

READING THE STARS TO A BAD PURPOSE.

The world has never been without its Cassandras, and just now it is having a surfeit of these ill-foreboding prophets. Sometimes these people of evil omen come forth to cast the world's horoscope in the name of science, and sometimes in the character of biblical interpreters. As many as three or four times within the recollection of those now living the Millerites or Second Adventists have fixed the time for the world's final destruction, their predictions being based upon the peculiar expositions given of various passages in Scripture. Twenty years ago the past winter the appearance of a comet inspired a widespread terror, certain pretenders to astronomical knowledge having given out that the annihilation of the earth by this celestial tramp was a thing quite within the limits of possibility. And now the approaching conjunction of certain planets affords this same class of pretenders an opportunity to ventilate their learning and inspire the ignorant, the superstitious and the emotional with a dread of impending evils at the same time. Opportunities of this kind occurring only at such long intervals are not to be neglected by these sensation mongers. Hence we find they are being turned by this class to good account.

We are told that the dire calamities await only the coincidence of these heavenly bodies to be precipitated upon our doomed world and race. Next year the four great planets—Jupiter, Uranus, Neptune and Saturn—will be in perihelion—will have reached their nearest approach to the sun, and then evils countless and unspeakable are to be let loose upon the world. The influence of these planets when brought into that position will be, we are assured, exceedingly pernicious to the earth and the people upon it. Indeed, some of these great members of the solar system exert, it would seem, at all times a baneful influence upon our little planet—entertain, as it were, a grudge against it. All these heavenly bodies except Jupiter are unfriendly to us—are, to use the language of astrology, *malefic*: Jupiter alone is *benefic*—kindly and well disposed towards us. But this will not avail to save us from these threatened evils; for, although he is much the largest member of this planetary quartet, his beneficent influence will be nullified by the much greater power for evil possessed by his associates; and which, when the whole set are brought in perihelion, they will be able to exert with deadly effect.

Having so obtained the mastery, the influence of these unpropitious planets will begin to manifest itself in the contamination of our atmosphere, causing widespread famine, pestilence and death. The plague and other incurable diseases will prevail, the waters will become putrid, all nature will be sick. Animals will die, even the fishes will perish and mankind be almost wholly swept from the face of the earth; only on the Pacific coast, where these malign influences are to be exerted with less power, will any considerable number of the human race be spared. As no reason has been assigned by these wise men for this letting up on the inhabitants of the Pacific coast, we are left to infer that this will be due to their greater moral excellence. We find in the case of Lot, of Bible fame, a precedent to justify such conclusion. But even here, we are not to make good our escape altogether. Persons of vile, intemperate and gluttonous habits—who are unclean, eat to excess, drink whisky and suck tobacco, will have a close call, and very likely go the way of the rest of mankind. As a large proportion of our population are addicted to these hurtful and unseemly practices, they, too, may be considered exposed if not doomed to early destruction.

As warrant for these dire predictions our star-gazers, referring to history, find that the world was afflicted in the manner here portended on every occurrence of these planetary conjunctions in the past. Never have these

orbs been in perihelion, or even so many as two or three of them, without bringing upon our race these overshadowing disasters. It was so in the year 542, and again 1665, when two of these malignant planets, Mars and Saturn, were coincident; and why should not like conditions now be attended with like effect; or rather, why should not these effects, when there are three of these planets conjoined, be even greater now than then. Shall we not be instructed by history and, admonished by the sad experience of past ages, hasten to adopt such measures as may seem best calculated to protect ourselves against these impending calamities. Nay, they are not merely impending: some of them have arrived; they are beginning to precipitate themselves upon us. In the plague now prevailing in Russia, we have a presage of their early coming, if not tangible evidence of their actual presence. That disease is the *avant courier* of the multitudinous ills with which we shall be visited. It was a godsend, this plague, to these vaticinators of evil. Coming so timely it imparted to their forebodings an air of probability, and has since helped to keep them in countenance with the ignorant and credulous public, if, indeed, its appearance did not suggest to them the idea of assuming the prophetic role as they have done. In the partial diminution of this dread disease these astrological savants must see cause for alarm, as tending to impair confidence in their predictions and so diminish their stock in trade.

The followers of these "star-gazers" are apt to be numerous, including that large class of quid-nuncs, simple and emotional, who love the horrid, believe in signs and consult fortune tellers, who for a small fee are ready to inform them that "it 'pears like" something dreadful, good or bad, is about to happen. These emotionals are fond of the dire and woful, provided always the woes decreed have been allotted not to themselves but to others. Now this proclivity to consult the future and sup on the supernatural and horrible is a constitutional infirmity with many people, and they are not to be blamed for its existence or for seeking ways and means for its gratification. Yet, as it is not a healthful or rational propensity, and its indulgence has a mischievous tendency, it is the duty of the press not to encourage it, nor minister to its indulgence; but, on the contrary, to labor for its suppression, informing these misguided people how little cause there is for alarm.

In the first place it should be remembered how these prognostications about the world coming to an end at a fixed time, and all similar predictions as uttered in our own day, have proved entire failures. Then mankind are prone to believe that the ills, incident to the present time, are peculiar and greatly in excess of those suffered by preceding generations. Hence, the wars and famines, the fires and floods of to-day, are regarded as something, exceptional and pointing to some signal catastrophe in which they are all to culminate. With the astrologer, these multitudinous misfortunes are to reach consummation with the conjunction of the planets. With the religion enthusiast, this will take place on the second coming of the Messiah, with the Aztec when Motezuma returning shall deliver his people from the thrall of the conqueror, and with the Latter Day Saints when Joseph Smith, or some other prophet, reappears on earth in bodily form once more. Now these things are believed in by millions of people, some of whom have been waiting for these events to transpire for generations and even centuries; and notwithstanding the non-fulfillment of these predictions, their faith in them remains fervid and steadfast.

Difficult as it is to disabuse their minds of these impressions, it is still the duty of all who occupy anything like the position of public teachers to inform this class of persons that there is little or nothing to justify their apprehensions. The truth in regard to these planetary bodies is, that, while they probably always exercise some influence upon the earth and its inhabitants, this influence is exerted through the sun, and is no greater at one time than

another. While they are, when in perihelion, nearest the sun, they may be, and generally are, the farthest from the earth, which ought, therefore, to be less affected by them at such time than any other. Now, the sun is so many million times larger than these planets all put together that any effect they can have upon that luminary, even when nearest to it, must be small, indeed. The earth, in making its annual circuit round the sun, comes at some points in its path 3,000,000 miles nearer to that orb than at others, and yet we are not sensibly affected by this greater nearness. Though Jupiter is 12 times larger than our earth, it is composed of matter so much more ethereal that its powers of attraction are barely 12 times greater than those of our planet, the power exerted by this force being directly as density and inversely as distance. What is true of Jupiter is true also of Saturn, this disparity between the latter and the earth being still greater. These two are much the largest planets in the solar system, and if their influence upon the sun, and through it upon the earth, is likely to be so little, how infinitesimally small must be the influence so exerted by these lesser planets. So little density have these orbs and such distances are they at all times from the earth that their effects upon the latter must be inappreciably small.

Let, therefore, all who have been alarmed dismiss their fears upon this point. There are plenty of good reason apart from this apprehended scourge why people should take measure for the better preservation of their health, and one would almost feel warranted in terrifying them into some amendment of their present beastly habits, were it not that upon the removal of the cause they would probably relapse, and as an excuse for so much self-abstinence plunge at last into greater excesses than ever. It would, therefore, be as well for the masses perhaps to turn a deaf ear to these portentous forebodings, get rid of their fears and live on as before. The dread of disease, if it do not invite, has a tendency to lay the human system open to its attacks. Excessive fright has been known to bring maladies upon those who would no doubt otherwise have escaped. We have all far less to fear from this approaching conjunction of the planets than from our own excesses and manifold evil habits, which are depopulating the world more rapidly than has ever been done by the Black or any other plague.—*Mining and Scientific Press*.

A REMARKABLE case of cohesion, or the welding of two metals at a temperature far below the melting point of either of them, has lately been noticed by Mr. Charles A. Fawcett, of Glasgow, and by him reported to Sir William Thomson. He describes the following experiment, which any of our readers who are curious enough can readily try, to test its correctness: If a piece of silver, one centimeter square, is heated on the inverted lid of a porcelain crucible, to about the temperature of 500° C. (932° Fahr.), and the end of a thin platinum wire is brought into contact with it, the two metals will be found to have welded to that extent that the silver may be raised from the lid, and will remain attached to the platinum wire when cooled off. Mr. Fawcett reports that other metals—copper and aluminum, for example—will likewise adhere to silver, though the experiment is less striking than in the case of platinum.

CHANGES OF SPECTRA.—If a small quantity of mercury is placed in a hydrogen Geissler tube, E. Wiedeman finds that an induction current gives the hydrogen spectrum at ordinary temperature. But if the tube is warmed in an air-bath, as the temperature rises the mercury lines appear, while the hydrogen lines grow fainter and finally disappear. If a tube of hydrogen and nitrogen is warmed at any point, so as to free sodium or other metals from the glass, the hydrogen and nitrogen lines vanish almost entirely while the lines of the metal appear. Does the hydrogen disappear, or is it transmuted into some other substance?—*Comptes Rendus*.