(rather and son), Ferrel, the two Peirces, Gould the astronomer, and others; of Captain Derby, the "John Phænix" of the world of wit and humor; of Blake, the inventor, and many others, but in this I may not indulge myself.

If I could summon their spirits from the "vasty deep" I am sure those of the former superintendents who are dead would join with those who are living in congratulating their successor who has recently been charged with the responsibility of directing its operations, on the thoroughly trained and competent corps of assistants who will aid him in carrying the Coast and Geodetic Survey into its second century. But perhaps even more important than these will be the traditions of a hundred years which he will not lightly put aside.

I confess to a feeling of nausea in these latter days whenever I hear the word efficiency, wrenched as it has been from its original meaning and made to stand for "the greatest possible output in the least possible time." The Survey has often been the object of adverse criticism, based on ignorance of the character of its work, because of the slowness of some of its operations. It is to its everlasting credit that as far as known no one has ever found fault with it for not keeping its work up to the highest standard attainable at the time.

Not "how much?" but "how well?" has been its criterion.

It is only by persistently adhering to standards of quality rather than quantity that it will continue to be as it was in the middle, and still is at the end, of its first century, "the admiration of the scientific world."

T. C. MENDENHALL

RAVENNA, OHIO

GRANTS FOR SCIENTIFIC RESEARCH MEDICAL SCHOOLS AND LABORATORIES

(Continued from Vol. XLIII., p. 681)

THE following list contains such facts as the committee has ascertained regarding the funds which are available for medical research in the United States and Canada.

Bender Hygienic Laboratory, Albany, N. Y. Dr. Ellis Kellert, Director. Income, not exceeding \$200; available at discretion of Director.

Harvard University Medical School, Boston, Mass. Dr. E. H. Bradford, Dean. Funds approximately "between \$350,000 and \$375,000" exclusive of teaching fellowships, many of which are utilized for research.

Massachusetts Homeopathic Hospital, Boston, Mass. Dr. F. C. Richardson, Director. Evans Memorial Department of Clinical Research and Preventive Medicine. Income from fund of \$260,000 available.

University of Chicago, Chicago, Ill.

Rush Medical College. Dr. J. M. Dodson, Dean. Appropriations from General Budget.

Otho S. A. Sprague Memorial Institute. Dr. H. Gideon Wells, Director. Approximately \$35,000 per annum appropriated for research in medicine, used chiefly in paying salaries of research workers.

Memorial Institute for Infectious Diseases, Chicago, Ill. Dr. Ludvig Hektoen, Director. Income from \$2,000,000 devoted to research in infectious diseases.

Northwestern University, Chicago, Ill. Dr. C. W. Patterson, Dean.

James A. Patten Fund for Medical Research. \$200,000. Income approximately \$10,000. Available in all departments of medical research but used mainly in department of bacteriology and in research on tuberculosis.

James A. Patten Fund for scholarships in medical research. \$50,000. Income approximately \$2,500. Available under same conditions as above.

Vail Research Fund. \$2,000. Income available for a research fellowship.

Western Reserve University, Cleveland, Ohio. Dr. C. A. Hamann, Dean.

Cushing Fund. \$170,000. (Cushing Laboratory of Experimental Medicire.) Apparatus Fund \$17,000. Payne, Crile Fund \$8,000. Hanna Fellowship Fund \$12,000.

McGill University, Montreal, Canada. Dr. Francis J. Shepherd, Dean. Douglas Research Fellowship in Pathology. \$25,000.

Yale University, New Haven, Conn. Dr. George Blumer, Dean. Francis E. Loomis Fund. \$20,000. Up to 1915 interest appropriated chiefly for departments of anatomy, physiology and pharmacology.

Tulane University, New Orleans, La. Dr. Isadore Dyer, Dean. Provision statedly for research in annual appropriations, not over \$1,000 per annum.

Columbia University, New York, N. Y.

College of Physicians and Surgeons. Dr. S. W. Lambert, Dean. William T. Bull Memorial Fund. \$32,100. Income available for research in surgery. Vanderbilt Clinic Endowment Fund. \$115,000.

George Crocker Special Research Fund. Dr. F. C. Wood, Director. \$1,441,150. Income available for cancer research.

Cornell University, New York, N. Y. Dr. W. M. Polk, Dean. Sage Foundation Fund for research in calorimetry in connection with ward patients. Occasional funds contributed for particular research work. There are four research fellowships in medicine.

Rockefeller Institute for Medical Research, New York, N. Y. Dr. Simon Flexner, Director. Endowment Fund 1912, \$8,443,450.

University of Pennsylvania, Philadelphia, Pa. Dr. Wm. Pepper, Dean.

Robert Robinson Porter Fellowships in Research Medicine. \$600 per annum. To be devoted to "investigation in medical sciences."

Robert M. Girvin Fellowship in Research Medicine. \$650 per annum. Purpose similar to Porter Fellowship.

Henrietta Hecksher Fellowship in Medical Research. \$500 per annum.

University of Pittsburgh, Pittsburgh, Pa. Dr.
Thomas Shaw Arbuthnot, Dean. Mellon Fellowships. (1) \$750 per annum. Open to graduates in medicine for research in the department of pathology. (2) \$600 per annum for research in electrocardiography with clinical study of diseases of the heart.

Washington University, St. Louis, Mo. Dr. P. A. Schaffer, Dean. Provision for research made in departmental appropriations.

University of California, San Francisco, Calif. Dr. H. C. Moffet, Dean. Hooper Foundation. \$50,000 annually for medical research. Approximately \$1,000 appropriated annually from budget for research in anatomy, physiology and pathology. Department of medicine, \$500 annually. Department of surgery, \$800 annually. Department of pediatrics, \$600 annually. Department of obstetrics and gynecology, \$500 annually. Research position in department of pathology, \$1,200 per annum. Leland Stanford Jr. University, San Francisco,

Calif. Dr. R. L. Wilbur, President. Coffin Research Fund for study of Tropical Diseases. Amounts for particular departments included in budget.

University of Toronto, Toronto, Canada. Robert Falconer, President. Medical Research Fund yields \$15,000 per annum. Surgical Research Fund yields \$1,000 per annum.

> CHARLES R. CROSS, Chairman

THE SECOND NATIONAL EXPOSITION OF CHEMICAL INDUSTRIES

The Second National Exposition of Chemical Industries will be held at the Grand Central Palace, New York City, during the week of September 25–30, 1916. The Advisory Committee of the Exposition is as follows: Chas. H. Herty, chairman, Raymond F. Bacon, L. H. Backeland, Henry B. Faber, Francis A. J. Fitzgerland, Bernard C. Hesse, A. D. Little, R. P. Perry, Wm. Cooper Procter, E. F. Roeber, George D. Rosengarten, T. B. Wagner, Utley Wedge, M. C. Whitaker and Charles F. Roth and Adriaan Nagelvoort, managers.

The roster of exhibitors includes most of the leading companies doing business with those industries wherein chemistry plays a part. From this list it appears that the exposition is already twice the size of its successful predecessor.

The managers anticipate an even greater number of visitors to attend this second exposition. The chemical and engineering societies that last year had their attention divided with the attractions of the exposition and the engineering congresses on the Pacific coast, have this year united and arranged to hold their annual meetings in New York during and in conjunction with the exposition.

The American Chemical Society will hold its annual meeting during the whole week—the program for the meeting is now being arranged and the committees appointed. The American Electrochemical Society has arranged to hold its meetings the latter part of the week, September 28, 29 and 30. The Technical Association of the American Pulp and Paper Industry is arranging its meeting for this week, and other societies are expected to hold meetings.