

## THE EDITOR'S COMMENTS.

### AT HIGH ALTITUDES.

Very interesting experiments have been made lately in Europe to ascertain the exact conditions in the upper regions of the atmosphere, where the air is too attenuated for human life to exist. Little balloons were sent up simultaneously, filled with hydrogen and supplied with self-recording scientific instruments. One of these little messengers was dispatched from Paris, ascended the enormous height of nine and a half miles, and was recovered in Belgium after a three days' journey. The silk covering was much injured, but the instruments were in perfect order.

The thermometer showed that the balloon had encountered the extremely low temperature of eighty-two degrees Fahrenheit below zero, and—what is still more significant, that this temperature in the highest strata was almost permanent, the difference between night and day being hardly appreciable. It will be readily understood that this fact opens up again the question of the real origin of the heat experienced at the surface of the earth, that is a *sine qua non* of human and animal life.

A theory that has become almost popular is that the sun is a great mass of gaseous substance in an active state of combustion and that the solar heat and light which the earth receives consist of so much of the heat and light rays as are arrested in their passage through space and refracted by the earth's atmosphere. According to this hypothesis the sun is an enormous oven into which worlds and fragments of worlds are constantly attracted and consumed, giving the necessary heat to the revolving orbs, which some day, in their turn, perhaps, will be used as fuel in the great center of light and heat. It is further assumed that the atmosphere of all planets of the system are protective envelopes, modifying the intensity of the solar heat during the daytime and tempering the severity of the cold during the night when such parts of their respective surfaces as are enveloped in darkness are turned away from the sun. Should it, however, prove correct that the heat is least where the atmosphere is most attenuated, this theory must be abandoned.

Another theory is that the sun is simply a great magnet, whose revolutions in the ether excite activity in that element, and that what we experience as solar heat is the result of the friction of the ether as its particles force a passage through the atmosphere. If this supposition is correct, the heat would be least where the air is thinnest, and vice versa. It is well known that in low depressions of the earth, as for instance, the Colorado desert and the valley of the Dead sea, below the sea level, the heat at times is almost unendurable. The density of the atmosphere accounts for this satisfactorily on the supposition that solar heat is caused by the friction in the air, and now the testimony of

the little balloon seems almost to settle the matter. "Perhaps," says an exchange, from which some of these facts are gleaned, "nothing stronger has been adduced, in favor of the theory than the silent but indisputable evidence which the Parisian meteorological balloon, the aerophile, brought down with it a few weeks ago from the upper air in the record showing that where only an attenuated envelope intervened between the delicate instrument making the record and the source of light the temperature was practically stationary night and day. This would seem to imply that the solar rays are originally void of heat, and that the friction created by their passage through the atmosphere is the true and only source of heat as we experience it on the earth."

Should it be established scientifically as a fact that the central orb in our planetary system is not a gaseous mass in a state of combustion, the question naturally presents itself how far this fact interferes with the evolutionary theory of the creation. According to this our part of the world was first a gaseous cloud which cooled, contracted, exploded and thus became a central sun with planets and satellites. Is this consistent with the supposed fact that the sun itself is only a magnet void of heat perhaps, except as it receives it from some other and larger sun, in the same way as the earth receives it through action on the atmosphere?

Scientists are fond of rearing hypothetical structures, but these often fall before the discovery of a single fact, sometimes apparently insignificant, such as the recording of the temperature by the aerophile sent up from Paris. Surer than all hypotheses is the knowledge received through sacred writ about the creation. There is no contradiction of any known fact in the almost sublime statement: "In the beginning God created the heaven and the earth." And if to this is added what from the same source has been revealed in these latter days through the Prophet Joseph, we have a solution of the great problem of creation, worthy to serve as a basis for the most profound scientific research and acceptable to the faith of the most devout heart.

### MARRYING A RAKE.

The young woman who becomes the wife of a rake in the hope of reforming him seldom meets with anything but disappointment of the most poignant character. The man who is thought to need a wife to recall him from dissipation is generally such a man as no woman can trust with her peace and happiness. No matter if the husband be wealthy at the time of the marriage; the course pursued by rich and poor is in about the same direction, and is on the downward grade. This has been demonstrated once more in the case of Mrs. Gertrude Fillmore, to her satisfaction at least. Four years ago she became the wife of John S. Fillmore in Denver. She was

young, talented and beautiful, and believed she could make home so attractive that dissipated habits would lose influence over her husband, who was wealthy. A year ago they parted, and now she is suing for divorce. She says her husband has spent \$200,000 in riotous living and drinking; that he took a cure for his habits on two occasions, but went back to the old practices; and that on the day they separated he turned on the gas in the room where they slept, and it was only through a watchman detecting the odor that both did not die—since which time she dared not risk herself with him. She has learned by experience the lesson that many young girls would do better to read and profit by without travelling in the same thorny path. The man who does not show enough energy and interest in himself to refrain from habits of dissipation is usually too much of a load for a woman to keep out of the mire of evil habits for long.

### FOR THE GOSPEL'S SAKE.

Elder George F. Taylor, who is laboring as a missionary in North Carolina, writes in a private letter that Elders Baker and Winter were put in jail in Raleigh for preaching the Gospel, but they were released on a promise to leave the town. They were appointed to labor in that place on December 1st but encountered much bitterness, resulting as stated. It is strange that in a country where religious liberty is one of the prerogatives of every citizen, medieval bigotry still survives to the degree the action of people of Raleigh indicates. The Gospel cannot, however, be conquered by persecution. The fact that there is much opposition in a locality is often a proof that there are many souls there prepared to receive the message.

### BELIEF IN MIRACLES.

It is yet within the memory of the older members of the Church that when the Mormon Elders preached the gifts of the Holy Spirit, or miracles, as a part of the fruits of obedience to the Gospel of Christ, the idea was excused, ridiculed and denounced by modern Christendom. The professed Christians who lived at the beginning of this dispensation had been taught that miracles were done away because "no longer needed," although in the Church of Christ they are a permanent feature for the benefit of the faithful. The "no longer needed" excuse was given to cover the fact of the disappearance of miracles performed by divine authority, and which had ceased because the authority had been taken away through a general apostasy from vital principles in the Christian Church. It was, and yet is, an argument with the churches which grew up in the third and succeeding centuries that as the young tree in the orchard needed the care of a gardener until it became well rooted and then could get along itself, so the Church needed miracles and gifts in its early years, till established, and then could do without them. But the force of the argument is lost in the