twinkle vividly. This magnificent globe is 87,000 miles in diameter, performing its journey round the sun in 11 years, and revolving on its axis in the amazingly brief period of about 10 hours. It is in bulk 1300 times larger than the earth, and has four moons or satellites. Through the first telescope invented Galileo beheld the moons of Jupiter, and since he was an astronomical enthusiast we can imagine the thrilling delight the wonderful spectacle afforded that eminent man, more especially as it presented an exquisite embodiment in miniature of that true theory of the solar system, of which he was the distinguished and solitary living advocate, and for the maintenance of which he was destined, though not to the extent of poor Bruno, to suffer persecution. The publication of the news created a profound sensation. It is interesting to note the emotions of Kepler on the occasion. "I was sitting," he says, in a letter to his friend Galileo, "idle at home, thinking of you, most excellent Galileo, and your letters, when the news was brought me of the discovery of four planets by the help of the double eye glass. Wachenfels stopped his carriage at the door to tell me, when such a fit of wonder seized me at a report which seemed so very absurd, and I was thrown into such agitation at seeing an old despute between us decided in this way, that between his joy, my colouring and the laughter of both, confounded as we were by such a novelty, we were hardly capable he of speaking or I of listening, so I immediately fell to thinking how there could be any addition to the number of planets without overturning my Mysterium Cosmographicum, published thirteen years ago, according to which Euclid's five regular solids do not allow more than six planets round the sun." This passage is exceedingly interesting as indicating the candour of Kepler—a very rare quality in those days—in at once renouncing a favourite theory on finding it virtually demolished by Galileo's discovery. As a contrast to the passage just quoted we are tempted to give a few sentences from a letter sent by Galileo to Kepler as placing in a ludicrous light the intense prejudice of the disciples of Aristotle in favour of all the theories of that philosopher. "Oh, my dear Kepler, how I wish we could have one hearty laugh together. Here at Padua is the principal professor of philosophy, whom I have repeatedly and urgently requested to look at the moon and planets through my glass, which he pertenaciously refuses to do. Why are you not here? What shouts of laughter we should have at this glorious folly! and to hear the professor of philosophy at Pisa labouring before the Grand Duke with logical arguments, as if with magical incantations to charm the new planets out of the sky."

Some years ago the writer inspected Jupiter through a teles ope of moderate power, when he appeared somewhat less than the full moon, his satellites appearing as small but distinctly visible stars—three on one side of their primary. and one on the other. Having occasion to be recently in Albany, the capital of the State of New York, we visited the Astronomical Observatory in that city, having had the pleasure of an introduction to the director of the institution through the courtesy of an American gentleman. The observatory is situated on an eminence near the city, commanding from its elevation an admirable prospect of the surrounding district. The night was remarkably clear and bracing, and in all respects favourable for a satisfactory view. The outer satellite of Jupiter was first exhibited, when it gently glided past larger and brighter than its primary as seen under the most favourable circumstances by the naked eye. The panoramic-like motion of the satellite was caused by the earth's diurnal motion, rendered peculiarly perceptible by the telescopic approximation of the object, and thus clearly proving that our insensibility to the earth's movements is entirely owing to the absence of any fixed object sufficiently near to make them strikingly sensible. For example, in travelling by railway with what speed do the telegraph posts pass us, but if the traveller fixes his gaze on a tree, exhibiting its beautiful proportions against the sky at the distant horizon, he will find it almost stationary. After the outer satellite had disappeared a few seconds elapsed ere the second came within sight, followed by the third before its predecessor had veiled its beauty. Then followed the fourth. Three of the