of which Dr. Schmidt established the facts of the life history of the Atlantic eels. There can be no doubt, however, that the voyage of 65,000 sea miles, from Copenhagen across the Atlantic, through the Panama Canal, to Tahiti, New Zealand and Australia, thence to the Dutch East Indies and China, across the Indian Ocean to East Africa, round the Cape and thence through the Straits of Gibraltar into the Mediterranean—where Dr. Schmidt was determined to check, by means of his most up-to-date apparatus, the findings of previous expeditions conducted by him in that sea—and finally back to her home port, will prove to have furnished contributions of the utmost importance in the science of the oceans.

THE SOLAR ECLIPSE EXPEDITION OF THE U. S. NAVAL OBSERVATORY

FURTHER details in regard to the expedition to observe the total eclipse of the sun on October 21 by the U. S. Naval Observatory have been given out by the Navy Department. The sun will enter the shadow at 9 o'clock in the morning, and be totally obscured for ninety-three seconds.

The expedition will leave Washington on July 19 and will sail from San Francisco on July 31 on the steamer *Sierra,* arriving at Tutuila, Samoa, on August 13. The following investigators will comprise the party:

Commander C. H. J. Keppler, in administrative charge; Commander Keppler headed the Navy's expedition which observed the solar eclipse of May 9, 1929, from the vicinity of Iloilo, Philippine Islands.

Lieutenant H. C. Kellers, Naval Medical Corps, who was a member of the naval eclipse expedition at Sumatra in 1926 and also of the 1929 expedition. Lieutenant Kellers will be medical officer and in charge of meteorological observations, and, at the request of the Smithsonian Institution, he will collect specimens of the island fauna and flora.

Professor S. A. Mitchell, director of the Leander McCormick Observatory at the University of Virginia, who will conduct spectrographic work.

Kempton Adams, assistant to Professor Mitchell.

Professor Ross W. Marriott, Swarthmore College astronomer, who will carry out coronal photography with a 63-foot camera and make observations to test the Einstein theory.

Dr. Weld Arnold, of the American Geographical Society, assistant to Professor Marriott.

J. J. Johnson, of the California Institute of Technology, who will make photometric observations.

B. P. Sharpless, junior astronomer at the Naval Observatory, who will do coronal photography with a 15-foot camera and other smaller ones.

Dr. T. A. Jaggar, Jr., of the Volcanic Observatory at Hawaii, who will study volcanic and seismic conditions on Niuafou Island.

In addition to this scientific personnel eleven enlisted men of the Navy and Marine Corps will go to assist in construction work and in taking observations. These men, selected from the personnel of the battle fleet, sailed from the Mare Island Navy Yard aboard the mine sweeper *Tanager* on June 25 and will arrive at Samoa about August 9. The enlisted personnel includes a rigger, an optical repair and instrument man, a carpenter to construct large cameras, an expert photographer, two general assistants, two radio operators, two cooks and an interpreter.

About 115 boxes and cases of scientific instruments and equipment have been shipped to Tutuila, besides camp equipage and food supplies sufficient for twenty men for sixty days, and about 8,000 board feet of lumber for the construction of various cameras. The largest of these cameras will have a focal length of sixty-five feet and include a photographic developing room.

Niuafou is a very small volcanic island about 300 miles west southwest of Tutuila. Primitive conditions prevail and only two white men and 1,100 natives live there.

About thirty craters are on the island. Many of them have recently been active, and a major eruption occurred in June, 1929, which destroyed one of the two villages. There are no good anchorages and only one precarious landing place.

THE LIFE SCIENCES BUILDING OF THE UNIVERSITY OF CALIFORNIA

THE work of moving thirteen departments from eleven wood-frame buildings into the new fireproof and earthquake proof Life Sciences Building at the University of California is practically completed. This building was the first to be built on the Berkeley campus under the provisions of the state bond issue of 1926, and cost $2,000,000.

The Life Sciences Building, said to be the largest academic building in America, is five stories in height, has a floor area of 321,000 square feet and provides 60 per cent. more space than the eleven buildings which it replaces, combined.

Among the old buildings which the completion and occupation of the Life Sciences Building will leave empty, are: Agricultural Chemistry, erected in 1908; Anatomy, erected originally as shops for the department of mining; Botany, erected in 1898; Budd Hall of Biochemistry, erected in 1896; California Museum of Vertebrate Zoology, a temporary structure of wood and corrugated iron which has been in service for twenty-one years; East Hall or Zoology Building, erected in 1898; Home Economics, a wooden building erected in 1916; Hygiene and Pathology, erected in 1913; Psychology Building, erected in 1898; Spreckels Physiology Laboratory, erected in 1903.