

and 1878-83, with the minima about the years 1825-30, 1860 and 1893-5. A continuation of the curves, based on the assumption that the apparent law already recognized holds good, indicates that the year 1913 will be at about the middle of the next wet epoch. The sunspot curve shows a close correspondence with the rainfall curves. There appears to be a long-period solar change of thirty-five years, the minimum of sunspots corresponding roughly with the maximum of rainfall. Dr. Lockyer concludes that 'since this long-period rainfall cycle synchronizes so well with the solar changes, the latter may render valuable assistance in determining the epochs of these dry and wet cycles.'

R. DEC. WARD.

HARVARD UNIVERSITY.

OPENING OF THE LAKE LABORATORY OF THE OHIO STATE UNIVERSITY.

ON the afternoon of July 2, the new Lake Laboratory building of the Ohio State University, located on Cedar Point, Sandusky, Ohio, was formally opened. Several scientists from the various institutions of the State were present at the exercises, while many of those unable to be present responded with letters of congratulations and well-wishes. The director, Professor Herbert Osborn, opened the session by reading extracts from these letters, after which the first speaker of the day, Professor C. J. Herrick, of Denison University was introduced. Professor Herrick spoke on the Summer Laboratory as an instrument of scientific research. He took the stand that such institutions fulfil their functions not merely by giving investigators facilities and materials for research, but particularly in the culture of the investigators themselves. Exchange of ideas and consequent broadening of view is an important point in the consideration of the value of summer laboratories. The speaker expressed a hope that the several scientific institutions of the state would cooperate with the State University in making the laboratory an institution of the highest usefulness and gave assurance that such would be the policy of the colleges and universities of Ohio.

Hon. J. T. Mack, of Sandusky, a member of the Board of Trustees and representing that body, outlined the policy of the university with respect to the laboratory and emphasized the fact that it is a laboratory for the use of the scientific men of the state, regardless of their affiliations.

Captain Alexis Cope, secretary of the university, gave a detailed history of the laboratory as shown by the archives of the university. The idea of such an institution originated with the late Dr. Kellicott, in 1894. During the succeeding year, appropriations were made for an addition to the State Fish Commission building in Sandusky, the whole of which could be used during the summers as a lake laboratory. In 1899 the present director, Professor Osborn, made a request to the board for a more commodious building and recommended that it be erected on Cedar Point which is a tongue of sand twelve miles long and a few hundred feet wide at most. This was favorably received and the present building is the outcome.

Professor Denny, dean of the College of Arts of the University followed this speaker with the theme 'Comradeship in Science.' Men of science should associate with one another, as by so doing they become inspired to greater efforts and disappointments are belittled as they see how others meet and overcome difficulties. The dean said that the laboratory was a part of the university and that full credit would be given toward degrees for work done.

The director, Professor Osborn, concluded the program by thanking the friends of the institution and those that have acted as its promoters. The professor gave briefly a history of summer laboratories, tracing their origin to Penckese and Agassiz. He said that a new life is put in biological work by the founding of such institutions in that live material and natural environment is had in easy access. The director reiterated the desire expressed by another speaker that the laboratory would become, as its expressed purpose is, an open meeting ground for all biological workers of Ohio and adjacent states.