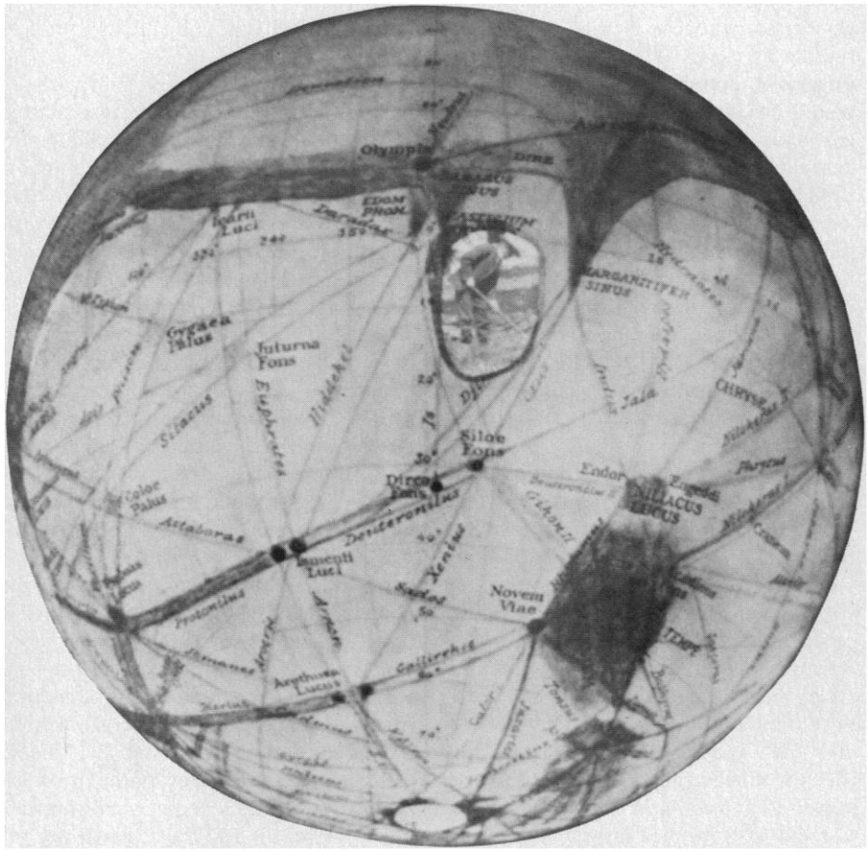
Book Reviews

A Fancier of Mars

Lowell and Mars. WILLIAM GRAVES HOYT. University of Arizona Press, Tucson, 1976. xvi, 376 pp., illus. Cloth, $13.95; paper, $8.50.

This timely book deals with the life of a Boston brahmin, Percival Lowell, born in 1855, who received a partly scientific education at Harvard, made his pile in business, traveled in the Orient and learned several oriental languages, got hooked on astronomy at the age of 38, and founded the observatory which bears his name at Flagstaff in what was then the Arizona territory. When he married, late in life, he took his bride on a balloon trip over London. His overriding preoccupation was with Mars and its canals, which he claimed not only to see but to have had photographed, and he went on to assert that the canals were the vegetation traces alongside artificial waterways constructed by intelligent beings to counteract the progressive desiccation of an aging planet. Some of his inferences, for example, the Mars-wide cooperative capacities of the inhabitants, were extremely far out, and contrasted markedly with his own political conservatism in terrestrial matters. All this provoked what Hoyt calls with somewhat excessive frequency a "furor," with an interminable public debate with violently opposed partisans like W. W. Campbell of Lick Observatory and apostates like W. H. Pickering of Harvard and A. E. Douglass, who later gained fame as the initiator of dendrochronology. Most of the Lowell Observatory's public exposure in its founder's lifetime was as a proselytizing institution staffed by disciples, and Lowell himself was a PR man and publicity hound of no mean order.



Percival Lowell gardening on Mars. The chart, one of Lowell's with his photograph pasted on it, was given to him as a birthday gift by his staff in 1905. [From *Lowell and Mars*]

The book, based as it is on the Lowell Observatory archives, smacks a little too much of a cult of personality. What is brought out, however, and might have been emphasized even more, was that Lowell was only "mad nor'nor'west" and made extremely valuable contributions to astronomy which have been the foundation of the high reputation of his observatory. Divested of their nutty overtones his observations of Mars were fundamental and comprehensive. He pioneered the modern art of site testing, with some attention to southern hemisphere sites. His assistant Carl Lampland devised modern techniques of planetary photography. Another assistant, the celebrated V. M. Slipher, made invaluable advances in stellar spectroscopy and founded the science of extragalactic red-shift determination. Finally, in his last years, Lowell, after recovering from a nervous breakdown, initiated the search which, whether by accident or by design, led to the discovery in 1930, 14 years after his death, of the planet Pluto by Clyde Tombaugh at Lowell. The planet appropriately has a name which starts with Lowell's initials. Many another eminent and successful scientist—Eddington with his numerology of the physical constants, Piazzi Smyth with his preoccupation with the Great Pyramid—has had an odd streak to mar his achievements, but Lowell came within an ace of destroying his reputation by his particular "King Charles' head." Even worse, he for a time harbored that arch paranoiac of astronomy T. J. J. See. For some of these unexpected sidelights on how astronomy sometimes gets done, read this excellently got up book.

The book might have been somewhat condensed to advantage, and there are several blemishes that caught this reviewer's attention: a misleading statement about Bode's law on p. 264; substitution of 142 angstroms for 0.42 on p. 140; a confusion between Robert John Strutt, who would succeed as fourth Baron Rayleigh, and his father on p. 185; and some oddities like "Ferdinand de Lessups" and "A. A. Commons." These are not sufficient to detract significantly from the general interest of this biography of one of the most colorful figures in American astronomy.

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