

12-inch equatorials. Some of the Professors are usually present, and no pains are spared by them to make these visits pleasant and profitable. Lectures are given by the astronomers at different times and places, and all specially interesting observations and discoveries are described in the magazines and the daily press. In these and other ways the observatory is made directly useful to the public, and it is an important factor in the intellectual advancement of the nation.

It is impossible to describe in detail the scientific work which has been and is being carried on. Much of it is of a technical nature and uninteresting to the general public. It may be said in a general way that ten new comets, a great number of double stars, and Jupiter's fifth satellite were discovered here. The photographs of solar eclipses have put a new face on the constitution of the solar corona, and the photographs of sunspots awaken the most intense interest. The photographs of the moon's surface, taken at short intervals during its entire age, are the most interesting and satisfactory that have ever been taken. By enlarging the photographs the mountains and their shadows, with the tremendous



THE LICK OBSERVATORY.

craters that scar the surface, can be seen with great detail, and the heights of the mountains can be determined with nicety. With the great Lick Telescope any object upon the moon 200 feet high can be seen.

The altitude of the various points along the road between San Jose and the Observatory is as follows:

Broad gauge depot at San Jose, 88.7 feet; Junction House, 399 feet; Grand View House, 1,500 feet; summit between Hall's Valley and Grand View, 1,838 feet; Hall's Valley, 1,543.5 feet; Smith's Creek Hotel, 2,146.2 feet; marble floor of the Lick Observatory, 4,209.46 feet; top of the cover of the Kepler reservoir, 4,246.20 feet.



36-INCH EQUATORIAL, LICK OBSERVATORY.

STANFORD UNIVERSITY.

The most richly endowed institution of learning in the world is Leland Stanford Jr. University, founded by the late Senator Leland