JOHN SHAW BILLINGS

THE New York Library Club has adopted the following resolution:

Resolved, That on the death of John Shaw Billings, The New York Library Club desires to record its grateful recognition of the great part which he played in the development of the library service of New York City and of the United States.

While Dr. Billings gained distinction in the profession of his first choice in medical service during the Civil War, in the organization of the U. S. Marine Hospital Service and of the Johns Hopkins Hospital, as director of the University of Pennsylvania Hospital and professor of hygiene in that institution, as expert in charge of the division of vital statistics of the tenth and eleventh censuses, and as a writer upon medical subjects, it is as one of the most eminent members of our own profession that we honor his memory.

Called in 1895 to be director of the newly established New York Public Library, he gave an impetus to the growth of its collections almost without parallel in the history of libraries and ensured their permanent value by making the collections of government publications and periodicals his first object. He was instrumental in the establishment of a remarkable system of branch libraries and planned the unique library building which contains the library's reference collections and is the center of its circulation department. As members of this club we will honor Dr. Billings as the most distinguished of all those who have served the library interests of this community.

As librarians, however, we will remember also his remarkable achievements as librarian of the Surgeon General's Office, in the development of the largest medical library in the world, in the publication of the most important of medical bibliographies, the "Index Catalogue," as well as the most useful, the "Index medicus," and in the inauguration of a national library service.

And as bibliographers we will remember also his services as delegate of the United States to the congress held in London in 1896 which established the International Catalogue of Scientific Literature.

He was a member of this club and its president in the year 1900, a member of the American Library Association and its president in the year 1902, a member of many learned societies, honored by learned institutions and societies, both at home and in foreign lands. He gave to his profession the service of a scientist interested in the most common problems, the labors of a specialist with the broadest sympathies.

THE CARNEGIE FOUNDATION FOR THE ADVANCEMENT OF TEACHING¹

THE seventh annual report of the president and treasurer of the Carnegie Foundation, which has just appeared, covers the year ended September 30, 1912.

The endowment in the hands of the trustees at that time amounted to approximately \$14,-000,000, and the income for the year amounted to \$676,486, of which \$634,497 was expended. From its first pension payment in June, 1906, to the end of the fiscal year September 30, 1912, the foundation has distributed \$2,077,-814 in retiring allowances to professors and \$238,590 in widows' pensions—a total of \$2,-316,404. In all 429 retiring allowances and 90 widows' pensions have been granted, of which 98 have terminated through death and 23 at the expiration of temporary grants, leaving 315 retiring allowances and 83 widows' pensions in force at the end of the year.

The report of the president, like the former reports, is divided into two parts—the first referring to the current business of the year and dealing with questions more directly pertaining to the administration of the foundation; the second part being devoted to current educational problems of a larger and more general nature.

The first part of the report includes a careful statement of the whole question of pensions for teachers, for government employees and for industrial employees. This statement contains the results of the examination of practically all of the pension systems now in operation anywhere, and leads finally to a discussion of a feasible pension system for the public school teachers of a state. This discussion is particularly needful at this time, since the question of teachers' pensions is a matter under consideration by a number of state legislatures. As the report points out, the bills which have been introduced in the various legislatures almost without exception

¹Official summary sent by the foundation.

violate fundamental actuarial conditions, and have been framed without study of the essential conditions which must be fulfilled by any adequate pension system. The material brought together in this report, the examples of the failures of pension systems which have occurred—as, for example, that in New South Wales—and the precarious situation in which many state pension systems now stand, make this portion of the report one of great practical value to the authorities of any state contemplating pensions either for teachers or for state employees.

President Pritchett, in arguing finally for some form of contributory pension system for public school teachers, points out clearly the difficulties of the contributory system, the necessity for the most careful actuarial advice and the public nature of the questions which are involved in a distribution of the cost of such a pension system between the state and the teacher.

Following the discussion of these pensions, a complete history of the methods by which the Carnegie Foundation pensions were arrived at is given; the process through which the trustees worked is told in the frankest manner; the difficulties which they encountered and the differences which arose out of the fact that the pensions of the Carnegie Foundation are not contributory, but have come as the result of a free gift, are made clear. The literature on pensions now at the disposal of the foundation is probably the most complete in the statement of such problems that has ever been brought together, and the discussion here made can not fail to be of value to a college, a state or an industrial association which is studying the pension problem; and the pension problem to-day is one of the insistent problems of modern social progress.

The second part of the report is devoted to such subjects as the matter of college entrance requirements, admission to advanced standing, a statement of medical progress, university and college financial reporting, advertising as a factor in education, education and politics, and finally, sham universities.

All of these subjects are discussed in the

frank and specific manner which has hitherto been used in these reports. In recounting the extraordinary medical progress of the last five years attention is called to the connection which still exists in the United States between reputable colleges and unworthy medical schools. The lessons of the recent Bulletin on Medical Education in Europe are also brought clearly forward. During the last five years the mortality among unworthy medical schools has been most satisfactory. The number of such schools in the United States has been reduced by about one third and the number of students attending them by about one quarter, and this diminution has occurred in exactly the places where it ought to occur -namely, in the elimination of the unfit.

The section devoted to education and politics discusses not only the recent remarkable changes in the University of Oklahoma, the University of Kentucky and the University of Montana, but also deals with two other tendencies in political life which are profoundly affecting education: first, with the rivalry which comes from competing state institutions, and secondly with the practise inaugurated almost wholly within the last ten years in states where there are no state universities, of subsidizing institutions that are under private control. In a number of states this process has gone on until it has enormously increased the number of privately controlled institutions which share in state appropriations. So marked has this tendency become that the question of state appropriation to education without state control is one which ought now to be frankly and squarely met.

Under sham universities the report deals with conditions such as hold, for example, in the District of Columbia, where commercial enterprises without endowment or facilties are chartered as educational institutions under the loosest conditions, which enable them to appeal to the credulity of ignorant students throughout this and other countries under high-sounding names and under the shelter of charters granted by the general government. A bill now before Congress aims to correct this situation. The report will be sent upon request to the Carnegie Foundation, 576 Fifth Avenue, New York City.

THE PACIFIC ASSOCIATION OF SCIENTIFIC SOCIETIES

THE third annual meeting of the Pacific Association of Scientific Societies will be held at the University of California, Berkeley, April 10-12. The number of constituent societies has increased to fourteen, representing a membership of 2,167.

The Technical Society of the Pacific Coast,

- The Cordilleran Section of the Geological Society of America,
- The Seismological Society of America,
- Pacific Coast Branch of the American Historical Association (not meeting),
- The Pacific Slope Association of Economic Entomologists,

Pacific Coast Paleontological Society,

The Philological Society of the Pacific Coast,

The Cooper Ornithological Club,

California Academy of Sciences (not meeting), Biological Society of the Pacific Coast,

California Section of the American Chemical Society,

Astronomical Society of the Pacific,

- The Geographical Society of the Pacific (not meeting),
- Puget Sound Section of the American Chemical Society.

The San Francisco Section of the American Mathematical Society will also hold its annual meeting at the University of California on April 12.

The Le Conte Club will hold its annual meeting and dinner at the Faculty Club, Friday evening, April 11.

The General Session of the Pacific Association will be held in California Hall on Saturday evening when an address of welcome will be given by President Benjamin Ide Wheeler, of the University of California. Three papers of general scientific interest will be read by representative members of the constituent societies.

The Southern Pacific, Santa Fe, Western Pacific, Oregon-Washington, Great Northern and Northern Pacific Railroads, have granted the usual convention rates for the states of Nevada, California, Oregon and Washington.

SCIENTIFIC NOTES AND NEWS

THE spring meeting of the council of the American Association for the Advancement of Science will be held at the Cosmos Club, Washington, D. C., on the afternoon of Tuesday, April 22, 1913, at 4:45 oclock.

THE issue of *Nature* for March 6 contains a portrait of Sir J. J. Thomson, with an appreciation of his contributions to physics by Augusto Righi, professor of experimental physics in the University of Bologna.

To celebrate the seventieth birthday of Dr. Paul Groth, professor of mineralogy in the University of Munich and editor of the Zeitschrift für Crystallographie, it is planned to place a bronze bust in the Mineralogical Institute of the University of Munich. Dr. G. Seligmann, of Coblenz on the Rhine, is treasurer of the committee.

THE senate of the University of Dublin has approved the conferment of the honorary degree of doctor of science upon Professor A. C. Seward, F.R.S., and Professor the Hon. R. J. Strutt, F.R.S.

THE degree of M.A. has been conferred by a decree of convocation of the University of Oxford on Professor W. H. Perkin, F.R.S., fellow of Magdalen College, the recently elected Waynflete professor of chemistry.

MR. A. HARKER has been nominated to represent the University of Cambridge at the twelfth International Geological Congress to be held in Canada in August next.

THE Geological Society of France has awarded its Gaudry medal to Professor Edward Suess, of the University of Vienna.

It is stated in *Nature* that the founder's royal medal of the Royal Geographical Society is not awarded this year, but a casket with a suitable inscription will be presented to Lady Scott, to contain the patron's medal and the special Antarctic medal awarded to her late husband, Captain R. F. Scott, in 1904. The patron's medal has been awarded to the late Dr. E. A. Wilson, of the National Antarctic