in form and bearing, amid old and crumbling temple walls, with a background of palms and other tropical plants and wonderfully terraced rice fields, make this island a paradise for artists and all who love the beautiful."

Dr. Schreiner has supervision of extensive field tests with fertilizers in various soils of this country and is making a special study of agricultural conditions and fertilizing practices in the growing of tropical crops such as tea, coffee, rubber and sugar-cane, with a view to applying his information to the soils of the southern United States.

THE PHILIPPINE RESEARCH INSTITUTE

SYSTEMATIC scientific research in the Far East is planned by the organization of the Philippine Research Institute. L. O. Colbert, director of coast surveys of the Philippine Islands, has been elected director and treasurer of the institute. The director of the Coast and Geodetic Survey, R. S. Patton, in a statement made to the *U. S. Daily,* said that the new organization is not connected with the Philippine government but will have the cooperation of the insular administration.

"The institute's stated purposes," Captain Patton said, "are four-fold. First, it is designed to provide a center for pure research in the natural sciences in the Far East. Second, it is to carry on scientific investigations and experiments in the fields of biology, chemistry, physics, mathematics and other natural sciences. This will be with a view to aiding applied science in the alleviation of disease and in assisting in economic and industrial development of the Philippines, through research in pure science. Third, it is proposed, through advances in pure science, to stimulate interest along more practical lines in economic and industrial development in the Far East. Fourth, it is proposed through this organization to advance the training of Filipino scientists in experimental methods and to create more wide-spread interest in the fundamental scientific problems of the Philippine Islands.

"The institute has been promised the assistance of the government in the use of certain facilities.

"It is understood that funds will become available shortly from expected donations. These are to be used for the establishment of fellowships for pure scientific research along lines to be laid down by the directors of the new organization.

"The institute will seek money primarily for the encouragement of research in pure science. It will, however, handle funds for the encouragement of any investigation which might be desired by the donors of funds.

"With the establishment of a definite institution for the encouragement of scientific research and for the handling of funds for this purpose, it is hoped that more systematic and greater efforts along research lines may be developed. It is hoped, moreover, that the Filipinos may be given more incentive along research lines than is at present possible with the limited funds available for government institutions."

THE BERMUDA OCEANOGRAPHIC EXPEDITION

THIS expedition is the twelfth of the department of tropical research of the New York Zoological Society, and has been in the field for four months. It will remain until November 1. The director is Dr. William Beebe and the headquarters are on Nonsuch Island, Bermuda. The objects are two-fold: to make as thorough as possible a résumé of the shore fishes of Bermuda with notes on their life histories, and to study the deep-sea life of a definite, few cubic miles of open ocean. Success in both these fields has been so pronounced that it has been decided to continue the work through another year.

A sea-going tug, the smaller winch of the *Arcturus* and two and a half miles of quarter-inch cable are used in the deep-sea work. In this oceanographic phase of the expedition, three hundred and fifty net hauls have been made up to July 31. These have been confined to an eight-mile radius, five miles south of Nonsuch, and from the surface to fourteen hundred fathoms. This has yielded an astonishing harvest of abyssmal life. About two hundred species of true deep-sea and pelagic fish have been taken, representing 13 orders and 52 families.

Although separated by only five to eight miles of water, the trenchant differences between Bermuda shore fish and those from the ocean depths are far beyond expectation. One phase of this may be illustrated by the relative number of genera in six orders:

	Deep-sea genera	Shore-fish genera
Isospondyli	30	6
Iniomi	11	2
Pediculati	16	2
Percomorphi	5	62
Jugulares	2	10
Plectognathi	2	12

Checked records have been made with a newly designed pressure gauge down to 1,600 pounds to the square inch, and living specimens have been taken in