Scott, George G.: *The Science of Biology;* from the author, Smith, Gilbert M.: five copies of *Phytoplankton of the Inland Lakes of Wisconsin, part II, Desmidiaceæ;* from Miss Alice W. Wilcox: House: *Wild Flowers of New York* (plates); from the author, Wilson, Edmund B.: *The Cell in Development and Heredity;* from the author, Wolback, S. B.: *The Etiology and Pathology of Typhus;* and from Woodruff, L. L.: Ward, Henshaw: *Evolution for John Doe.*

PRISCILLA B. MONTGOMERY,
*Librarian.*

---

## VI. THE REPORT OF THE DIRECTOR.

TO THE TRUSTEES OF THE MARINE BIOLOGICAL LABORATORY.

*Gentlemen:* I beg to submit herewith a report of the thirty-eighth session of the Marine Biological Laboratory for the year 1925.

1. *The New Building.*—The year 1925 was marked by the dedication and occupancy of the new building, planned for since 1919, as related in successive Annual Reports. A "plot" plan and floor plans of this building were published in the Annual Report for 1923 (BIOLOGICAL BULLETIN, Vol. 47, 1924, pp. 29–35) together with a brief description of the uses of the rooms. The photographs herewith reproduced show a view of the completed building from the harbor, a closer view of the main facade, a view of the rear from the "Eel Pond," and interiors of a private biological and a private biochemical laboratory. The building is beautiful externally, and thoroughly practical and complete, as well as beautiful, in its internal arrangement and appointments. Its use during the season of 1925 revealed no serious flaws or defects in either its arrangement or its appointments.

The style of architecture is the same as that of the Crane Building, but accentuated by the use of stone for the basement walls, by horizontal stone courses above the first and third stories and by the use of painted copper panels between the windows of the second and third stories which increases the columnar

FIG. 1. The New Building and Crane Building (on the right) from Great Harbor. Note the three-quarters buried power house in the center at the corner of the stone harbor wall, and the roof of the tank house above the corner of the New Building.

FIG. 2. A closer view of the main facade.

FIG. 3. Rear view of the New Building and the Crane Building (left wing) from the Eel Pond; wooden building of the Supply Department on the left. The auditorium projects from the interior angle.

FIG. 4. Interior of one of the private biological laboratories overlooking Great Harbor and Nonamessett Island. Cement salt water table on left and usual furnishings, but special apparatus (14 x 20 ft.).

FIG. 5. Interior of one of the private biochemical laboratories taken from the window end. Note chemical desk and hood in addition to the fittings of a biological laboratory (12 x 23 ft.).

effects of the intervening brickwork. The main façade (Fig. 2) with its three high arched door-ways in the center, its rounded brick columns, and pediment ornamented with an intricate original marine composition are especially noteworthy.

2. The Dedication Exercises were held July 3, 1925. They were attended by official delegates of the following former and present subscribing and coöperating Institutions and Organizations, as well as by members of the Laboratory and neighbors.

OFFICIAL DELEGATES.

| | |
|---|---|
| The Academy of Natural Sciences of Philadelphia | Professor E. G. Conklin<br>Professor C. E. McClung |
| Agnes Scott College | Miss Mary Stuart MacDougall |
| The Department of Agriculture, Washington, D. C. | Dr. E. D. Ball |
| University of Alabama | President George H. Denny |
| The American Association of Anatomists | Professor Henry McE. Knower |
| American Association for the Advancement of Science | Dr. J. McKeen Cattell |
| The American Chemical Society | Dr. H. E. Howe |
| The American Society of Biological Chemists | Dr. Albert P. Matthews |
| The American Society of Naturalists | Professor S. O. Mast |
| The American Society of Zoölogists | Professor G. H. Parker |
| Amherst College | Professor Harold H. Plough |
| Antioch College | Mr. Ondess L. Inman |
| Barnard College | Professor Henry E. Crampton |
| Bermuda Biological Station for Research | Professor W. J. V. Osterhout |
| The Biological Laboratory, Cold Spring Harbor, L. I. | Dr. Reginald G. Harris |
| Boston Society of Natural History | Dr. Joseph A. Cushman |
| Boston University | Rev. Zerna Vane Arthur |
| Botanical Society of America | Professor B. M. Duggar<br>Professor J. R. Schramm |
| Bowdoin College | Professor Manton Copeland |
| Boyce Thompson Institute for Plant Research | Dr. William Crocker |

| | |
|---|---|
| Bryn Mawr College | Dr. Franz Schrader |
| Bureau of Fisheries, Washington, D. C. | Dr. Willis H. Rich |
| Butler College | Dr. David Rioch |
| Carleton College | Professor D. B. Young |
| Carnegie Corporation | Professor T. H. Morgan |
| Carnegie Institution of Washington | Dr. A. F. Blakeslee |
| Carnegie Institution, Station for Experimental Evolution | Dr. E. C. MacDowell |
| The University of Chicago | Professor Ralph S. Lillie |
| University of Cincinnati | Dr. Edward F. Malone |
| Clark University | Dr. William H. Cole |
| The College of the City of New York | Assistant Professor Earl A. Martin |
| Columbia University | Professor Gary N. Calkins |
| | Professor Henry E. Crampton |
| | Professor Thomas H. Morgan |
| | Professor Edmund B. Wilson |
| Constantinople Woman's College | Dr. Mary Mills Patrick |
| Cornell University | Professor Charles R. Stockhard |
| University of Delaware, Women's College | Miss Margaret Walton |
| DePauw University | Professor Walter Norton Hess |
| Doane College | Mrs. M. C. Bennett |
| Elmira College | Miss Clara Dettmer |
| | Miss Elizabeth Humeston |
| University of Georgia | Dr. E. R. Clark |
| Goucher College | Professor Clara L. Bacon |
| Hamilton College | Professor A. D. Morrill |
| Harvard University | Professor W. J. V. Osterhout |
| | Professor George H. Parker |
| Harvard University Medical School | Dr. A. C. Redfield |
| Haverford College | Mr. William A. Wolff |
| Hood College | Dr. Mabel Bishop |
| Hope College | Professor Samuel O. Mast |
| Howard University | President J. Stanley Durkee |
| | Dr. E. E. Just |
| The Johns Hopkins University and the Johns Hopkins Medical School | Dr. Warren H. Lewis |

| | |
|---|---|
| Eli Lilly and Company | Dr. G. H. A. Clowes |
| McGill University | Dr. I. Maclaren Thompson |
| Marietta College | Professor H. R. Eggleston |
| University of Maryland | Professor P. W. Zimmerman |
| Massachusetts Institute of Technology | Professor Robert T. Bigelow |
| Mercer University | Professor Gail L. Carver |
| Miami University, Oxford, Ohio | Dr. J. K. Breitenbecker |
| University of Michigan | Professor L. V. Heilbrunn |
| James Millikan University | Dr. H. P. Agersborg |
| Milwaukee-Downer College | Dr. Mary Edith Pinney |
| University of Minnesota | Dean Elias P. Lyon |
| The Missouri Botanical Garden | Dr. Benjamin M. Duggar |
| University of Missouri | Dr. Charles H. Philpott |
| The Mount Desert Island Biological Laboratory | Dr. Ulric Dahlgren |
| Mount Holyoke College | Dr. Cornelia Clapp |
| National Research Council | Dr. Maynard M. Metcalf |
| The National Academy of Sciences | Dr. Frank R. Lillie |
| The New York Academy of Sciences | Professor Henry E. Crampton |
| The University of North Carolina | Dr. C. Dale Beers |
| Oberlin College | Professor Robert A. Budington |
| | Professor Charles G. Rogers |
| Ohio Wesleyan University | Professor E. G. Conklin |
| Peabody Museum, Salem, Mass. | Professor Edward S. Morse |
| University of Pennsylvania | Professor Clarence Erwin McClung |
| University of Pennsylvania School of Medicine | Professor Henry Cuthbert Bazett |
| Pomona College | Dr. Charles W. Metz |
| Randolph-Macon College | President R. E. Blackwell |
| Rhode Island State College | Dr. H. W. Browning |
| | Dr. F. Bauer |
| Rutgers College | Dr. Walter T. Marvin |
| Sheffield Scientific School, Yale University | Professor Ross G. Harrison |
| Shorter College | Dr. Ada R. Hall |
| Smithsonian Institution | Dr. Austin H. Clark |
| Stanford University | Mr. Charles Maurice Cram |

| | |
|---|---|
| St. Louis University | Professor Alphonse M. Schwitalla |
| Syracuse University | Professor C. W. Hargitt |
| The Tulane University of Louisiana | Dr. Walter E. Garrey |
| Union College | Professor James Watt Mavor |
| Vassar College | Professor A. L. Treadwell |
| University of Vermont | Dr. E. G. Spaulding |
| University of Virginia | Dr. Ivey Foreman Lewis |
| University of Washington | Mr. Louis G. Seagrave |
| Washington University | Mr. Alfred M. Lucas |
| Washington and Lee University | Professor W. D. Hoyt |
| Wesleyan University | Professor Hubert B. Goodrich |
| The Western College for Women | Dr. Ruth Laura Phillips |
| Western Reserve University and Adelbert College | Professor Francis H. Herrick |
| Whitman College | Rt. Rev. Robert L. Paddock |
| Williams College | Professor James L. Kellogg |
| The University of Wisconsin | Professor Charles E. Allen<br>Professor Leon J. Cole |
| The Wistar Institute of Anatomy and Biology | Dr. Milton J. Greenman |
| Yale University | Professor Lorande L. Woodruff |

Members of the Laboratory and many invited guests were also present and the large new auditorium was completely filled. The afternoon addresses according to the subjoined program have been published in *Science* (Vol. LXII., No. 1604, pages 271–280, Sept. 25, 1925). The Committee in Charge of the Exercises, under the able direction of Dr. H. E. Crampton, provided lunch and housing arrangements for delegates, and guides for inspection of the building, and arranged an afternoon tea and demonstrations of materials and experiments set up by workers at the Laboratory. The exercises were concluded by an evening lecture delivered by Professor W. J. V. Osterhout of Harvard University.

## MARINE BIOLOGICAL LABORATORY.

WOODS HOLE, MASSACHUSETTS.

DEDICATION EXERCISES.

FRIDAY, JULY 3.
1925.

2 P.M. Daylight saving time. In the auditorium. Presiding Officer, THE HONORABLE CHARLES R. CRANE, *President Board of Trustees.*

---

Address of Welcome: PROFESSOR FRANK R. LILLIE, *Director.*
Address: PROFESSOR EDMUND B. WILSON, Columbia University.
Address: "The Changing Face of Nature and of Man at Woods Hole," by PROFESSOR EDWIN G. CONKLIN, Princeton University.

4:00–6:00 P.M. Inspection of buildings and work. Afternoon tea will be served.

8:00 P.M. The first of the series of evening lectures will be delivered by PROFESSOR W. J. V. OSTERHOUT, of Harvard University—Subject: "Absorption and Accumulation."

3. *Report of the Building Committee* (The Director, Assistant Director and Treasurer).—In the last Annual Report the estimates for construction of the new building and the sources of funds for the purposes were given. It is a source of gratification to the Committee that the building was completed and equipped for a sum of $734,101.01 which is $14,485.70 within the estimates of $748,886.71. Ground was broken March, 20 1924 and the building practically fully equipped was ready for occupancy in June, 1925. In its final report presented to the Board of Trustees August 11, 1925 The Building Committee presented a summary of payments needed after July 1, 1925 as follows:

SUMMARY OF ADDITIONAL NEW BUILDING COSTS AFTER JULY 1, 1925.

| | | |
|---|---|---|
| July 1, 1925—Balance due Contractors and Architects.... | $19,023.39 | |
| Balance due John Manville Co. for panel work in auditorium..... | 1,500.00 | |
| Balance due on Supplementary Orders..... | 22,321.70 | $42,845.09 |

| | | |
|---|---|---|
| *Additional Amounts Needed.* | | |
| *a.* Apparatus and Chemicals | $ 5,000.00 | |
| *b.* To complete Machine Shop | 600.00 | |
| *c.* Additional items for completion of service and equipment | 5,000.00 | 10,600.00 |
| | | $53,445.09 |
| July 1, Cash in Building Fund | | 30,094.48 |
| | | $23,350.61 |
| Anticipated savings on contracts: | | |
| Cleghorn Company | $817.00 | |
| Cronin Company | 925.00 | 1,742.00 |
| August 3, Amount required from Friendship Fund | | $21,608.61 |

In this accounting a fund of $10,600.00 was provided for minor items of completion. With this understanding the Committee proposed that their accounts be closed after the payment of the outstanding items noted above and that the Committee be discharged as soon as this is accomplished. The report was accepted by the Board of Trustees, and the Secretary was instructed to notify the Friendship Fund that the Marine Biological Laboratory would consider their pledge fulfilled by a total payment of $221,608.61 instead of $248,886.71 as originally estimated.

The subjoined analysis of the Building Fund Account was submitted by the Business Manager, Dec. 15, 1925.

ANALYSIS,
MARINE BIOLOGICAL LABORATORY,
BUILDING FUND ACCOUNT,
DECEMBER 15, 1925.

| | | | |
|---|---|---|---|
| *Cash Received to date:* | | | |
| Rockefeller Foundation | | $500,000.00 | |
| Friendship Fund | | 221,608.61 | |
| Interest on bank deposits: | | | |
| December, 1924 | $ 8,721.67 | | |
| June, 1925 | 459.28 | 9,180.95 | |
| Donation, Frank R. Lillie | | 3,311.45 | $734,101.01 |
| *Payments as follows:* | | | |
| Geo. A. Fuller Co., Gen. Contractor | $484,210.56 | | |
| C. H. Cronin, Inc., Plumbing | 48,229.06 | | |
| Cleghorn Company, Heating | 30,658.95 | | |
| Hixon Electric Co., Elec. work | 66,555.36 | | |
| F. S. Payne Co., Elevator | 3,977.00 | $633,630.93 | |

| | | | | |
|---|---|---|---|---|
| Coolidge & Shattuck, Architects' commission and travelling exp. | | | 31,734.26 | |
| *Other Commissions:* | | | | |
| Supt. and Eng. Fees: | | | | |
| Heating—Buerkel & Co. | $ 518.94 | | | |
| Elec.—Hixon Electric Co. | 776.24 | $ 1,295.18 | | |
| Elec.—Hixon Electric Co. (By Dr. Lillie, 1923.) | $ 1,990.51 | | | |
| Heating—Buerkel & Co. (By Dr. Lillie, 1923.) | 1,320.94 | 3,311.45 | 4,606.63 | |
| *Supplementary Items:* | | | | |
| | *Paid.* | *To complete.* | | |
| Apparatus | $21,429.17 | $ 2,070.83 | $ 23,500.00 | |
| Chemicals | 1,474.84 | 25.16 | 1,500.00 | |
| Crane Bldg. changes | 6,205.16 | | 6,205.16 | |
| Furnishings | 12,475.20 | | 12,475.20 | |
| Grading | 1,889.75 | | 1,889.75 | |
| Machine Shop | 3,999.72 | 500.28 | 4,500.00 | |
| Sea water equipment | 5,979.97 | | 5,979.97 | |
| Miscellaneous | 1,844.75 | 4,734.36 | 6,579.11 | |
| Johns-Manville, Inc. Auditorium ceiling | 1,426.56 | 73.44 | 1,500.00 | |
| | $56,725.12 | | $ 64,129.19 | $ 64,129.19 |
| Total Building Cost | | | | $734,101.01 |
| Balance on hand in Building Fund, Dec. 15, 1925 | | $ 7,404.07 | | |

4. *Special Scientific Equipment of the New Building.*—Twenty-five thousand dollars was provided in the estimates for special scientific equipment, mostly movable apparatus, in addition to the apparatus already in possession of the Laboratory. The inventory value of the movable apparatus accordingly becomes well over $30,000.00. There has been provided thus such a quantity and variety of instruments and other apparatus, much of it very delicate and costly, that a new service department of "Scientific Apparatus" has been created with Dr. Samuel E. Pond of the University of Pennsylvana as custodian. Dr. Pond also acted as purchasing agent for the new apparatus, and was able to get the maximum results from the expenditure of the new

funds. There were few demands for apparatus in the season of 1925 that could not be satisfied with that on hand; the machine shop operated in coöperation with the department of scientific apparatus in adapting instruments and making new ones. All appliances are fully catalogued and cross-referenced as to distribution in the various buildings and rooms and temporary loans.

The equipment of the machine shop was completed during the summer. This equipment is largely for metal work. It is proposed to install a bench and equipment with a trained operator for glass blowing which will permit some construction of glass apparatus and all necessary repairs. It is not intended to centralize all glass blowing here, but to provide for the more delicate and complicated pieces of work.

5. *Attendance.*—Reference is made to the list of Students and Investigators in attendance (pp. 43–51) and to the Tabular View of Attendance (p. 51). The number of students admitted was held to the usual quota, which necessitated refusing a considerable number of applicants; the laboratories in the old buildings were used for the work of the classes as before. The number of investigators was 208 which is 14 more than the previous year the largest attendance heretofore. This season the space was ample. The policy in assigning space was determined partly by the rates, but, for the rest, the better equipped and more commodious quarters of the New Building and the Crane Building were filled first both for the beginning investigators and the older ones. All of the space in the brick buildings was thus occupied, and it was remarkable how little unoccupied space was left even in the old buildings after the need for crowding ceased and each investigator was given ample quarters. The number of institutions represented by students was 65, by investigators 74, combined 112 with allowance for duplications.

The following foreign countries and institutions were represented: Brazil, H. Paul's Medical School; China, Peking University and Shanghai; Czecho-Slovakia, Charles University Prag; England, University College, London; Germany, Kaiser Wilhelm Institut Für Biologie; Holland, University of Leyden and de Hoogere Burgerschool, Amsterdam; Poland, Lemberg and Warsaw Universities, Roumania, Bucharest University; Russia,