

A BRIEF ACCOUNT OF THE OBSERVATORY AT
THAMES, N. Z.

(Long., $11^{\text{h}} 42^{\text{m}} 10^{\text{s}}.57$; Lat., S. $37^{\circ} 8' 23.''21$.)

BY J GRIGG.

This observatory was erected in 1884, and contains a $3\frac{1}{4}$ -inch refractor, by WRAY, equatorially mounted, a $1\frac{1}{4}$ -inch transit, by LATIMER CLARK, with mean-time and sidereal clocks; also a few subsidiary instruments.

The observations hitherto made include transits, eclipses, occultations, sun-spots, comets, and nebulæ. Photographic records were also made for a few years, but afterwards discontinued as regular work.

Since 1886, every comet visible has been observed, its path recorded, and its orbit investigated.

Since 1894, systematic search has been made for new comets, by sweeping the southwest sky, and the position of every nebulous object met with recorded.

In the latter part of 1894, ENCKE'S comet being visible to northern observers, a search ephemeris was prepared for its southern path, by which it was found on February 24 and 25, 1895, its position agreeing very closely with that given in *Observatory*, No. 228, which came to hand two months later. So far as the writer knows, these were the only post-perihelion observations made. An ephemeris was afterwards prepared for searching for it on its return in 1898, by which it was found on June 16th, 18^h G. M. T. The information was posted to Sydney, and proved to be the earliest recorded by several days. This was afterwards acknowledged in the *Publications* of the Astronomical Society of the Pacific and the Royal Astronomical Society.

The only new comets hitherto discovered here have been 1902 *c* and 1903 *b*.

The observatory is not yet provided with charts and catalogues of the smaller telescopic stars; hence micrometric measurements can very rarely be made, as the tube of the telescope has to be shifted to the nearest known star for comparison; but it is estimated that, except near the horizon, the apparent

position can generally be ascertained within about two minutes of arc.

November, 1903.

PLANETARY PHENOMENA FOR MARCH AND
APRIL, 1904.

BY MALCOLM McNEILL.

PHASES OF THE MOON, PACIFIC TIME.

Full Moon, March 1, 6 ^h 48 ^m P.M.	Last Quarter, April 7, 9 ^h 53 ^m A.M.
Last Quarter, " 8, 5 1 P.M.	New Moon, " 15, 1 53 P.M.
New Moon, " 16, 9 39 P.M.	First Quarter, " 22, 8 55 P.M.
First Quarter, " 24, 1 36 P.M.	Full Moon, " 29, 2 36 P.M.
Full Moon, " 31, 4 44 A.M.	

On the evening of March 22d the first-magnitude star *a Tauri* will be occulted by the Moon. The occultation will be visible from most parts of the United States, but the exact times vary so that the time for one place does not give much aid in estimating the times for other places. Another occultation of the same star will occur on April 18th, but it can probably not be seen from any part of the country except possibly the extreme west.

There will be an annular eclipse of the Sun on March 16th. The path of the annulus runs from eastern Africa, through the Indian Ocean, Siam, and ends in the Pacific. This is one of the two eclipses of the year. The other will come on September 9th, and will be total solar.

The Sun passes the vernal equinox and spring begins March 20, 5 P.M., Pacific time.

Mercury is a morning star at the beginning of March, but is too near the Sun for naked-eye observation, rising only about forty minutes before sunrise. It rapidly approaches the Sun, passing superior conjunction and becoming an evening star on the afternoon of March 26th. After that it rapidly increases its distance from the Sun until it reaches greatest east elongation, 20° 12', on the afternoon of April 21st. It then remains above the horizon for an hour and three quarters after sunset, and may be easily seen in the evening twilight. At the end of April it sets about an hour and a half after sunset. The