LL's rescarches on distrion of stars (1777), 449, neter (filar), description and 89.

way, 415.

way, its general shape acing to HERSCHEL, 480. um Visibile of telescopes

o), 419. planets defined, 268.

planets, general account,

eti (variable star), 440. medan calendar, 252. , different kinds, 249. atmosphere, 881. raters, 329.

general account, 326.

light and heat, 881.

light 1-618,000th of the

. 882. motions and attraction,

nodes, motion of, 159. perigee, motion of, 163.

phases, 154. rotation, 164.

secular acceleration, 146.

surface, does it change,

surface, its character, 328. of stars in the line of

470. ins on the moon often netres high, 830.

an observer defined, 23. almanac described, 263. and clusters, how distrib-465.

and clusters in general.

of Orion, the first telescopic discovered (1650), 457. their spectra, 465. hypothesis stated, 497. , discovery of by LE VER-and ADAMS (1846), 867.

Neptune, general account, 365. | Precession of the equinoxes, 206, Neptuno's astellite, elements, 309. New star of 1876 has apparently become a planetary nebula, 445. New stars, 443. NEWTON (I.) calculates orbit of comet of 1680, 406. NEWTON (I.) Laws of Force, 184. Newtonian (reflecting) telescope, 66. NEWTON'S (I.) investigation of comet orbits, 896. NEWTON'S (H. A.) researches on meteors, 386. NEWTON'S (H. A.) theory of constitution of comets, 894. Nucleus of a comet, 388. Nucleus of a solar spot, 287. Nutation, 211. Objectives (mathematical theory), 68. Objectives or object glasses, 54. Obliquity of the ecliptic, 106. Occultations of stars by the moon (or planets), 186. OLBERS's hypothesis of the origin of asteroids, 840, 342. OLBERS predicts the return of a meteorio shower, 381. Old style (in dates), 254. Opposition (of a planet to the sun) defined, 115. **Oppositions of Mars**, 885. Parallax of Mars, 290, 291. Parallax of the sun, 216. Penumbra of the earth's or moon's ahadow, 174. Photosphere of the sun, 279. PICARD publishes the Connaissance des Tems (1679), 268. Prime vertical of an observer de-PICKERING's measures of solar light, 288. Pianets, their relative size exhibited, 269.

POULLET's measures of solar radiation, 285.

209. PTOLEMY. determines the solar paraliax, 225. Parallax (annual) defined, 50. Parallax (equatorial horizontal) defined, 52. Parallax (horizontal) defined, 50. Parallax (in general) defined, 50. Parallel sphere defined, 26. Parallels of declination defined, 24. Parallax of the stars, general account, 476. PEINCE's theory of the constitution of Saturn's rings, 859. Pendulums of astronomical clocks, 71. Periodic comets, elements, 399. Perturbations defined, 144. Perturbations of comets by Jupiter, 408. Photometer defined, 417. PIAZZI discovers the first asteroid (1801), 840. Planetary nebulæ defined, 459. Planets ; seven bodies so called by the ancients, 98. Planets, their apparent and real motions. 113. Planets, their physical constitution, 870. Ploiades, map of, 425. Pleiades, these stars are physically connected, 449.

Polar distance of a star, 25. Poles of the celestial sphere defined, 14, 20, 24. Position angle defined, 90, 450. Power of telescopes, its limit, 828. Practical astronomy (defined), 2.

fined, 25. Problem of three bodies, 141. PROCTOR's map of distribution of

nebulæ and clusters, 466. PROCTOR's rotation period of Mars, 886

INDEX.

509