Magnitudes of the stars, 416. Major planets defined, 238. Mars, its surface, 836. Mars, physical description, 334. Mars, rotation, 836, Mars's sateliltes discovered by HALL (1877), 888. Marius's claim to discovery of Jupiter's satellites, 848. MASKELYNE determines the density of the earth, 192. Mass and density of the sun and planets, 277. Mass of the sun in relation to masses of planets, 227. Masses of the planets, 232. MAXWELL's theory of constitution of Saturn's rings, 860. MAYER (C.) first observes double stars (1778), 452. Mean solar time defined, 28. Measurement of a degree on the earth's surface, 201. Mercury's atmosphere, 814. Mercury, its apparent motions, 810. Mercury, its aspects and rotation, 318. Meridian (celestial) defined, 21, 25. Meridian circle, 83. Meridian line defined, 25. Meridians (terrestrial) defined, 21. Messuer's catalogues of nebulæ, 457. Metonic cycle, 251. Meteoric showers, 890. Meteoric showers, orbits, 383. Meteors and comets, their relation, 883. Meteors first visible about 100 miles above the surface of the earth, 380. Meteors, general account, 875. Meteors, their cause, 377. Metric equivalents, 8. Neptune, discovery of by LE VER-MICHAELSON determines the ve locity of light (1879), 222.

MICHELL's researches on distribution of stars (1777), 449. Micrometer (filar), description and use, 89. Milky way, 415. Milky way, its general shape according to HERSCHEL, 480. Minimum Visibile of telescopes (table), 419. Minor planets defined, 268. Minor planets, general account, 840. Mira Ceti (variable star), 440. Mohammedan calendar, 252. Months, different kinds, 249. Moon's atmosphere, 831. Moon craters, 329. Moon, general account, 326. Moon's light and heat, 881. Moon's light 1-618,000th of the sun's, 382. Moon's motions and attraction, 152. Moon's nodes, motion of, 159. Moon's perigec, motion of, 163. Moon's phases, 154. Moon's rotation, 164. Moon's secular acceleration, 146. Moon's surface, does it change, 332. Moon's surface, its character, 328. Motion of stars in the line of sight, 470. Mountains on the moon often 7000 metres high, 830. Nadir of an observer defined, 23. Nautical almanac described, 263. Nebulæ and clusters, how distributed, 465. Nebulæ and clusters in general, 457. Nebula of Orion, the first telescopic nebula discovered (1650), 457. Nebulæ, their spectra, 465. Nebular hypothesis stated, 497.

RIEB and ADAMS (1846), 867.