

approach of an earthquake 'storm', and thus may come nearer to forecasting quakes - something which is now impossible.

"With a view to making a local survey, the Carnegie Institution is establishing four stations in Southern California, located at Pasadena, Riverside, La Jolla and, probably, Catalina Island. The range of each station for microtremors is about 50 miles, and of course longer for heavier shocks. The four stations will therefore cover the whole of the coastal region of Southern California, and from their records we shall obtain a good knowledge of the distribution of earthquake activity. One of the instruments at Pasadena recorded 200 microtremors in its first twelve months of experimental operation.

"The example of the Carnegie Institution led to an active campaign for the installation of modern seismometers around San Francisco Bay, and funds have been raised by business men and corporations of the cities on the bay for that purpose. The central station will be located at Berkeley, at the University of California, which will also run a subsidiary station at the Lick Observatory on Mt. Hamilton. Stanford University will take care of a third, and the California Academy of Science in Golden Gate Park, of a fourth. The cost of these instruments, including the necessary earthquake-proof shelter, full equipment of seismometers and time recording apparatus, amounts to \$22,000. Their maintenance and the study of their records is assumed by the three institutions named.

"It is anticipated that we shall thus learn what the present earthquake activity is, and that we shall be able to locate it and to follow its variation as it increases toward the next severe shock.

"The installation of similar groups of instruments, not only in other parts of California, but around Boston, New York, St. Louis, New Orleans, and other great centers of population and property, is one of the things to which business men should give serious consideration, and toward which their contributions would constitute an investment in security."

WHO OWNS AMERICA'S PREHISTORIC REMAINS?

The Indians who roamed about prehistoric North America, carelessly crossing the boundary of one "state" of the future United States and going on into another "state" were making trouble for antiquarians of today, according to Neil M. Judd, curator of American archeology, of the National Museum.

Speaking at a meeting of anthropologists of the National Research Council, Mr. Judd reported that as a result of the wanderings of aboriginal tribes an archeologist who is studying the ruins of Indian settlements and the relics of pre-columbian Indian civilizations often has to follow the trail from one locality to another. But crossing state borders is harder for the archeologist of today than it was for the Indian of prehistoric times, because of a growing disposition in some sections of the country to restrict archeological research to resident tax payers.

"There is one state which prohibits investigation of archeological sites by non-residents and forbids sale of local antiquities outside of that state," said Mr. Judd.

In that particular commonwealth commercial pot hunting has increased since passage of the law. Two other states have laws designed to prevent vandalism of prehistoric remains, but these laws may be utilized to prevent the researches of non-residents. Six other states have considered or are now considering similar legal restrictions.

"In most instances these laws were introduced with the idea that they would put a stop to irresponsible digging by untrained individuals. What the laws will actually do is prevent serious investigation by all competent students who happen to live outside the state borders, and encourage ~~promiscuous~~ relic hunting by local curio dealers and others seeking personal gain.

"Unless a nationalistic spirit is maintained it is quite possible that archeological research throughout a considerable portion of the United States will eventually be so circumscribed that established museums and educational institutions of international prestige can no longer engage in constructive field investigations."

Mr. Judd pointed out that the real object of American archeologists is to acquire all possible data concerning different groups of America's prehistoric population, so that the unwritten history of those groups may be better understood and recorded. This can only be done by careful observation at old ruins and dwelling sites and by painstaking study of pottery and other articles just as they are found in rubbish sites, abandoned rooms or burial grounds.

"This research is necessary if we are to understand the part these early tribes played in the history of America and of the human race, and it is work for specialists," said Mr. Judd. "Generally speaking, the prehistoric artifact exhumed by unskilled hands and thus separated from data perhaps equal in importance to the specimen itself must always remain a mere curiosity. Every mound, every ancient ruin or shell heap has its own peculiar problems. They must be worked out there, on the ground, and only a man trained in seeing under the surface of things can work them out.

"Prehistoric Indians had no thought of our present state boundaries, and it is both unethical and unscientific for residents of one state to say that those who chance to dwell in another may not cross their state borders in pursuit of data pertaining to migratory aboriginal peoples," Mr. Judd added.

"NEW STAR" IS IN DISTANT UNIVERSE

Flashing out from previous invisibility to the thirteenth magnitude, bright enough to be seen with a large telescope, a nova or "new star" in a spiral nebula has been discovered at the Heidelberg Observatory in Germany by Prof. Max Wolf, the director of the observatory, and his associate, Dr. K. Reinmuth. Word of this discovery has just been received by the Harvard College Observatory from Prof. Elis Stromgren, director of the Central Astronomical Bureau at Copenhagen, Denmark.

The spiral nebula in which the nova has appeared has no name, but is known as Messier 61 after its number in Messier's catalog of nebulae and star clusters. It is also known as N. G. C. 4303 after its number in the New General Catalog of such