

Scientific.

Dr. Jenner and the Cow Pox.

It has been lately resolved to erect a bronze statue in London to the memory of the eminent Dr. Jenner, the great discoverer, or at least the great agent of extending vaccination. We find by the Boston Advertiser that it is proposed to aid in the erection of this testimonial by subscriptions here. At such a time it cannot be improper to look at the man and his labors.

Every one knows that small pox was formerly one of the greatest plagues of our world, sweeping myriads into untimely graves, and where it existed only in its mildest forms it carried off one in fourteen of the whole population. Whenever it appeared in Ceylon, entire villages were abandoned; in Thibet, on one occasion, the capital was deserted for three whole years; in the Russian empire two millions of human beings died of the small pox in twelve months. Bernoulli calculated that fifteen millions fell victims to it every twenty-five years, taking the whole world, or six hundred thousand annually; and whole tribes of the North American Indians have been destroyed by this fearful malady. To Lady Mary Wortley Montague we are indebted for her determination and courage in having her son inoculated in Turkey, and her daughter subsequently in England; her example was followed by the Princes of Wales, who caused her two daughters to be inoculated. This custom was opposed even by eminent men, who denounced it as an attempt, at once impious and unavailing, to counteract the visitations of an all-wise Providence, asserting that in the case of the adults who voluntarily submitted to it, it was suicide; and in respect to children, it was murder. A London clergyman, named Massey, declared that it was no new art, as Job had been inoculated by the devil.

Notwithstanding that some good was done by inoculation, it was still true that multitudes died of small pox; and within the memory of thousands now living, many thousands were deprived of their beauty by the marks the disease left behind it.

At a comparatively early period some glimpses of a preservative against this plague existed; for when a lady in the days of Charles the Second, told the beautiful Duchess of Cleveland that she would soon deplore the loss of her beauty from the effects of the small pox, then raging in London, she replied there was no ground for fear, as in her own country she had undergone an attack of the cow pox, which was a preservative; and the attention of Jenner was first attracted by hearing a country girl saying that she could not take it, for she had had cow pox; but not one in a thousand, probably, had ever heard of the cow pox, and certainly not one in ten thousand believed in it as a remedy from small pox. Not a single physician in the known world then practiced it.

The 17th of May, 1749, gave birth, in the vicarage house of Berkely, in Gloucester, to Edward Jenner, son of the estimable clergyman of that parish. He was a child and youth of great promise, and having received a good preparatory education on the neighborhood of his native town, he entered in the study of medicine, and, after a time, removed to London, where he placed himself under the care of the distinguished John Hunter. From this enthusiastic and successful cultivator of the science of life, Jenner caught the true art of philosophical investigation. The friendship between Hunter and his pupil lasted through life. After several years' study, Jenner returned to his native town, where he practiced medicine, and distinguished himself by scientific studies, a paper of his on the singular habits of the cuckoo, was inserted in the Transactions of the Royal Society, and attracted much attention.

It was now that the fact came before him that the servant girls who milked the cows of that neighborhood, usually took a mild disease from the teats of the cows, and were ever afterwards protected from the small pox. The incident riveted his attention, and he commenced a careful investigation of the whole subject. He communicated his views to Hunter, who replied, "Do not think, but try; be patient, be accurate." This encouraged him to persevere, notwithstanding the sneers and determined opposition of his medical neighbors, who omitted no opportunity of expressing their contempt and even abhorrence of his views. However on three different occasions he vaccinated his own son, and in 1788, he

first published an account of it, which attracted the attention of medical lecturers in London, one or two of whom mentioned it in their lectures of that year.

But it was not till 1798, that the subject became understood. Dr. Chenebrough successfully tried the plan, and Lady Ducie, and the Countess of Berkley broke through the prejudices of the day, and caused their children to be vaccinated. The inspector-general of the military hospitals favored it, and in the following year, the children of the Duke of Clarence were vaccinated, and a feeling in favor of this protective remedy began to spread. Jenner now began to watch for the realization of his hopes, that the scourge of small pox would soon be eradicated from the world, but the opposition of many eminent physicians and surgeons was inveterate; still the cause slowly gained ground: he was tempted by large offers of support to remove to London, but refused to do so; and others realized the pecuniary advantages to which he was justly entitled; vaccine institutions were opened both in England and (notwithstanding the war) on the continent of Europe, and eminently succeeded.

Before, however, vaccination had been heard of in Paris, it was known in the United States, the American public being made acquainted with it through the medium of the newspapers, as "Something curious in the medical line." There, too, it was destined to be opposed. Sermons were preached against it, and the leading physicians of Philadelphia pronounced it to be "too beastly and indelicate for polished society." But truth and good sense prevailed, President Jefferson, with his sons-in-law, vaccinated nearly two hundred persons among their own connexions, and soon the practice became almost universal.

In Europe, the cause made progress; the Parliament voted large sums of money to advance it, efforts were successfully made to introduce it over the whole continent of Europe, and it was shown in the British House of Commons that 2,000,000 persons had been vaccinated, of whom not one had died of the affection. Strange tales were, however, told about it. A lady complained, that since her daughter was vaccinated, "she coughs like a cow, and has grown hairy over her body;" and in one part of England the practice was discontinued because those "who had been inoculated in that manner bellowed like bulls." Still the practice gained ground, many clergymen began to vaccinate in the vestries of their churches gratuitously; among these the eminent Rowland Hill vaccinated many thousands, and many private gentlemen, and even ladies, practiced the art.

On the whole, Jenner was greatly encouraged. From every part of the world he constantly received letters expressive of gratitude, admiration, and congratulation. When the continental sovereigns visited London in 1814, he was cordially received by the Emperor of Russia. He died in a good old age, with his general health and mental faculties unimpaired till the last. His death, occasioned by apoplexy, took place, of course very suddenly, on Jan. 23, 1822, in the 74th year of his age. He was buried in the chancel of Berkley church, and a monument to his memory was erected by his professional brethren. Most cordially do we hope that the civilized world will now do itself justice, by the erection of a statue which may proclaim to future ages his worth, and the public gratitude.

As in reference to persons who have achieved great things, there is much curiosity as to their personal appearance and habits, we will close with a description of him by a friend at the very prime of his life:—"His height was rather under the middle size; his person was robust, but active and well-formed. In his dress he was peculiarly neat, and every thing about him showed the man intent and serious, and well prepared to meet the duties of his calling. When I first saw him, it was on Frampton Green. I was somewhat his junior in years, and had heard so much of Jenner Berkley, that I had no small curiosity to see him. He was dressed in a blue coat and yellow buttons, buskins, well-polished jockey boots, with handsome silver spurs, and he carried a smart whip with a silver handle. His hair after the fashion of the times, was done up in a club; and he wore a broad-brimmed hat. We were introduced on that occasion, and I was delighted and astonished. I was prepared to find an accomplished man, and all the country spoke of him as a skillful surgeon, and a great naturalist; but I did not expect to find him so much at home in other matters."—*Christian Times.*

Ancient Manuscripts Recovered.

Simonides, a young Greek, now in Constantinople, is said to have made a rich discovery of manuscripts in ancient Greek. Among the books discovered, there are several Greek histories, not otherwise extant, geographies, poems, and some pieces, heretofore unknown, of Pindar, and among other interesting objects, a Homer written in the time of Pisistratus, and dedicated to his son Ippias, nearly twenty-four hundred years old. He pretends to possess a key to Babylonian letters, in Phœnician characters, and for Egyptian hieroglyphics; and he speaks in terms of learned comment of all and any hieroglyphics which are shown to him. Mr. Simonides is the author of a work in modern Greek, published some years ago in a school which existed in the island of Siani, where an uncle of his, a monk of the celebrated Mount Athos, possessed a will leaving to him the secret of a library sealed up and contained in leaden boxes. By means of this will, Mr. Simonides, after the decrees of his uncle, succeeded in finding the hidden literary treasure. He is desirous of publishing them for himself, but has not the means of doing it. The matter is still involved in some mystery; but the persons to whom he has shown some of the manuscripts have no doubt of their authenticity. Public opinion in Constantinople varies very much on the subject, and by some the whole affair is regarded as a deception. The number of the manuscripts in his possession is so great that it argues in their favor. He, moreover, has published a manuscript copy of the history of Septantius under Ptolemy Philadelphus; and, though this work was previously known through a very faulty copy, the one published by him here is considered quite correct and very favorable to the author.

The Farm.

The Value of Carrots.

Very few persons are aware that carrots are among the most wholesome of vegetables, and greatly assist digestion. French cooks, in many of their stewed dishes, introduce small slices of young carrots; and the *Julienne* soup, so common on every French table, is seasoned with finely chopped vegetables, young carrots being the most important; and the difference in digestion between a dinner eaten at a French *café* and an English hotel is not alone in cooking, but in the vegetable condiments introduced. It is only lately that chemists have explained the digestive stimulus known to exist in the carrot to consist of the *pectic acid* found in this vegetable.

After saying so much, with a view to the promotion of a better understanding with the carrot in our kitchen gardens, we quote the following from the Working Farmer, calculated to increase the field cultivation of this useful vegetable:—

"Two bushels of oats and one of carrots, is better food for a horse than three bushels of oats; and when used for light work, the quantity of the carrots may be increased. With such food, horses will enjoy good health and spirits, a loose hide, shining coat, and improved digestion. It may be thus explained. The carrot is very nutritious, and, in addition, aids in gelatinizing the watery solutions contained in the stomach of a horse. Carrots contain *pectic acid*, a single drop of which, mixed with the juice of an orange or other fruit, immediately turns it into jelly, and the Paris confectioners use it for that purpose. Soups in which carrots have been boiled are always gelatinous when cold, and are more easily digested than soups otherwise made.

The benne plant has similar properties. A thin slice of this plant thrown into a glass of water, renders it ropy and gelatinous, and for this reason it is a specific for summer complaint in children.

By examining the dung of a horse fed in part on carrots, it will be found to contain no undigested hay or oats, and therefore less quantities of those materials are necessary than when half the amount swallowed is parted with in an undigested state. For fattening animals the carrot is equally valuable, and for milk cows they surpass any other food. The milk of a cow at midwinter, fed on carrots, is equal in flavour to that supplied from clover in summer, while the butter made from the milk is finely coloured and highly flavoured.

In soils containing proper proportions of bone-dust, sulphuric acid, potash, and common salt, eight hundred bushels of long orange, or eleven hundred bushels of white Belgian carrots may be easily raised per acre, while

the same land will not produce one tenth the quantity of oats. We have sold our crop of carrots this year to the livery-stable keepers of Newark at fifty cents per bushel, and we could have sold another thousand bushels or more at the same price.

Experiments with Sorrel.

MR. FREAS.—I hear and see a good deal spoken and written against sorrel, which I do not think it deserves. I will give you my views upon it. Sorrel is generally regarded as a worthless production. Still it is not always easy to get rid of. On many farms, and more especially on such as are of a sandy formation, and imbued with acids, sorrel readily takes root, and finding in the soil an abundance of appropriate *pabulum*, it grows and perpetuates itself with surprising and fatal vigor. On all lands of this description it springs spontaneously. When a farmer finds that his fields have become infested with it, his only remedy is to make the best of it. If he keeps horses or sheep, they will find a ready market for the produce of the sorrel plot, and will be found to do as well as when fed on the best cultivated grasses, with a liberal supply of grain. Of the correctness of this I am convinced by numerous experiments made with a view to ascertain, precisely, its specific value for feeding, my farm being one on which the plant grows with the most luxuriant vigor, and cannot easily be got rid of. Horses, fed on sorrel hay—made, as hereafter stated, without a particle of provender—do remarkably well, and will perform as much work in the spring as those supplied with any feed it is possible to give them. As the sorrel grows short, and contains, for so diminutive a plant, a very considerable quantity of seed, it should be cut early in the season—say as soon as the seeds have fairly formed, and be made, not by open and long exposure to a hot sun, but in *grass cock*. This is done by allowing the crop to remain in *winrow* till toward night of the first day after mowing, and then *pitching* it into small cocks of eighty or a hundred pounds each, (green hay,) and *raking* up the scatterings afterward with a hand rake.

In this condition it should be allowed to remain for five or six days, if the weather be fair, and before getting in, it may be turned up, simply reversing the cocks, the bottoms of which will generally be a little moist, in consequence of absorption of water from the ground. By permitting sorrel to stand till the seed ripens, the value of the crop for hay will be materially diminished, as the seed will be shattered out in cutting and conveying to the barn. When ground, sorrel seed makes a meal highly valuable as a feed for hogs, &c.—*German-town Telegraph.*

Suggestions.

When I see ploughing done, year after year, in the same track, beside a fence or gully, till a dyke or fence of considerable height is thrown up, and of course a corresponding leanness in the interior, thinks I to myself, there is a want of good husbandry.

When I see a stone wall topping out with a single tier of round stone, thinks I to myself, the upper foot in the height of such walls ought never to have been put on, and I look out for dull scythes and loss of hay.

When I see a fruit tree loaded with twice the top necessary for bearing well, and this partly dead, thereby keeping the rays of the sun from the under crop, thinks I to myself, there is an indication of bad husbandry.

When I see a total failure of a crop of Indian corn, thinks I to myself, if that man had bestowed all the manure and perhaps two thirds of the labor on half the ground, he would have had a fair crop of ruta baga the following year.

When I see a farmer selling his ashes for ten cents per bushel, thinks I to myself, that farmer had better given his purchaser ten cents to leave them to his corn and grain.—*Main Farmer.*

LIME IN OLD GARDENS.—Old garden soils which have been very liberally manured, sometimes become sour for want of an alkali, and in such cases the use of lime and even of quicklime is judicious. The decomposition of fatid matters is thus secured, and the acid products of previous decompositions are neutralized, while the soil is rendered more pulverulent, and less inclined to cake from extreme heat or moisture.—*Working Farmer.*