

solar disturbances have recently been, and now are in progress.

It has moreover been fully established that the aurora is electrical in its character. During the week that has just passed not only has the aurora been almost nightly visible, but throughout the country we have had a series of thunder-storms unparalleled in the grandeur of their electrical features. If the aurora depends upon the condition of the sun, may we not reason that these remarkable displays of atmospheric electricity have also a connection with solar phenomena?

That the sun is actually undergoing a remarkable change in the constitution of its luminous envelope is asserted by several eminent European astronomers. Signor TACCHINI has just discovered by the spectroscope that an enormous quantity of magnesium has suddenly made its appearance in the photosphere. Now, we all know that burning magnesium produces the most intense heat and light. Will not this unparalleled presence of magnesium in the sun's photosphere greatly increase its heat? May not the excessive heat of the present Summer, as well as the auroral and electrical storms of the last few days, be due to this reckless throwing of magnesium into the sun's furnace?

One thing has been established beyond all question, and that is that a material change has taken place in the constitution of that part of the sun which is visible to us. It is only reasonable to suppose that this change will be perceptible to us in other ways than by the mere presence of new lines in the spectroscope. Suppose that the volume of solar magnesium continues to increase, and the solar heat increasing with it, converts the coming Winter into a tropical Summer; or suppose that the sun is about to share the fate of certain fixed stars, which have suddenly blazed with unusual brilliancy, and then vanished forever from sight. Either intense heat or inconceivable cold would result if one or the other of these suppositions were to prove correct. In either case, the earth would become untenable, and life on this planet would become extinct. The last man would then bewail the falseness of PLANTAMOUR, and grieve that he had not been smashed on the 12th of August, 1872, in company with the rest of his species, and in the enjoyment of a moderately comfortable temperature.

While these contingencies are too remote to disturb the peace of mind of any but the idiots who went on their house-tops to watch the coming of PLANTAMOUR's comet, they nevertheless remind us of the fact that the sun may prove as dangerous to the earth as the boiler of a high-pressure steam-boat is to the bold voyager on the Mississippi. However new and strong the Mississippi boiler may be, the traveler cannot help feeling uneasy when he sees the engineer crowding barrels of resin into the furnaces, and in like manner it is suggestive of a possible catastrophe when we find the sun "firing up" with such an unusual material as magnesium.

A Possible Catastrophe.

Because PLANTAMOUR's comet proved a delusion and a disappointment, we are not therefore to conclude that the earth is a sort of iron-clad planet, impregnable not only to cometary missiles, but to every sort of astronomical disaster. We may concede that the scientific persons who tell us that a comet can be compressed into a tea-spoonful of jelly know whereof they speak, and that they are intimately acquainted with the exact dimensions of every erratic meteoric stone, and can demonstrate that the earth can endure uninjured any possible amount of meteoric cannonading. Still, there are dangers which remain after the innocuous character of comets and meteors has been established. Men of science have latterly devoted careful attention to the sun, and have from time to time published reports upon the condition of that luminary which may well create uneasiness as to the safety of the planets which he has so long held in strict subjection.

It has been established, if we may accept the authority of men who are eminent astronomers, that the earth is steadily losing its velocity, and as steadily drawing nearer to the sun. If the earth perseveres in this sort of conduct—and there is every reason to suppose that it will—we shall fall into the sun in about twenty-four millions of years from the present date. This inevitable catastrophe is too remote to effect the price of real estate at the present time, but there is another possible danger growing out of the irregularities of which the sun has lately given evidence, which may bring us much sooner to the end of all things earthly.

It has recently been held that the aurora borealis is intimately connected with peculiarities in the solar photosphere. Whenever the aurora is frequent and brilliant, the black patches, commonly called solar spots, are numerous and active in their changes. This fact would seem to establish a connection between these two phenomena. Within the past month we have had the most remarkable auroral displays that have occurred within the memory of the present generation, while it is a matter of general remark that within the last twenty years the aurora, which was formerly rarely visible in this latitude, has become yearly more and more frequent. If, therefore, there is the connection between the sun and the aurora which is now believed to exist, we are warranted in concluding that unusual