

General Pleasanton's Blue Glass "Discovery."

It is curious that, in the extended comment which Gen. Pleasanton's hobby has received from the press of this vicinity, it has been treated wholly as if it were a discovery—something hitherto unheard and undreamed of. The fact is that the action of blue glass upon the sun's rays was known long before the spectroscope came into use; and has been so thoroughly experimented upon and examined that General Pleasanton has added not one jot or tittle to the sum of knowledge already recorded in the premises. He has made the not infrequent, but always amusing, error of crying aloud as new an old discovery, and of coupling with it old illusions long since dispelled.

We believe that for the first clear demonstration of a difference in character in the rays of the sun, science is indebted to one of our own countrymen—Prof. Draper, of New York. He established by clear experiments that the rays of heat and light were so distinct from the chemical rays that the two might be separated, and only one allowed to fall upon the object used in the experiment. In the chemical rays he recognized a new principle, or force, which he christened with the name of "tithonicity," the rays being called "tithonic." Further English experiments, however, wrested the right of sponsorship from Professor Draper, and conferred it upon Mr. R. Hunt, and the accepted title for the new force now is "actinism," and for the rays "actinic."

Long before the spectroscope came into use it was discovered that the actinic rays of the sun were wholly intercepted by red, orange and yellow glass; and that, on the other hand, the rays of heat and light were not only intercepted, but that the actinic rays were actually made more powerful by passing through blue and violet glass—the light rays serving as a drag upon the actinic force. Photographers years ago made use of this fact, making the skylights of their studios out of blue glass to strengthen the actinic rays. The same reason explains why photographs can be taken as well on cloudy as on bright days—the clouds are the blue glass, intercepting the rays of heat and light, but affording ready passage to the actinic rays.

The invention and appliance of the spectroscope extended our knowledge of this peculiarity of light, though not informing us of the ultimate cause. The red, orange and yellow rays of the solar spectrum were found to contain no actinism. It commences feebly in the green, becomes stronger in the blue, and is most abundant in the violet. It is found to exist also, very abundantly, in the dark space outside the visible spectrum—the ray-waves being of such extreme velocity that the eye cannot transmit them to the brain without retarding appliances.

If General Pleasanton had pursued his resources a little further he might also have "discovered" that scientists were long since aware that the quantity of actinic force in the sun's rays varied greatly with different hours of the day, and with different seasons. It may be stated, as a general rule, that when the luminous is most abundant the actinic force is least, and vice versa, within proper limitations. The actinism is greatest in the early morning, and in the spring of the year.

But it is in the supposed effect of blue glass upon vegetation that General Pleasanton makes his greatest error. When actinism was first discovered the idea prevailed (and this he has caught hold of) that to increase the actinism was greatly to quicken the germination of seeds and cuttings, and to assist in the formation of the coloring matter of leaves. Blue glass was therefore used, and is still used, in the hot-houses, for that purpose. Later and most conscientious experiments have, however, proved that it is not the increase of actinism but the decrease of the light rays that hastens the germination. On the other hand it has been conclusively demonstrated that it is the red rays alone which produce the green coloring matter (the chlorophyll) to which we owe the health of the world, it being the laboratory of nature which consumes the excess of carbon, and restores it in the shape of oxygen—thus preserving the equilibrium of the atmosphere. Thus, while blue glass helps the plant at particular stages, the full solar light is

necessary to its complete and healthy growth.

As to the therapeutical effect of the blue glass on human beings, there may be something in it, for particular stages and particular conditions. It helps the plant to germinate—it may help the infant in embryo; but the idea that it can have any general healing effect is apt to be purely imaginary, and springs from a partial acquaintance with the subject. Perhaps no more appropriate comment could be passed upon General Pleasanton's "discovery" than Pope's oft-quoted couplet—

A little learning is a dangerous thing,
Drink deep, or taste not the Pierian spring.

—Cincinnati Times, Feb. 12.

Japan the Paradise of Travelers.

Whatever may be our doubts as to the extent of the foreign influence, we can have none as to the loveliness of Japan and the delight of traveling in the interior. Japan is the traveler's paradise. Through a strange medley of pines and palms, of rice and buckwheat, of bamboos and elms, of tea and cotton; through azalea thickets and camellia groves, across tobacco fields and past rock covered with evergreen ferns of a hundred kinds, and crowned with grotesque remains; through tussac grass and forests of scarlet maple, and over mountains clad in rich greenery, you may journey in perfect peace, safe from violence, safe even from beggars, never troubled, never asked for anything, except by a civil policeman for your passport, and that with the lowest of low bows. The maidens say "Ohio" sweetly to you in the villages as you pass, where eight years ago you might have been sliced up by the sharp swords of the Samurai. "Ohio" too, call the laborers in the fields, leaving their work to come and bow at the roadside, not as the Japanese bow to the Dutch, but with the bow of equal to equal, the bow of infinite politeness.

Without servant or interpreter, a European can travel in safety throughout the land. The people and their houses have been described too often. One cannot but love their fun, their cleanliness, their inborn sense of art. It is impossible to realize that the Japanese are real men and women. What with the smallness of the people, their incessant laughing chatter, and their funny gestures, one feels oneself in elfland. On a fine day the men appear as grinning demons in black tights, streaked all over with blue heraldry. On wet days the long rush coats and long-sided straw hats equally remove all vestige of humanity. When we turn over Japanese pictures in our English homes we fancy that both the faces and the dress must be unlike real life. On the contrary, they are very like the old fashions of the wealthy class, with whom faces are as much made up and are as much a matter of fashion as are clothes. It is the country people of Japan who are my elves—the tiny, jovial, copper-colored poor.

Were I describing rural Japan at length I would try to show that it may be looked at from a point of view from which it has not as yet been much considered. Japan is the last refuge of the joyous life. See the Thames on a fine Saturday in July, or the fair of St. Cloud on the last Sunday evening of its reign, and you may for a moment believe that even in Europe the joyous life is not extinct; but the fun of the Thames is vulgar and the loose morals of St. Cloud are venal. The joyous life of the Middle Ages may have been bad of good—in Europe it is gone, and let us speak well of the dead—but it was neither venal nor vulgar; that life still lives in Japan, where no paganism of antique grandeur dwells, but rollicking, unthinking fun. All who love children must love the Japanese, the most gracious, the most courteous and the most smiling of all peoples, whose rural districts form, with Through-the-Looking-Glass-Country and Wonderland, three kingdoms of merry dreams.—Sir Charles Dilke, in *Fortnightly Review*.

—A grasshopper draft bill has passed the Nebraska Senate. Its provisions give the supervisor the authority to call out all males between the ages of 16 and 60 years to work, not exceeding ten days, in destroying the little pests, and imposing a penalty for refusing to go out to work.

MODERN MIRACLES.—Public and private discussion has now taken up the subject of modern miracles. At the noon prayer meeting in Farwell Hall, a few days ago, a prominent clergyman of this city stated the case of a member of his church who claimed to have met with a special dispensation of healing. According to her statement, she had been paralyzed and dumb for eight years, and one day she suddenly became impressed with the idea that she must pray earnestly for her recovery, as she had spent all her living on physicians, and was nothing bettered, but rather grew worse, and could rely no further on human hopes and efforts for restoration. She dropped on her knees and began to plead in faith for relief. After a short interval, suddenly, to her great surprise, she heard a human voice, which proved to be her own in prayer. Simultaneously she felt a cracking in her joints, and a thrill, as if of electricity, through her bones, when, instantly she rose and walked out into another room, to the amazement of her friends. Her health and speech appear permanently regained, and her case is cited as an illustration of what any person may receive in answer to prayer, if the petition is accompanied with a proper degree of faith.—*Chicago Correspondent Bridgeport (Conn.) Standard*.

DIED.

In Sugar House Ward, February 23d, 1877, of scarlet fever, STUART, son of Jacob and Margarette Gilson, in his 8th year.

At Paragonah, at 12.30 p.m., on Sunday, Feb. 18, of quick consumption, DEBORAH L. P., wife of Hyrum Stevens, aged 31 years, 10 months and 16 days.

Deceased leaves a husband and five children to mourn her loss. She was baptized when she was eight years old, and through her whole course of life was true to the Church of Jesus Christ of Latter-day Saints; died in good fellowship, with the assurance of a glorious resurrection.—*Com.*

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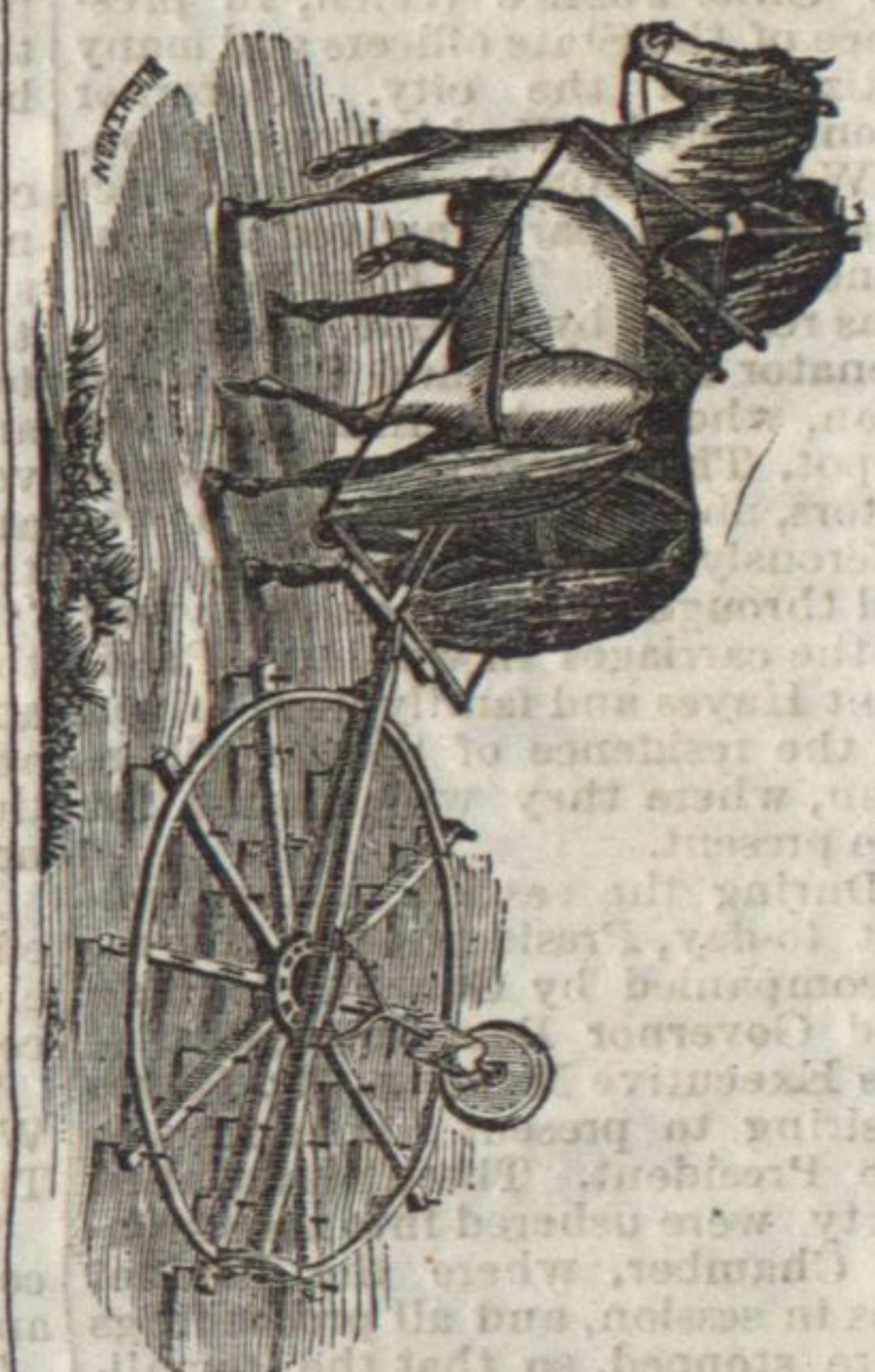
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