

after each hiding, it has shone out brighter than before.

Comparing ancient astronomy with modern, we find them substantially the same. Though the Egyptians did, more than once, see the sun rise in the west, the followers of Thales and Anixamander held many views in accordance with our present theories. The first systematic observations were made by the Alexandrian school, which was established by the Ptolemies. But the real written science begins when Hipparchus of Bithynia committed to paper his discovery of ten hundred and eighty-one (1081) stars, and the inclination of the earth's orbit. His successors—Ptolemy, Copernicus, Kepler, Tycho Brahe, Galileo, and a host of others—have left their records of observations and calculations.

Astrology is properly the term by which to designate the science as studied by the ancients. We have read that it was a sentiment rather than a science, for their vague notions and superstitions were the result of mere speculation rather than of earnest enquiry after truth. The Chinese, Hindoos, Chaldeans and Egyptians viewed the heavens and marked the stars as aids to them in their prophesyings, and the study was confined to their "wise men" or prophets. They considered the earth as an immovable body around which the sun revolved every day, being created to warm and lighten it, while the stars were designed for the sole purpose of teaching men their destinies. This belief was adhered to by the Romans, and before the Christian era Greece was the only nation which studied astronomy for its own sake. Then Pythagoras conceived the idea that the sun was a fixed body around which the earth travelled once in twenty-four hours, and that the morning and evening star were the same planet. Then, too, Nicetas of Syracuse learned the diurnal motion of the earth on its axis. But their teachings were scouted until Copernicus, dashing to the ground all adverse theories, declared the earth to be but a planet, and the sun the centre of the system. Then men began to study the "celestial spheres" with other thoughts of them than as mere oracles, with another object than to learn their own fate.

How wonderful that God-given power—the human mind. It studies the eye, it

studies light, it studies air. Then it designs, and, to a telescope. Now, it reaches the planets, explores them and discerns their motions, and now, rising, wanders among the fixed stars and tells their dominions. Wonderful indeed it is. What desires, aspirations, purposes it has! What will it not dare? What can it not do? Neither time, nor space, nor numbers appall it; it travels through past, ages, or searches into the future; it goes down into the depths and fathoms the mysterious, or soars above the clouds and measures the infinite; it contemplates system upon system, and counts the innumerable; it discovers the soil of Mars, the rings of Saturn, the moons of Jupiter, the atmosphere of Uranus; it tells the velocity of light, the distances of the constellations, the paths of countless millions; its successes would amaze those who drank most deeply of the streams which flowed from the fountains of wisdom on Mount Olympus; it told of seven planets in our system, and for some reason concluded there must be another. It, therefore, journeyed into the unexplored regions, and soon the exultant cry "Eureka!" was wafted to us from Neptune, twelve hundred and eighty millions of miles away. But this achievement did not satisfy. It only lent new impetus, for written upon the sign posts were those magic words, "*plus ultra*," and firmly grasping in its hand the "banner with the strange device," it waved it in the face of all obstacles, and laughing at impossibilities cried, "It shall be done." Gradually night changed to dawn, and dawn to the broad blaze of day, and day lent some faint glimmerings to the dense shades farther on. Higher and yet higher genius mounted on into the twilight until lost again in night, but still through the impenetrable darkness rings the watchword, "excelsior! excelsior!"

Science leads to God. Chemistry, geology and philosophy show us a measure of His wondrous wisdom whom the elements obey. But astronomy reveals Him in every letter, and "an undevout astronomer is mad." Who can deny the assertion? The vast assemblies of the glittering host unite in one glad chorus of praise to Him "who by wisdom made the heavens," and there is not an infidel on earth, did he listen to their teachings, who could doubt these great multitudes without a reproof, for they declare in tones