could never be made suitable for the purposes of the bureau. The delicate physical apparatus is constantly affected by vibrations from the heavy printing presses. At least twenty-five rooms in the main building are so dark that it is impossible to work in them without the aid of artificial light. In the darkest of these rooms forty-five persons are working from 9 in the morning until 4:30 in the afternoon by the help of electric light. Unless they are soon provided with better-lighted rooms their vision will be permanently impaired and their capacity for work correspondingly decreased.

Not the least important reason for housing the survey in a modern, fire-proof building of its own is the consideration that government property and records valued at approximately \$6,000,000 are in constant danger of loss by fire. Recently, over \$10,000 worth of property was destroyed in twenty minutes by a fire in the photographic laboratory on the top floor of the main building. The buildings contain over 100,000 square feet of varnished and inflammable wooden partitions, along which fire could spread with great rapidity. Many of the records thus flimsily sheltered could not be replaced at any price.

What the survey needs is a strong, fire-proof, well-lighted building containing a net available space of at least 150,000 square feet, exclusive of basement and halls. Such a building would cost about \$1,200,000. The annual rent paid on the buildings now occupied is \$34,900, which is nearly three per cent. on \$1,200,000.

A bill for such a structure as is required was introduced in the senate by Mr. Frank P. Flint, of California, on March 21 and in the house of representatives by Mr. James S. Sherman, of New York, on March 26.

UNIVERSITY OF THE PACIFIC AND THE EARTHQUAKE.

THE University of the Pacific, San Jose, California, the oldest institution of higher learning on the Pacific coast, was damaged to the extent of about \$60,000, net, during the recent earthquake. East Hall, a large four-story brick building, the only building on the

campus seriously damaged, will be lowered to two stories. The fourteen rooms on the ground floor are occupied by laboratories. Two thousand dollars had just been put into additional equipment; but the entire loss of apparatus, chemicals, etc., will not amount to more than \$500. The Monday following the earthquake the laboratories were running as usual, as were the other departments of the university. The other buildings on the campus were not damaged except in the loss of plaster. The executive committee has decided to erect a two-story 'earthquake-proof' building to take the place of the upper half of East Hall. The Jacks-Goodall observatory on the southwest corner of the campus was not injured. Seven buildings owned by the university in San Francisco were entirely lost; but they will be rebuilt at once. The residence of President McClish was destroyed, but it will be rebuilt. Among the professors, the residences of Dr. Hatzell and Dr. Sawyer were the only ones damaged, and those but slightly. No lives were lost, but two students were injured by falling bricks.

NEW YORK OBSERVATORY AND NAUTICAL MUSEUM.

PRELIMINARY plans have just been formulated for the organization of a great marine museum for the city of New York. It is expected that this will mean to the navigator what the Metropolitan Museum means to the lover of art and the American Museum to the student of natural history. The new institution will take its place as one of the three great museums of the city of New York, and in it one can study the tides, navigation and marine instruments at first hand.

As the science of navigation is based on astronomy, it will be necessary to have an astronomical observatory as an adjunct to it. The capitals of Europe, London, Paris and Berlin, each has its magnificent observatory; and in the United States the cities of Washington, Boston, Chicago, San Francisco and Pittsburg, have their big telescopes and finely equipped observatories. The commercial capital of the United States, the second largest city in the