

lieve but that the illustrations of species published in connection with the "Manual" will do away with most of the usefulness it may have had as a training subject preliminary to advanced studies upon plant life.

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December 26, 1908

DISTRIBUTION OF THE NOBEL PRIZE

TO THE EDITOR OF SCIENCE: In his interesting and important address as retiring president of the American Association for the Advancement of Science, printed in your issue of January 1, Professor Nichols makes two statements regarding which I wish to submit a bit of confirmatory evidence, derived from the awards of the Nobel prizes for the eight years that they have been established.

The two statements are: (1) "The men who have laid the foundations upon which civilization is built have nearly all been teachers and professors." (2) "We have less than our share of men of science."

Each year five Nobel prizes of a value of about \$40,000 each are awarded, three of which alone, those in physics, in chemistry, and in physiology and medicine, concern us at present. These are awarded to the persons who have been most serviceable to mankind during the preceding year by making the most important discovery, invention or improvement in the designated field. The other two prizes are for work in literature and for work in the interest of international peace. Of the 24 prizes for scientific work of this description 16½ have been awarded to university professors, 3 more to directors of scientific research institutes, 3 more to teachers in scientific schools of high grade, viz., Royal Institution of London, École Polytechnique, and School of Physics and Industrial Chemistry of Paris (a divided prize) and the Academy of Military Medicine in St. Petersburg, and only 1½ to persons apparently not engaged in teaching. Even if allowance is made for one or two cases, like that of Major Ronald Ross, in which the scientific work was

done first and the position as a teacher resulted from it, it seems clear that at least four fifths of these prizes have been awarded to teachers in institutions designed to encourage research.

With reference to the second point quoted above it should be noticed that the Swedish committees of award have shown no tendency to favor Swedish or Scandinavian scientists. They have allotted the prizes to persons in the various countries as follows:

Germany	8	Sweden	1
England	5½	United States	1
France	4½	Italy	½
Denmark	1	Spain	½
Netherlands	1	Total	24
Russia	1		

Does not the above grouping correspond roughly to the order in which most scientists would arrange the great countries with reference to their important contributions to the advance of knowledge and support in an interesting way the second claim of Professor Nichols?

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January 11, 1909

QUOTATIONS

HARVARD UNIVERSITY AND THE MASSACHUSETTS
INSTITUTE OF TECHNOLOGY

It seems probable that the taking from the institute by Harvard of two of its leading professors will bring up again the question of a consolidation or of an alliance between these two educational institutions. Recognizing the position occupied by the institute, President Eliot, of Harvard, throughout the whole of his long administration has refrained from developing technical education along extensive lines. His attitude in this respect is the more noticeable when the great development of the university in all other professional fields is considered, and it is also remarkable because during this period there has been great development in technical education in almost all other institutions, the students in technical subjects forming in many institutions by far the larger part of the undergraduate department.

Only to such subjects was special attention given as was demanded by specific gifts, mining, metallurgy and architecture being instances. The reason for this restraint was regard for the institute and the admirable work which it was doing and the belief that there should be but one technical school in Boston. President Eliot continually sought a merger with the institute and refrained from developing a competing school.

The McKay bequest to Harvard brought about a crisis and two years ago more active steps were taken to consolidate the institute with Harvard. It is related that once when the merger came up before the Harvard Faculty of Arts and Sciences a member of the faculty inquired what Harvard was to get out of it, to which President Eliot replied: "The merger is a subject under discussion by two groups of gentlemen, the Corporation of the Massachusetts Institute of Technology and the Corporation of Harvard University, and the sole consideration is the good of technical education in the community and in the country at large."

When the merger was abandoned Harvard still sought an organization which would compete in the least possible manner with the institute. The terms of the McKay bequest, however, made it necessary that Harvard give instruction in the same subjects as is given at the institute, and the university found its best solution of the situation in the organization of the Graduate School of Applied Science. Following its general motive of giving the best education to the exceptional student, Harvard has developed those subjects which are not touched upon by the institute, such as forestry and applied biology, the latter in the reorganized Bussey Institution, which has been made a part of the Graduate School of Applied Science. The McKay bequest now makes it necessary to develop the other branches, and in so doing to seek the best possible men. Two such men are considered Professor Swain and Professor Clifford.

The election of Professor A. Lawrence Lowell as president of Harvard, it is also thought, may have an influence in bringing Harvard and the institute into closer relation-

ship. President-elect Lowell is a member of the corporation of the institute and when the merger discussion was on he used his utmost efforts to bring about a union. As president of Harvard he will be in a better position to accomplish this object. Harvard will have ample funds for its School of Applied Science and can employ the best teachers there are. It also has sufficient land for the location of proper buildings. The institute, on the other hand, is handicapped by an improper location and insufficient funds to compete successfully against Harvard, fortified by the McKay bequest.—*Boston Transcript*.

SCIENTIFIC BOOKS

Mechanics of Engineering, comprising Statics and Kinetics of Solids; the Mechanics of the Materials of Construction, or Strength and Elasticity of Beams, Columns, Shafts, Arches, etc., and the Principles of Hydraulics and Pneumatics, with Applications. For use in Technical Schools. By IRVING P. CHURCH, Professor of Applied Mechanics and Hydraulics, College of Engineering, Cornell University. Revised edition. Pp. 854. New York, John Wiley & Sons. 1908.

Since the publication of Rankine and Weisbach, perhaps no single treatise which has attempted to cover the wide field of applied mechanics as taught in our American colleges of engineering, has been more useful than this one.

It has appeared in edition after edition until it would seem as if practically all the younger generation of engineers in this country must be familiar with it either as a text-book or as a work of reference. The book originally appeared in parts during the years 1886-7-8, so that it has now quite attained its majority. Its wide use by the profession has been due to its merits, which are many.

I may here mention some of them: 1. The subject matter of this book, which is central and essential to the training of every engineer, is presented as a series of semi-detached problems or developments which may be readily mastered separately, no one of which