

given proportions, the same sorts must contain the same classes and proportions of elements. Animals would thrive equally well on a variety of kinds of food. Nature admits of this. So it is with corn crops, and especially the straw of them. As great a collection of fertilisers in the shape of straw will take place on a soil containing no earth but fine clay as will grow on a soil principally made up of silicates. A dressing of one earth on another earth does more good than by merely altering its physical character. This is proved by the facts that an application of chalk will be entirely taken up in the course of time by the crops that follow: also by the exhaustion of clay when applied to moor or fen soils, and so on. Therefore as the chemical character of soils is changed by their physical opposites, and as straw contains some of the inorganic elements of the soils it grew on, what can be more worthy of attention than the point in question, how these elements are so easily made soluble, and when sundered are available for again entering into reproduction? This point chanced to be the last in this part of our subject, but it is not the least. *W. G.—London Gardeners' Chronicle.*

### BLACK HAWK HORSES.

We copy the following, in reference to this breed of horses, now so much in favor in the adjoining States, from the Transactions of the State of Maine Agricultural Society:—

"For the satisfaction of those in Maine who are in possession of Black Hawk horses, we copy the following letters, first published in the *Boston Cultivator*. The first is an extract from a letter of Benjamin Thurston, of Lowell, who was for several years the owner of Black Hawk, under whose training he was brought on the trotting course, and by whom he was sold to Mr. Hill, in 1844. Under date of Oct. 7th, 1847, he says:

"It gives me much pleasure to answer your letter, as I feel a great interest in anything which relates to Black Hawk. I will answer your questions in the order in which they are asked.

"Black Hawk was raised by Mr. Twombly, of Greenland, (formerly of Durham,) N. H. 2nd. He was begotten by Sherman Morgan, owned by Mr. Bellows at that time. 3rd. His dam was repre-

sented to be a half-blood English mare, raised in New Brunswick. She was finely proportioned, and of great speed. Although never trained, I think she could trot a mile in less than three minutes.

"This letter, it will be noticed, was written nearly eight years ago. To show the estimation in which Black Hawk and his progeny were then held by Mr. Thurston, it will not be out of place to introduce another extract from the same letter, as follows:

"I bought Black Hawk when he was four years old; for six years used him as my family horse, and think him, without exception, the finest horse I ever knew. I have owned a number of horses for the last twenty-five years—varying from ten to thirty-five at a time—and have also been in the habit of purchasing the finest I could find for sale; but if the choicest qualities of the best horses I ever owned were combined, I do not think they would produce an animal to surpass Black Hawk. In the first place, he is the best roadster I ever drew rein over. I have frequently driven him fifty miles in half a day, and once drove him sixty-three miles in seven hours and fifteen minutes. He did it with perfect ease, and indeed I never saw him appear fatigued. At the time I owned him, I believe he could have trotted one hundred miles in ten hours, or sixteen miles in one hour, or one mile in two minutes and forty seconds. In the second place, he has the best disposition of any horse I ever knew, and is perfectly safe for a lady to ride or drive. Thirdly, he will draw as kindly as any team-horse. His stock is unequalled. There are in this part of the country some ten or twelve of his get, five or six years old. These can trot a mile in from two minutes thirty-five seconds, and sell at prices ranging from \$500 to \$1000. They are finely proportioned, good sized, nice gaited, hardy compact animals."

"We next introduce an extract from a letter written by John Bellows of Lancaster, N. H., (owner of horse Sherman Morgan,) to David Hill of Bridport, Vt. It comprises an interesting description of the sire of Black Hawk. Its date is March 24th, 1848:—

"In answer to inquiries relative to the origin of your famous horse Black Hawk, I state that he was foaled at Durham, N. H., the property of Ezekiel Twombly, now of Greenland, N. H. His dam was a good sized, fast trotting, black mare, resembling in appearance, the Messenger stock of horse.