIES

"OUT of a full heart the mouth speaketh." The hour will come when valiant Dr. E. C. Moore will clearly recognize as blessings in disguise the great obstacles he has overcome in one of the most dastardly and malicious attacks the school system of an American city has yet encountered. Full endorsement of his general views, as expressed in a recent issue of SCIENCE,¹ is given freely and from somewhat varied experience of the most convincing character. The questions catalogued in the article cited are such as insistently demand settlement, and it would be a large step forward to realize, in some way, authoritative answers to these queries and to many others of equivalent importance in education, which now can not reach a final bar of judgment, except by tortuous indirection. Perhaps the dignifying of the U. S. Commissioner of Education with title and prestige of a member of the president's cabinet might go far to accomplish this end. And there is, no doubt, greater need and greater reason for such action than for certain similar schemes promulgated for advancing less vital and more selfish interests.

While thus completely in accord with Professor Moore in his advocacy of increasing the powers and responsibilities of the national commissioner, it is difficult to understand how this measure, of itself, can rectify the evils outlined in the aforesaid article, and those especially which have been heretofore the chief obstacles in the pathway of the superintendent of schools of Los Angeles and his coworkers. The poorly devised (*sic*) system in California,

which almost invites conflict of city council and board of education in financial estimates, might be deprecated by a national secretary, but state legislatures are bomb-proof and wholly invulnerable, save by one kind of ammunition, viz., the ballots of the voters. Mr. Moore's own recent victory in Los Angeles illustrates this fact conclusively, and it is difficult to understand how any added power within practicable bounds could have rendered even an official of the president's council more effective in meeting this unseemly attack than was the aroused public opinion at the most critical juncture.

In so far as the strengthening and enlarging of the power and scope of the national department of education may be effective in the unbiased study of many complicated problems and in the wider dissemination of facts and comparisons among the people, no obstacle should be thrown in the way of this proposition. But the fact remains that the machinery by means of which reforms must be introduced will not be changed materially by any such method. Undoubtedly there are serious limitations now to the possibility of desired accomplishment—limitations which the suggested plan might overcome to a great extent. The history of the administration of the Hatch and Morrill funds under the department of agriculture encourages the belief that revolutionary results might be expected to follow the judicious institution of similar bounties with more general application to primary and secondary education. And the reactionary influence of this same agricultural department upon the school systems of rural districts is a telling argument indeed. We certainly have no quarrel with the advocates of a strong department of education at Washington.

What the present writer aims to emphasize here is the paramount importance of more closely relating the general public to the school system. Dr. Moore asks with feeling born of bitter experience (but crowned with fresh laurels of victory won in this very controversy): "Shall the city board of education fix the amount of money required for school purposes each year, or shall the

¹ October 8, 1909, p. 470.