

Thus has the Marine Biological Laboratory come up from a condition of penury to one of affluence, from a day of small things to one of greatness, from anxious hope to glorious realization. In this story of the growth of the Marine Biological Laboratory there is romance and inspiration, and in dealing with its material growth there has been presented the least romantic and inspiring part of the story. That would be found in the laborious days and wakeful nights and thrilling discoveries of its workers, but there is no time left to tell this part of our history and it does not lend itself so readily to lantern slide illustration.

Let us close with a word of appreciation of the labor and service and sacrifice of those who have made this day possible. Our founders and benefactors have left to us a noble heritage in this institution and its ideals. They labored not for themselves only but for their successors, and we dedicate this building not merely to present but to future generations. Our strongest social instincts are for service; the joy of life is progress; the desire of all men is for immortality through their work. We may be forgotten, as many of our predecessors and benefactors have been, but with Huxley we may say, "I am content to be remembered or not to be remembered so only the truth is advanced." In the dedication of this superb temple of truth, all who have had any part may take a just pride and it is eminently fitting that we should recall with gratitude those who have in any way contributed to this great institution. A common mistake is to fix upon one man, one event, one gene as the cause of some complex development. No one man, foundation or event has been the cause of the Marine Biological Laboratory of to-day. In some measure it is the result of all that has gone before. Nevertheless, there are certain outstanding men who should be recalled with gratitude to-day; among these are the following fore-runners and founders: Louis Agassiz, Spencer F. Baird, Alpheus Hyatt, W. G. Farlow, E. G. Gardiner, C. S. Minot, W. T. Sedgwick.

Since its foundation there has been an ever-increasing number of friends and benefactors of the laboratory. It is not possible to name them all, but we should be lacking in gratitude if we failed to name, on this occasion, those who have made possible this great material development of the Marine Biological Laboratory, *viz.*, The Rockefeller Foundation, The Carnegie Corporation, The Friendship Fund, Mr. John D. Rockefeller, Jr., and last but not least, Mr. Charles R. Crane.

Not only to these benefactors but to the men and women who have unselfishly worked here do we owe

a debt of gratitude. Others gave their money and influence, these gave their work and their lives. Among them are: C. O. Whitman, director for twenty-one years; Frank R. Lillie, assistant director for ten years and director for eighteen years; H. C. Bumpus, assistant director for five years; J. I. Peck, assistant director for three years, and Gilman A. Drew, assistant director for fifteen years—the man who more than any other one person is responsible for the scientific planning of this building.

Our gratitude is due also to many others—investigators, instructors, students and staff—whose labors have become part of the fame and influence of this laboratory. Among these workers is one whom we sadly miss to-day, but whose name and fame will ever be associated with this place—Jacques Loeb. Many of these founders and workers have gone from us forever, but their memory remains a permanent and priceless possession. "They builded better than they knew." Would that they might be with us to-day to see this consummation of their labors and hopes! "They rest from their labors but their works do follow them." "Others have labored and we have entered into their labors."

This great laboratory, the greatest of its kind, offers an unparalleled opportunity and a serious responsibility. Scientific institutions such as this are the most distinctive and most hopeful contribution of this age to the progress of civilization and of mankind. Gifted with immortal youth, inspired by high ideals of truth and service, may this laboratory be a center of discovery, of learning and of progress to generations yet unborn!

This is a day not only of retrospect but of prospect; not only of rejoicing but of resolution. Here we dedicate not only this building but ourselves to the "increase and diffusion of knowledge among men," to a higher civilization and a better humanity, to the search for truth which shall make us free.

SCIENTIFIC EVENTS

THE WILD LIFE RESERVATION ON THE MISSISSIPPI RIVER

INITIAL steps have been taken by the Department of Agriculture for the purchase of lands for the creation of the upper Mississippi river wild life and fish refuge, authorized by congress in June, 1924.

Funds amounting to \$400,000 became available on July 1. The expectation is that ultimately more than \$1,500,000 will be expended for the acquisition of overflowed lands on either side of the Mississippi in Illinois, Iowa, Wisconsin and Minnesota for a distance of about 300 miles from Rock Island, Ill., to Wabasha, Minn.

The refuge is designed as a feeding and resting place for wild fowl and other migratory birds and a natural home for fur animals. In addition, it is to be established for preservation of fishes and trees, wild flowers and other native plants.

Secretary Jardine has authority to purchase lands for the refuge, and administration is to be in charge of the Bureau of Biological Survey, which maintains many similar places owned by the government.

Jurisdiction of the Department of Agriculture will extend to wild birds, game, animals, fur-bearing animals, trees, wildflowers and plants where the Department of Commerce will have jurisdiction with respect to fishes, mussels and other aquatic life. The two departments are authorized to make suitable regulations governing hunting and fishing on the areas acquired.

The areas to be purchased are limited to bottom lands between the river and the bluffs, which rise precipitously on each side from 200 to 400 feet. The average price under the law can not exceed \$5 an acre. In this region the Mississippi flows through a valley averaging three to five miles in width. At times of high water a large part of this area is overflowed and not suitable for agriculture. There are many permanent sloughs and bayous, some of them navigable to boats of light draft.

To save fish in these cut-off bodies of water the Bureau of Fisheries sends agents each year to return them to the Mississippi or carry them to other localities for restocking depleted streams. Thus millions are rescued every year by federal and state agencies in one of the greatest spawning grounds in the country for such species as bass, pike and sunfish.

NEW PLAN OF STUDY FOR HONORS STUDENTS AT THE MASSACHUSETTS INSTITUTE OF TECHNOLOGY

DR. DUGALD C. JACKSON, professor of electrical engineering, has sent to certain students at the Massachusetts Institute of Technology an invitation to become members of the honors group, a plan which was recommended by the corporation's visiting committee on electrical engineering and which the faculty authorized to be put into effect beginning with the next academic year.

The plan provides to the students in the group greater independence of study within the scope and ideals of the curriculum than is characteristic of the usual practice, and includes the following features:

The students in the group will be privileged to attend the class exercises of the regular subjects or not, as they individually please; but will be expected to successfully pass the usual term examinations, which should be readily accomplished as a result of the special reading proposed.

The laboratory work of each term, which now usually consists of a series of independent assignments, will consist of a general assignment relating to the principles of construction and the characteristics of the circuits, instruments and machinery treated during the term, with the time and method of work largely determined by the interest of each individual student, who will carry on under the advice and direction of the conference adviser. Students will be encouraged to carry on this work as far as practicable as individual investigations of the principles and applications under consideration, directed along paths of their own interests in the subject. The usual laboratory reports will be omitted, and the report for each student will be his notebook containing an outline of his plan for the term, the record of his various investigations and measurements, his comments and a brief summing up toward the end of the term of his accomplishments and progress during the term.

Freedom from existing restrictions of scheduled class hours and laboratory hours will afford greater opportunity for more reading and study related to the subjects under consideration. In order that the students' progress may be orderly and any difficulties encountered may be courageously faced and overcome a conference of an hour and a half each week will be held between the group and a member of the faculty learned in the subjects for the term, in which conferences the progress and the difficulties will be mutually discussed. Substitution of subjects in the curriculum will also be provided for to accommodate particular tastes and interests of students.

If the student becomes interested in a particular investigation, even as early as the junior year, that would develop into a suitable thesis project, this may be substituted for the larger part of the usual laboratory work.

For the purpose of stimulating the group to the scholarly thoughtfulness regarding their careers that is needful for distinguished leadership in creative electrical engineering, near the end of the senior year each student in the group will present to his conference advisers an oral statement of his progress and accomplishments during the junior and senior years, with comments on his grasp of the electrical engineering field and its collaterals.

THE NEW YORK INTER-SECTIONAL MEETING OF THE AMERICAN CHEMICAL SOCIETY

AN inter-sectional meeting of the American Chemical Society will be held in New York City from September 29 to October 1. All meetings will be held in Rumford Hall, the Chemists' Club, 52 East 41st Street, New York, at 10 A. M. unless otherwise noted. The following program will be presented:

Symposium on Motor Fuel and Oil Conservation. Dr. C. O. Johns, chairman.

September 29.—“Petroleum aspects of oil conservation”: K. G. Mackenzie, consulting chemist, The Texas Company.

September 30.—“Fermentation industries and motor