

makes much headway. To scarify therefore below the roots after harvest, even if nothing more is done, stops their progress, destroys many during the winter frosts, and materially assists the cleaning in the spring. Hoing in summer or even horsehoeing seems to be of no use whatever, but is generally the reverse: it divides and transplants the roots in a thousand pieces. Perhaps the only way to eradicate couch is to grow fewer crops of corn. If the seeds, instead of being sown with wheat or oats, be broken up, and grown as bastard fallow in the second year of their growth after midsummer—a time when they are of little real use as food for the stock—the enemy may not only be arrested, but almost extirpated, and the soil will be free from those crops which foster the shedding of the seed of the couch; a state of things indispensable to the eradication of the weed from the soil.

#### POWER OF THE ENGLISH LANGUAGE.

It used to be said that if Athens and Lacedæmon could make up their minds to be good friends and make a common cause, they would be masters of the world. The wealth, the science, the maritime enterprise, and daring ambition of the one, assisted by the population, the territory, the warlike spirit, the stern institutions of the other, could not fail to carry the whole world before them. That was a project hostile to the peace and prosperity of mankind, and ministering only to national vanity. A far grander object, of more easy and more honorable acquisition, lies before England and the United States, and all other countries owning our origin and speaking our language. Let them agree not in an alliance offensive but simply never to go to war with one another. Let them permit one another to develop as Providence seems to suggest, and the British race will gradually and quietly attain to a pre-eminence beyond the reach of mere policy and arms. The vast and ever increasing interchange of commodities between the several members of this great family, the almost daily communication now opened across, not one, but several oceans, the perpetual discovery of new means of locomotion, in which steam itself now bids fair to be supplanted by an equally powerful but cheaper and more convenient agency, all promise to unite the whole British race throughout the world in one social and commercial unity, more mutually beneficial than any contrivance of politics.—*London Times*.

#### STRENGTH OF INSECTS.

In a volume published by Van Voorst, on the Natural History of Animals, several illustrations are given of the super-herculean strength with which the commonest insects are endowed.

The common flea, as every one knows, will without much apparent effort, jump two hundred times its length, and several grasshoppers and locusts are said to be able to perform leaps quite as wonderful. In the case of the insect they scarcely excite our notice; but if a man were cool to take a standing leap of three hundred and eighty odd yards, which would be an equivalent exertion of muscular power, perhaps our admirers of athletic sports might be rather startled at such a performance.

Again, for a man to run ten miles within an hour would be admitted to be a tolerable good display of pedestrianism; but what are we to say to the little fly observed by Dr. Delisle, "which ran nearly six inches in a second, and in that calculated to have made one thousand and eighty steps? This according to Kirby and Spence, is as if a man whose steps measured only two feet, should run at the incredible rate of twenty miles in a minute. Equally surprising are the instances of insect strength given by Mr. Newport.

The great stag beetle, which tears off the bark from the roots and branches of trees, has been to gnaw a hole, an inch in diameter, through the side of an iron canister in which it was confined and on which the marks of its jaws were distinctly visible.

The common beetle can without injury, support and even raise great weight, and make its way beneath almost any amount of pressure. In order to put the strength of this insect-Atlas to the test, experiment have been made which prove that it is able to sustain from twenty to thirty ounces, a prodigious burden when it is remembered the insect itself does not weigh as many grains; in fact, once more taking man as a standard of comparison, it is as though a person of ordinary size should raise and get from under a weight of between forty and fifty tons.

#### LIME IN SOILS.

The question—How much lime is needed in soils? is an interesting one. Very erroneous ideas formerly prevailed in reference to this subject. It is not many years since the idea was strenuously advanced, that the application of lime was all that the soils of Massachusetts needed, to make them produce wheat. Chemistry has rendered good service in this case. Of late, it has been ascertained that some of the best wheat soils,—those of Seneca Co., N. Y., for instance,—contained less than one per cent. of lime. So far as examinations have been made there are but few soils in this State that do not contain as much. A leading article in the *Genesee Farmer* for March, states that "the instances are rare where one per cent. of lime exists in the soil, that the addition of more is beneficial, or would pay the cost of application." It is stated that in the wheat district of Wheatland, Monroe county, N. Y., the soil does not contain over two per cent. of lime, and that on the noted wheat farm of Gen. Harmon, in that district, the use of lime does not increase the crop.—*Ibid*.

#### RAW AND COOKED FOOD.—CARROTS FOR HORSES.

In relation to the statement that cooked meal is nearly three to one better than raw meal, for hogs, which we copied some time since, from a speech of Professor Mapes, Mr. Levi Duand writes us, that his father was in the habit of cooking food for hogs for twenty-five years, and that twenty-five per cent. was as much as he deemed to be the saving by the process. Hon. John Brooks, Princeton, in a letter to the Hon. J. W. Proctor, Danvers, (published in the *N. E. Farmer*), says—"The statement that 50 per cent. is saved, by cooking meal for hogs, is beyond my experience, which is not more than 25