

all statements of its period of revolution, can be nothing more than the rudest kind of guessing, hardly rising to the dignity of a "barren idealism." Had it fallen into the sun, it is not probable that any one would have known it, or that the temperature of the earth would have been increased by the hundredth part of a degree Fahrenheit.

But the disposition to wonder at unusual events is no new thing under the sun. A long time ago Tacitus said "*Umme ignotum pro mirifico*," which may be freely translated: "The less you know about it the louder the racket you make." R. W. M.

The present Comet in the eastern sky, which can be distinctly seen by every one at early morning, is certainly the most remarkable one of all the modern comets. Prof. Lewis Swift, director of the Warner Observatory, Rochester, N. Y., states that the comet grazed the sun so closely as to cause great disturbance, so much so that it has divided into no less than eight separate parts, all of which can be distinctly seen by a good telescope. There is only one other instance on record where a comet has divided, that one being Biella's comet of 1846, which separated into two parts. Applications have been made on Mr. H. H. Warner by parties who have noted these cometary offshoots, claiming the \$200 prize for each one of them. Whether the great comet will continue to produce a brood of smaller comets remains to be seen.

A Washington dispatch says that the following spectroscopic observations of the great comet were made during the past two mornings at the naval observatory, by Commander Sampson. The spectroscope used was a five prism direct vision, one made by Brown and attached by suitable clamps to the comet-seeker, which has a four inch glass of about two feet eight inches focal length. The spectrum consisted of three bands—one, the brightest, was situated in the middle of the green, about corresponding to the small B lines, a second was in the orange yellow, and the third at the middle of the blue. The middle band was very bright and sharply defined on the least refrangible side, and faded gradually on the other side. No band sharply defined on both sides could be made out.

It will be remembered that the first telegraphic reports made the spectrum very bright and continuous, with many bright bands, among which the sodium bands were particularly prominent. The comet was at that time near the sun. The whole appearance of the spectrum is now changed. Although it includes rays of about the same refrangibility, there is no trace of the sodium band. It was found that when the brighter portions of the bands were removed as far as possible from the field of view, the fainter portions were seen to extend themselves into an almost continuous spectrum. When the tail of the comet near the nucleus was examined, it was found to consist of a faint, continuous spectrum without any bright bands. The explanation which suggests itself of this great change in the spectrum is, that when it was first examined, just after it had passed the sun, the continuous spectrum was due to reflected light, while the bright bands were due to the incandescent vapor formed by the intense heat of the sun. The comet has now so changed its position with regard to the sun that the amount of reflected light has greatly diminished, and the comet itself has greatly cooled after its hot bath in the atmosphere of the sun. The beautiful silvery appearance of the comet is due to the preponderance of green light which it emits, as shown by its spectrum.—*Argus, Albany, N. Y. Oct. 18.*

The comet's tail is forked at the end where it has a width of three degrees; this corresponding to an actual diameter of 9,000,000 miles.

The Comet and the Earthquake.

A MONTREAL ASTROLOGER ON THE PROBABLE RELATIONS BETWEEN THEM AND HIS PREDICTIONS OF THE WEATHER.

The science of astrology, a few centuries ago considered superior to astronomy, and universally practiced by learned men, is not half so dead as many people imagine it to be. Though its professors have wofully decreased in number, and become confounded with clairvoyants, mediums, fortune tellers and other charlatans, yet there are a few enthusiasts who firmly believe that the stars and planets in their constantly changing aspects, exercise an influence over all things terrestrial, including even the minds, will and power of human beings, and can cause wars and pestilence, peace or prosperity, according as the evil or good planets are in the ascendant.

A Star reporter called upon a gentleman of this city who is of the opinion that the shock of earthquake felt a few days ago was the result of the proximity to the earth of the comet now visible in the heavens. He said comets boded no good to the earth, whenever they made their appearance disasters were sure to follow; earthquakes, war, pestilence, and individual crimes invariably followed the appearance of comets. The immense magnetic power exercised by the fiery meteors, must affect the earth and its inhabitants unfavorably. Not only the earth, wind and water were affected, but the minds of the people at large and even individually. The astrologer produced an immense horseshoe magnet, which he brandished in an alarming manner while discoursing and after drawing his visitor's attention to its attractive powers, declared that the influence exercised by the planets was altogether magnetic. There was no star in the solar system too far away not to affect the earth. The clouds and water being lighter were, of course, more easily affected. Hence, certain aspects of the planets produced wind and rain. The motions of the planets also affected persons mentally, and in a less degree physically. Human events were also controlled by the constellations as their aspects were either good or evil. An instance of an opposing evil influence would be the sun on one side and Mars on the other, with the earth in the centre, feeling the magnetic influence of both planets. Turning from the subject of the theory of astrology, which is just the same now as it was hundreds of years ago, the sage went on to say that there were not many astrologers at the present day. The more celebrated ones lived in London, Eng., and were known under such *noms de prophete* as Zadkiel, Raphael, Orion, &c., &c. The reason of this concealment of their real appellations was owing to the fact that there was an old law in England which forbids the receiving of money for the casting of nativities. In the large cities in the United States there were several professional astrologers who for money would dive into futurity and give his customer some idea of coming events. These men were not humbugs but intelligent persons, working in a regular astrological system. There were not many astrologers in Canada. For a certain sum of money these professors would give a short judgment on the mental qualities of the enquirer, and predict his future pecuniary status. They could also find things that were lost if the exact time of the loss was furnished them. The answering of any particular question is called horary astrology. If the exact time of the beginning of an illness is noted, the astrologer can predict with certainty whether the result will prove fatal or not. As an example of how many believers in astrology there are at present, it may be remarked that Zadkiel sells 250,000 of his prophetic almanacs every year, and the other seems in proportion. Zadkiel is the most in favor on account of his wonderful prediction concern-

ing the assassination of the Czar, which happened exactly at the time he set it down for.

The amateur astrologer at this point in the conversation relinquished the magnet and took possession of an immense baby, which his wife had deposited upon the floor in a significant manner. Pausing only long enough to remark that it was a fine child for eight months, the sage went on to say that he had turned his attention chiefly to astro-meteorology, or the prediction of the weather by the position of the planets, and he hoped in time to knock the spots out of Vennor. It was a well known fact that when certain planets were in such and such a position a certain condition of weather was sure to follow. For instance, Herschel and Saturn, in any aspect, produced turbulent weather in the fall; in the Spring time a common storm was the result, and in winter snow was sure to follow.

With considerable satisfaction the professor admitted that he had prepared a table of disturbances of the atmosphere for the coming month, which he expected would be the meteorological programme followed by the Clerk of the weather.

The reporter then asked the Professor whether he had made any calculations as to what events were likely to conspire during the next month or so. He replied that he had not, as that would involve a different mode of calculation altogether. In order to divine events he would have to take the exact time of the new moon and calculate the position of the planets in our solar system at the present time, and from their various positions in the heavens draw an inference concerning events in the near future.—*Montreal Star.*

The Comets.

THE FOUR COMETS OF THE YEAR.

In plain fact, there have been but four comets seen thus far in 1882. The first celestial vagrant of the year was discovered by Mr. Wells, of the Dudley Observatory, March 17th, and for a long time it monopolized the attention of astronomers in both the old and the new world, owing to its unique features. Although the period of the Wells comet has not yet been fully calculated, enough is known to show that the comet will not return to view under 1000 years. The second comet of the year was seen but once, and then for only a very short time, by the astronomers who were observing the sun's eclipse from Egypt last spring. It was described in a brief despatch which noted the success of the observation of the eclipse as "a fine, bright comet, close to the sun," and astronomers for a long time watched for its appearance, on the supposition that it would be visible on its return from perihelion, but without success. The third comet of the year was discovered on the morning of September 13, and duly chronicled by Prof. Barnard, of Nashville, Tenn. At first, owing to the place of its discovery, in the constellation of the Twins, it was presumed by some to be the re-appearance of the famous Pons comet of 1812, but this was subsequently shown to be an erroneous supposition, owing to its direction of motion. The Barnard comet, which was, at the time of discovery, a faint telescopic object, about one and one-half seconds of arc in diameter, is now approaching perihelion, which it will attain about the 7th of November. At its brightest it will be but about three times as large as when first seen.—*Albany Argus*

Candor is the seal of a noble mind, the ornament and pride of man, the sweetest charm of woman, the scorn of rascals, and the richest virtue of sociability.—[*Beutzel-Sterann.*]