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THE BROOKLYN INSTITUTE  
OF ARTS AND SCIENCES.

1893-4.

*THE EDUCATIONAL DIRECTORY.*

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# The Biological Laboratory,

LOCATED AT

COLD SPRING HARBOR, LONG ISLAND,

CONDUCTED BY

THE BROOKLYN INSTITUTE OF ARTS  
AND SCIENCES.

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**In the Season of 1895**, the Laboratory will be open from Tuesday, June 25th, until Thursday, September 14th, for specialists.

**The Regular Session** will open on Monday, July 8th, and close on Thursday, August 24th.

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## COURSES OF INSTRUCTION.

1. **Comparative Embryology.**
2. **Bacteriology.**
3. **Advanced Course in Cryptogamic Botany.**
4. **General Course in Zoology.**
5. **General Course in Phænogamic Botany.**

**Private Laboratories for Specialists and Advanced Students.**

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For further information inquire of Prof. HERBERT W. CONN, Ph.D., Director of the Laboratory, or of Prof. FRANKLIN W. HOOPER, Secretary of the Board of Managers. Address, 502 Fulton St., Brooklyn, N. Y.

# THE BIOLOGICAL LABORATORY.

[Located at Cold Spring Harbor, L. I.]

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 Prof. W. H. C. PYNCHON, (Trinity College), *General Biology.*

## LOCATION OF THE LABORATORY.

The location of the Biological Laboratory, at the head of Cold Spring Harbor, is one of the most favorable on the coast. The country around is high and rolling, with abundant forests, glens and small streams, affording most excellent collecting ground for every form of animal and vegetable life common to our climate. Just above the Laboratory is a series of three beautiful fresh water ponds, each fertile in forms of fresh water life, and through which flows the water of Cold Spring Creek. Just below the Laboratory is the long and beautiful harbor of Cold Spring, divided by a sandy neck into an inner and an outer basin. The inner basin is particularly rich in marine life, and the channel between the inner and outer basins has a most varied and vigorous growth of algae, molluscs and echinoderms. The outer basin has rocky projections, shallow flats, banks, and eel grass, sheltered pools, oyster beds, and other most favorable conditions for collection and study. The outer basin opens widely into Long Island Sound, whose shore is very varied in character for twenty miles in either direction.

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## LABORATORY AND APPLIANCES.

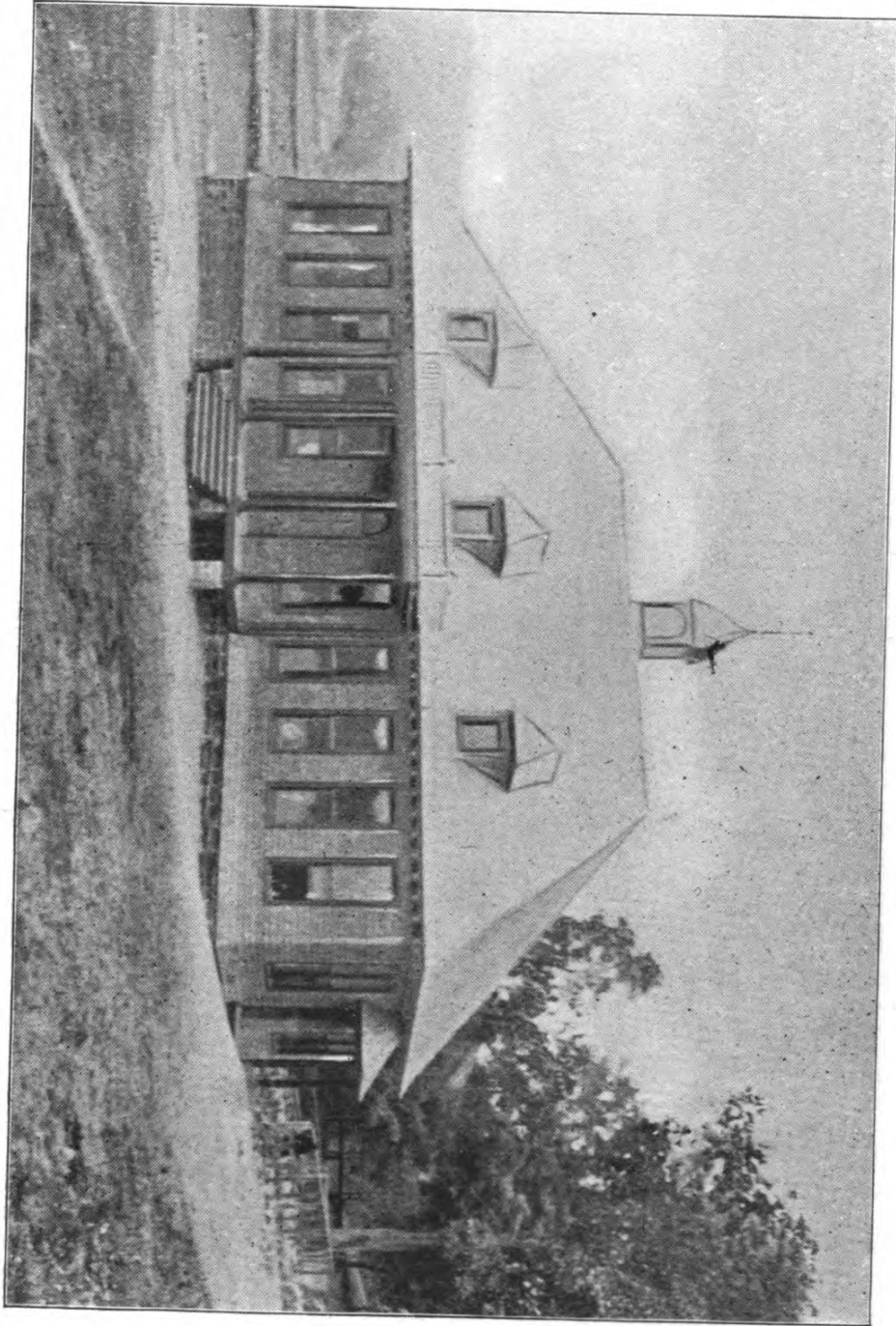
The facilities for Biological Work at the Summer Biological Laboratory of the Institute were materially increased last season by the erection of a new and commodious laboratory building (36x72 feet) designed for the special purposes of the school. The laboratory building stands upon a wharf close by the water, and is provided with all the necessary conveniences for

summer work. It contains (1) a general laboratory (36x40 feet), in which are located tables for students' work, aquaria supplied with running fresh and salt water, and conveniences for lectures and class instruction ; (2) six private laboratories, which were assigned to persons who were competent to carry on independent work, and who were, as a rule, engaged in special investigation ; (3) a room equipped for and devoted to work in bacteriological technique, such as making cultures, isolating species of bacteria, etc. ; (4) a room equipped with apparatus for photographing purposes, including ordinary photography, microscopic photography and the making of lantern slides, and (5) a working library placed at the disposal of the members of the School. In addition the students were furnished with all the necessary apparatus, reagents, etc., for biological work at the seashore. The Laboratory owns a launch provided with apparatus for the collection of material for laboratory work, and small row boats were at the disposal of the school. Near by the main laboratory is a second building equipped and used for lecture purposes in cases where larger numbers attend the lectures than the general laboratory room will accommodate, or in cases when it is desirable to use the lantern for illustrative purposes. Through the generous hospitality of the New York State Fish Commission portions of the Fish Commission Building were placed at the disposal of the School.

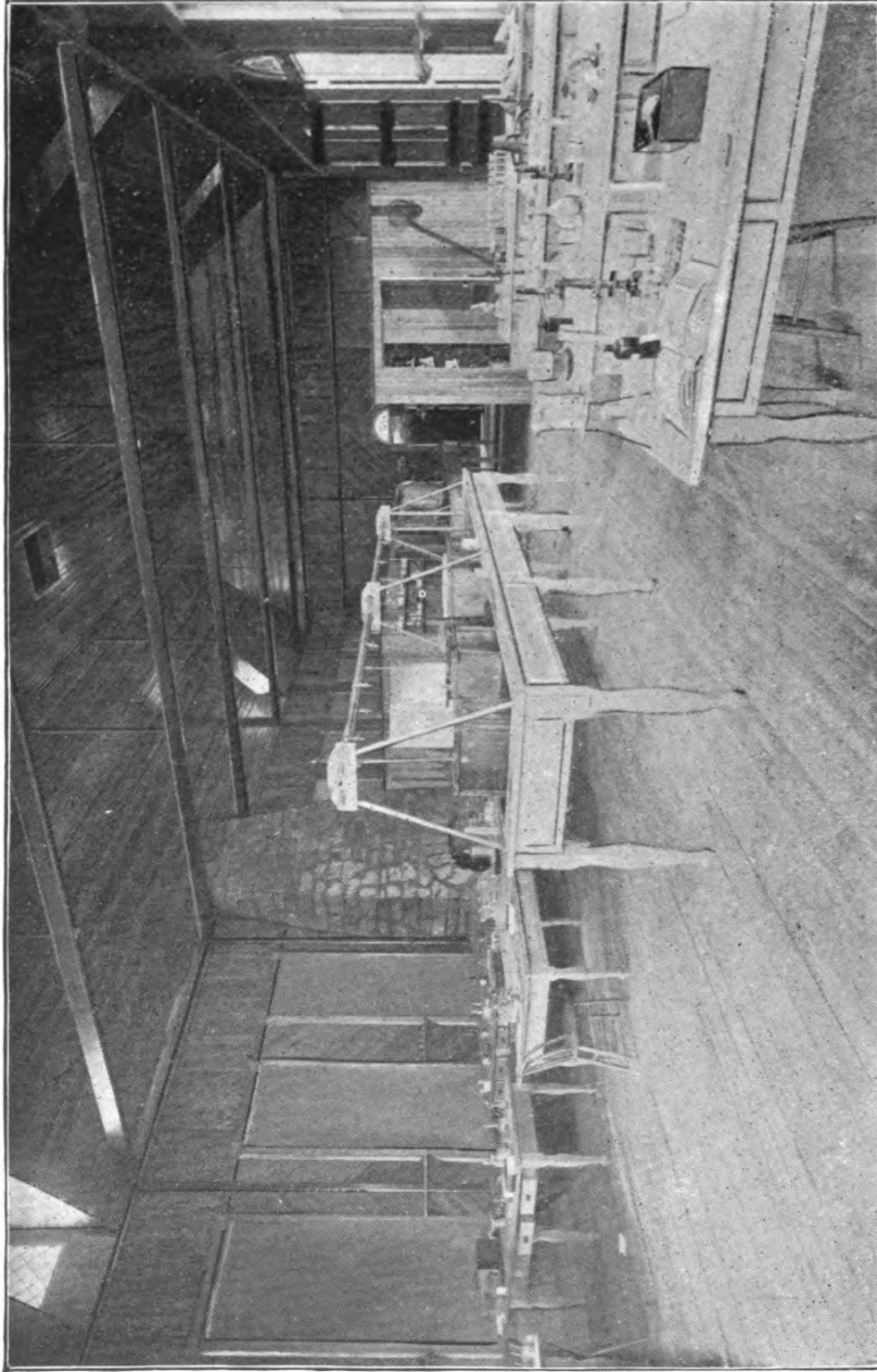
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### THE PURPOSES OF THE LABORATORY.

The objects of the Laboratory are (1) to furnish a place for general biological instruction and (2) to offer



THE BIOLOGICAL LABORATORY, COLD SPRING HARBOR.—MAIN BUILDING, 72 X 36 FEET.



**INTERIOR VIEW OF MAIN LABORATORY BUILDING.**  
Showing Laboratory Tables and Aquaria.

V. Course in Elementary Botany, specially designed for teachers of Botany in schools and academies, and also for those who had no previous training in laboratory work on flowering plants. Those taking this course were instructed on the general structure, growth and morphology of flowering plants and in the analysis of flowers. As in the other courses, lectures and demonstrations accompanied the laboratory work.

In addition to the regular courses mentioned above was a series of fifteen illustrated lectures given in the evening upon popular scientific subjects, open to all connected with the Laboratory. A limited number of Specialists in Biology who desired to engage in original research were admitted to the privileges of the laboratory and assigned to private laboratory rooms. The fee for specialists who occupy private laboratories is \$25 per month or \$50 for the season.

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#### FACILITIES FOR ADVANCED WORK.

Students who pursued the General Course of Instruction during the summer, and who had time for extra work, were given the instruction and facilities necessary to enable them to carry on special investigations, while those students who had already gained the knowledge and experience which was provided by the general course, were permitted to give their entire time to special work. No special courses were laid down in advance, but each student was at liberty to arrange with the Director of the Laboratory for such work as was practicable.



## FACILITIES FOR ORIGINAL INVESTIGATION.

Each lecturer was provided with a private laboratory room in which to carry on his own private investigation so long as he remained at the laboratory, and was not called upon to give any instruction outside of his lectures and such directions for work as accompanied his lectures.

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## PERSONS ENGAGED IN ORIGINAL RESEARCH.

Prof. HERBERT W. CONN, Ph.D., Wesleyan University, Conn.  
 Prof. L. N. JOHNSON, Michigan University.  
 Miss MARY B. DENNIS, Ph.D., Brooklyn.  
 Prof. W. H. C. PYNCHON, Trinity College, Conn.  
 Mr. DUNCAN S. JOHNSON, Wesleyan University.  
 Dr. EDWARD L. RICE, University of Munich.

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## STUDENTS IN THE SEVERAL COURSES.

### I.—COMPARATIVE EMBRYOLOGY.

Prof. H. E. CHAPIN, Ohio University, Athens, Ohio.  
 HARVEY J. CLEMENTS, Teacher, Washington, Ind.  
 W. M. ESTEN, Assistant, Wesleyan University, Middletown, Ct.  
 F. T. KURT, Student, Wesleyan University, Middletown, Ct.  
 JAMES F. JONES, Instructor, Marietta College, Marietta, Ohio.  
 W. H. C. PYNCHON, Instructor, Trinity College, Hartford, Ct.  
 ANNETTE B. RICHMOND, Student,  
 Wesleyan University, Norwich, Ct. 54 Prospect St.  
 SARAH B. TUCKER, Student, Wesleyan University, Durham, Ct.  
 A. M. THOMPSON, Student, Wesleyan University, Rumford, Me.

## II.—CRYPTOGAMIC BOTANY.

- HARVEY J. CLEMENTS, Teacher, Washington, Ind.  
 F. T. KURT, Student, Wesleyan University, Middletown, Ct.  
 E. M. MONTFORT, Instructor, Marietta College, Marietta, Ohio.  
 ANNETTE B. RICHMOND, Student,  
 Wesleyan University, Norwich, Ct.  
 SARAH B. TUCKER, Student, Wesleyan University, Durham, Ct.  
 A. M. THOMPSON, Student, Wesleyan University, Rumford, Me.

## III—ELEMENTARY ZOOLOGY.

- W. RYALL BURTIS, Student, Rutgers College, Freehold, N. J.  
 ANNA E. COLLINS, Teacher,  
 Girls' Normal School, Philadelphia, Pa.  
 CLARA E. COOKE, Medical Student, Madisonville, Ohio.  
 EMMA DEANE, Teacher, 405 Sackett St., Brooklyn, N. Y.  
 C. S. GRISWOLD, Teacher, Groton School, Groton, Mass.  
 Mrs. E. HOYT, Teacher, 53 Brooklyn Avenue, Brooklyn, N. Y.  
 EDITH JOHNSON, Teacher, 1139 Dean St., Brooklyn, N. Y.  
 MILDRED JOHNSON, Teacher, 1139 Dean St., Brooklyn, N. Y.  
 A. E. MONTFORT, Instructor, Marietta College, Marietta, Ohio.

## IV.—BACTERIOLOGY.

- Prof. H. E. CHAPIN, Ohio University, Athens, Ohio.  
 CLARA E. COOKE, Medical Student, Madisonville, Ohio.  
 J. F. JONES, Instructor, Marietta College, Marietta, Ohio.  
 Prof. J. W. HOFFMAN, Tuskegee Institute, Tuskegee, Ala.

Evening lectures were given once a week on subjects of a general biological or scientific nature for the benefit of the students and the residents of Cold Spring and vicinity. The lectures were illustrated in most instances by lantern slides, and were attended by from fifty to one hundred and thirty people. The evening lecturers during the summer of 1893 were: Prof. FRANKLIN W. HOOPER, Prof. HERBERT W. CONN,

Ph.D., Prof. L. N. JOHNSON, Prof. W. H. C. PYNCHON, Mr. CORNELIUS VAN BRUNT, and Prof. WILLIAM NORTH RICE The number of persons in regular attendance on the lectures in addition to the students was sixty.

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### TUITION, BOARDING AND ROOMS.

The tuition fee for the full term (eight weeks) was \$24.00; for the first five weeks of the season or less, \$15.00. The fee for the use of private laboratory rooms was \$50.00.

A dining room has been fitted up for the accommodation of the instructors and students in a building near by the Laboratory. Excellent table board was furnished to all connected with the School at \$4.50 per week. Furnished rooms were obtained near the Laboratory at rates varying from \$1.50 to \$3.00 a week, according to location, size, etc. Where two occupy the same room the expense of board and room was from \$6.00 to \$7.00 per week.

The buildings and grounds occupied by the Laboratory are the property of the WAWPEX SOCIETY of Cold Spring Harbor, a Society founded by Mr. JOHN D. JONES, of New York; and whose purpose it is to promote the increase and diffusion of knowledge in the Natural History Sciences. Through the great liberality of the founder of the Society, the generous action of the Society itself, and the active co-operation and support of its members, the Laboratory buildings and grounds afford most advantageous conditions for biological study and research.