

Harbor, for the study of the biology of the fishes utilized in the now very large sardine and tuna canning industries. The state government has found that such studies are an imperative necessity in the exercise of its legal control over the fisheries. They are necessary, not merely for the determination of biological facts bearing directly upon methods of conservation, but also for the interpretation of the statistics which are now collected by the state for the purpose of observing the condition of the fisheries. The statistical system used is unique, and has proved its independence of the errors usually introduced by statistics gathered by personal inquiry, but the perfection of the data thus gathered does not eliminate, but rather enlarges the importance of biological knowledge and hence of laboratory work.

The building is of reinforced concrete, two stories in height, and of modified Spanish architecture with red tile roof. There are sufficient accommodations for from six to ten research workers in the three laboratories and work room. A large library room, a file room, a dark room and store room are also provided.

It is hoped to collect a library upon fishery subjects which will be very complete, and to that end a number of the important periodicals in the field have been purchased in their entirety. However, aside from the publications of the International Council for the Investigation of the Sea, there are not a great many such periodicals, and the real sparseness of our knowledge of the commercial fishes is emphasized by their lack.

The permanence of the laboratory is assured by the existence of a law specifying the collection of the statistics and the biological investigations necessary. It is felt that it will be very difficult for reactionary interests to repeal the law, or to attack the funds collected by special taxes for the maintenance of the work. Dependence upon appropriations made from year to year has proved disastrous in the case of the federal government and in those of a number of states, and it is to be hoped that such a system as is in existence in California will remain independent of appropriations.

The biological problems which face the

fishery expert are wide in scope and will inevitably interest the ecologist and the systematist. For their solution vast quantities of materials are available in the canneries and fish markets, while the detailed records of the catch which are gathered provide a basis for a real science of vital statistics of the fisheries. Men interested along such lines will be cordially welcomed in the new laboratory, in so far as its accommodations are adequate.

WILL F. THOMPSON

#### MATHEMATICAL PUBLICATIONS

THE *Bulletin* of the American Mathematical Society contains several notes concerning mathematical publications from which we quote.

The council of the society has received an offer from an anonymous donor to pay the cost, up to \$4,000, of an extra volume of the *Transactions* of the society, to be brought out promptly. This extra volume will be sent without charge to all subscribers and exchanges now on the list.

Mrs. Mary Hegeler Carus, as trustee for the Edward C. Hegeler Trust Fund, has given to the Mathematical Association of America the sum of \$1,200 annually for five years for the purpose of publishing a series of monographs whose purpose should be to popularize mathematics by making accessible at nominal cost the best thoughts and keenest researches in this field set forth in expository form comprehensible to teachers and students of mathematics and to other readers of mathematical intelligence. The deed of gift includes the promise to capitalize this annual income by a permanent endowment fund if at the end of five years the project shall have proved successful.

The members of the division of mathematics of Harvard University have constituted themselves an informal committee to solicit contributions to relieve the present financial need of the *Jahrbuch über die Fortschritte der Mathematik*. The deficit for the coming fiscal year will amount to about \$1,000. The editor, Professor L. Lichtenstein, has appealed for aid. The Emergency Society for German and Austrian Science and Art, which last year appropriated 20,500 marks for the *Jahrbuch*, contemplates the continuance of its support, sub-

ject to the cooperation of American mathematicians.

On the occasion of the sixtieth birthday of Professor David Hilbert, of the University of Goettingen, his friends, colleagues, and former students presented to him an address, an album of photographs, and a memorial volume of mathematical papers. Among those who joined in these remembrances were over sixty-five American friends and former students. The celebration was directed by a committee consisting of Professors O. Blumenthal (chairman), R. Courant, G. Hamel, E. Hecke, A. Schönflies, and (for America) E. R. Hedrick. The mathematical papers of the memorial volume will appear separately either in the *Mathematische Annalen* or in the *Mathematische Zeitschrift*.

The preparation of the complete edition of the works of Sophus Lie, undertaken in 1912 by Teubner, but suspended because of the greatly increased cost of printing, will be resumed with the financial support of the Norwegian Mathematical Society. The title of the edition will read: *Sophus Lie, Gesammelte Abhandlungen, im Auftrage des Norwegischen Mathematischen Vereins und mit Unterstützung der Akademien zu Kristiania und Leipzig, herausgegeben von Friedrich Engel und Paul Heegaard*. It is planned to publish seven volumes, of which volume three, the first to appear, is now in press.

#### GRANTS FOR RESEARCH BY THE NATIONAL ACADEMY OF SCIENCES

THE following grants for researches have been approved by the National Academy of Sciences:

##### *Bache Fund*

H. Nort, Gouda, Holland, for counting the stars on the Franklin Adams charts.....	\$ 200
H. S. Jennings, Johns Hopkins University, for studies of the cytology of the rhizopod <i>diffugia</i> .....	500
Herbert M. Evans, University of California, for the determination of the œstrus cycle by means of histological changes in the vaginal and uterine fluid in other mammals than the rat (especially the rabbit and the cat).....	500

Carl G. Hartman, University of Texas, for the completion of observations on the œstrus cycle of the opossum.....	500
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##### *Draper Fund*

E. A. Fath, Carleton College, for the purchase of a string electrometer for application to the photometry of the stars.....	375
W. W. Campbell, Lick Observatory, for the purchase of eclipse apparatus.....	450

##### *J. Lawrence Smith Fund*

George Perkins Merrill, U. S. National Museum, in aid of further investigations of meteorites .....	500
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##### *Gould Fund*

Benjamin Boss, Albany, N. Y., for the support of the <i>Astronomical Journal</i> .....	1,000
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##### *Marsh Fund*

Carl O. Dunbar, Yale University, for collection and study of Permian insects.....	150
Miss Winifred Goldring, State Museum, Albany, N. Y., for investigation of Devonian plants of Gaspé.....	75
W. J. Sinclair, Princeton University, for continuation of his studies on the stratigraphic succession of mammalian faunas of the White River oligocene.....	300
Rudolf Ruedemann, State Museum, Albany, N. Y., for studies on the graptolites of North America.....	200
F. Canu and R. S. Bassler, United States National Museum, for continuation of monographic studies on recent and fossil bryozoa .....	150
C. W. Gilmore, United States National Museum, for continued work on a monographic study of the fossil lizards of North America.....	300

##### *Joseph Henry Fund*

Carl T. Compton, Palmer Physical Laboratory, Princeton, N. J., for researches on the electric moments of molecules.....	1,000
H. J. Muller, University of Texas, for the purchase of a microscope designed especially for selective illumination of given cells or portions of cells by means of visible or ultra-violet light for use in studies in cytology, embryology and genetics.....	250
Aleš Hrdlička, United States National Museum, for support of investigations relating to the origin and antiquity of man on the American and Asiatic continents.....	500