in both pursuits. The students of natural sciences could be here enrolled in their several classes, and instructed in the graphic arts as demanded by their own special needs. And individuals of graphic talent, those intending to follow the illustration of scientific subjects as a lifework, could be here instructed in a manner calculated to amply fit them for the graphic execution of any subject in any branch of scientific investigation. least two courses, experimental and didactic, would be attended by both sections of workers, viz.: reproductive methods. that is, the various processes by which a drawing or painting is published, and a systematized explanation of that ideal relationship which must exist between scientist and artist to insure the best results. The mere mention of these two courses calls up to mind a generous number of subjects embraced by them, each one of which, if anything like justice were done it, would require more time than is allowed to any single period of discussion. But, and I have no doubt at all as to the truth of this assertion, every one, be his help great or small, who assists towards raising the institution from the suggested to the realized will have done every form of scientific work a great service.

In closing this effort towards bringing art and science into closer, more effective affiliation, I could hardly find a higher sentiment, or an example of nobler support of this cause, than that expressed in a recent personal communication from Mr. Max Brödel, the most capable of all the artists engaged in illustrating American science to-day. They run as follows:

The only course on the subject of medical illustration is given by myself, and is limited to a few individuals. I don't wish to leave this world without having done some good, and I believe I can help the beginner in the study of medical illustrations to avoid a great many pitfalls and

disappointments. There is not a penny in it for me, but I do it because I think it is my duty towards the medical profession.

A. W. LEE

University of California

THE MARINE BIOLOGICAL STATION OF ROSCOFF. ANNEX OF THE UNI-VERSITY OF PARIS

A CIRCULAR received some time ago from Professor Delage concerning the Marine Laboratory at Roscoff, seems worthy of reproduction in Science in order that the advantages of the station may be brought to the attention of American students who may be intending to pursue zoological studies abroad.

J. PLAYFAIR McMurrich

Founded in 1872 by H. de Lacaze-Duthiers, this station had at its beginning only a rudimentary equipment. But the judicious selection of its site was a certain guarantee of its ultimate development, for in its immediate neighborhood all varieties of sea bottom are to be found, with the fauna and flora characteristic of each; indeed, there are few points, either in France or abroad, that can compare with it in the richness and variety of their fauna. In addition the tides are very high (almost 10 meters) and expose a large extent of shore, so that the collection of quantities of material is very easy.

The progress of the station has been continuous and to-day it is a vast establishment whose buildings cover the extent of a demi-hectare and comprise a large aquarium with 300 square meters of floor-space and containing 20 aquaria and 2 large basins, all supplied with a constant circulation of sea water; an aquarium of nearly 1,000 square meters of surface and 4 meters in depth, supplied by the tide; elevated tanks of 180,000 liters capacity for the supply of the large aquaria and the smaller ones in the work-rooms; 22 work-rooms for students carrying on original researches: a museum containing examples of all the animal forms of the region, identified by specialists: a large hall for students, in which two courses of lectures and laboratory work, each consisting of thirty sessions, are conducted; a library; a physical laboratory; a chemical laboratory; two photographic rooms; an engine room; a workshop: and twenty living rooms for investigators who may find it necessary to live in close proximity to their work.

The equipment also includes several small sail-

boats and a motor boat of eighteen tons, in which excursions may be made as far as the English coast.

The number of workers in attendance at the station, which in former years has varied between thirty and forty, has doubled, and it has been found necessary to make considerable enlargements in order to accommodate all those who request the hospitality of the station.

The aquarium and the old work-rooms have been pulled down and reconstructed on better plans, and 24 new rooms have been added, all lighted by large windows and supplied with all the scientific equipment which modern technique demands. These rooms are intended as private laboratories and are placed at the disposal of students from abroad at an annual rental of 1,500 frs., payable to the faculty of sciences of the University of Paris. This charge is notably less than that made by the Zoological Station at It must be understood, however, that Naples. the Roscoff Station makes no pretensions of duplicating that at Naples. Situated as it is on the shore of a tidal sea, whose fauna is quite different from that of the Mediterranean, it is, on the contrary, a natural complement to the more southern station.

THE BOGOSLOF ISLANDS

The following notes have been received from the North American Commercial Company, of San Francisco, under date of June 30, 1908:

Our Dutch Harbor log contains the following: "Wednesday, June 17th, 1908: The Rush passed here for Unalaska at three P.M. from the Seal Islands. Captain Munger returned on the Rush. He went up to the islands on the McCullock. On the way down the Rush had intended doing a little surveying around Bogoslov, but the navigating officer could not find the islands." The company's letter of the 17th instant from St. Paul Island says: "The McCullock, returning from Bogoslov, reports the disappearance of McCullock and Perry peaks. A reef adjoining Castle Rock now forms a small bay. We are not in possession of all the facts."

It will be remembered that the Bogoslofs are a group of three small volcanic islands in the southern part of Bering Sea and thirty-seven miles northwest of the island of Unalaska. One of these islands, Castle Rock, has been known since 1796, Fire Island has

been known since 1883, while the third one, Perry Island, rose from the sea about the time of the San Francisco earthquake in 1906.

There is a brief account and photographs of these islands published by Dr. Jordan and Mr. G. A. Clark in the *Popular Science Monthly* for December, 1906, pp. 481-489.

J. C. Branner

STANFORD UNIVERSITY, CAL., September 17, 1908

SCIENTIFIC NOTES AND NEWS

THE Academy of Sciences at Turin has awarded its Riberi prize of the value of \$4,000 to Professor Bosio, of Turin, for his discoveries in relation to the biological reactions to arsenic, tellurium and selenium.

SIR JAMES DEWAR, Fullerian professor of chemistry at the Royal Institution, London, and Professor O. D. Chvolson, professor of mathematical physics at St. Petersburg, have been elected foreign members of the Belgian Academy of Sciences.

MR. WILBUR WRIGHT, as has been fully reported in the daily press, has made with his aeroplane at Le Mans a flight lasting one hour, thirty-one minutes and thirty-five seconds and covering 66.6 kilometers. He has also made a flight with a passenger lasting 55 minutes and 30 seconds and covering 58 kilometers.

Dr. LUTHUR H. GULICK has resigned the directorship of physical training in the New York public schools to become secretary of the Physical Training Department of the National Young Men's Christian Association.

Dr. S. Tscherny, of Kiev, has been appointed director of the university observatory in Warsaw.

Mr. Robert Nelson has been appointed to the newly created post of electrical inspector of mines in Great Britain.

Professor L. H. Bailey has been given leave of absence from the directorship of the College of Agriculture of Cornell University to devote his time to the chairmanship of the commission appointed by President Roosevelt to investigate the conditions of rural life. He expects to be at Ithaca during the present month and in Washington during November