

and frequently destroyed before they become rooted. By this means the stools become very vigorous and bear the most abundant crops. In the spring, after the fruit is set, place around each plant a small quantity of straw, or what is much better, cover the whole surface of the ground one inch thick with wheat chaff. This prevents evaporation, protects the fruit from the earth, improves the flavor, and will greatly increase the size."—*Indiana Far. and Guard.*

### ITALIAN RYE-GRASS.

The following communications were read at a Council meeting of the Royal Agricultural Society of England:—

"7, Curzon-street, May Fair, London,  
July 12, 1845.

"I beg to send you Grace a report of my mode of cultivating Italian rye-grass as food for my horses, the success of which has astonished me very much, and which I am anxious to make known for the general welfare of agriculturists at large.

"My land, a strong clay, in good heart, and under-drained, is finely pulverised during the summer months, after tares, or any early crop of corn; is sown broadcast with four bushels per acre of seed, grown by myself—without weeds—harrowed very lightly with bushes—iron harrows bury the seeds too deeply; if weeds grow they are pulled, and the grass stands for a crop, which in 1844 was cut the first time the first week in March, with about ten inches of grass; April 13th it was cut the second time, May 4th the third time, May 24th the fourth time, June 14th the fifth time, July 22d the sixth time, with ripe seed and three loads of hay straw to the acre. Immediately after each of these crops the land was watered once from a London street water-cart, with two parts of pure urine from the stables, and one part of water, the produce of each crop increasing with the temperature of the atmosphere, from three quarters of a load per acre, as hay, to three loads per acre. The crop having shed a quantity of seed, I was doubtful the urine might injure its growing, so discontinued to water, but well harrowed it with iron harrows, and left it expecting nothing more from it; it produced, however, three or four, I believe four, light crops afterwards, and has now standing upon it again three loads to the acre, the third crop for seed. My first cutting (1845) this year, was not till April 6th; second, May 3d; third, June 9th; fourth, two feet and a half long, now standing on the land. I think it necessary to observe, from my own experience, Italian rye-grass differs as much in quality and variety as English rye-grasses or English fruits; there are Italian rye-grasses that bloom at one foot and a half high; and that I grow, as your Grace has seen, stands from four to five feet. Any further information that may be required, so far as I am able, shall be given to any one wishing to grow the plant. I attach a letter sent me by a practical farmer, to whom I supplied seed for an acre, which will furnish interesting information to sheep graziers.

(Signed)

"WILLIAM DICKINSON."

[Mr. J. Hunt to Mr. Dickinson.]

"Hayes Gate, near Uxbridge, July 1.

"With the Italian Rye Grass seed I had of you, I sowed about an acre the first week in September last, after a crop of spring tares; the ground was manured with about 10 tons of good horse-dung. The second week in April I began to feed it off with ewes and lambs, and they made very quick progress, especially the lambs: the Grass producing an abundance of milk. There were forty-two couples, and the grass supplied them three weeks, giving the ewes chaff and oats, and the lambs peas.—After this they began to feed it again for want of other food. I took them off the grass on the 13th of May, and on the 18th of June we mowed the whole for hay, which produced nearly two loads per acre; this was about five weeks growth. I should not have pursued this plan had

I not had tares which I wanted off the land to sow with Swedes. The grass is now growing freely, but not so fast as after seeding off. I want your water cart. I am quite satisfied of its being the most valuable plant I know of, especially for early spring feed: it comes to perfection for feed quite as early as rye, and the comparison between the two for feeding qualities is as ten to one in favour of the Italian rye-grass. I am so well satisfied of its goodness that I intend sowing a much larger breadth in the ensuing autumn after wheat.

(Signed)

J. HUNT."

The President informed the Council that he had made arrangements for the trial of Mr. Dickinson's plan on the clays and alluvial soils of Somersetshire, as well as on the chalks of Dorsetshire; the result of which he would in due time communicate to the Council, along with those of an extended comparative trial he had instituted of the cultivation of the various wheats on the soils of Dorsetshire.

*Germination of Seeds.*—The President laid before the Council the following communication addressed to him by Mr. La Beaume, in reference to the application of electric currents to seeds for the purpose of exciting their vitality and quickening their growth.

"London, 11 Argyle-street, July 30, 1845.

"As the President of your Society, I beg to lay before you the following facts, which I think important to the interests of agriculture, horticulture, and floriculture. By former, and also more recent experiments on a limited scale, I have fully succeeded in quickening the germination of various seeds, invigorating their plants, increasing the fecundity, and improving the quality of the produce. This is particularly important in turnip seeds, as you well know. The means I have employed are not atmospheric electricity, galvanism, or electro-magnetism, which cannot apply, but electricity developed by a machine of adequate powers, and by a simple, peculiar, effective process, easily understood, and easily used with very little manual labour. The time required is, on the whole, about half an hour, and 1,000 bushels of wheat, or any other grain, can be electrified as easily as an ounce at the same time. I beg also to remark, that this my process applies equally to the resuscitation of the impaired vitality of old as well as bad seeds, to the revivification of withering plants, and to the increase of the quality and quantity of their fruit. In order to a more extended trial, and to the establishment of the facts I have communicated, if several members of your body will send me some packets of turnip and other seeds, I will freely and cheerfully electrify and return them in a day or two, so that success may be proved by an impartial trial under your auspices, and I shall neither seek or receive any other reward than your approbation, and the satisfaction of diffusing practical knowledge for the public good.

(Signed)

"M. LA BEAUME."

### COAL ASHES AS MANURE.

I observed in your last paper an article on the use of coal ashes. I have tried them in various ways, and find them a good manure, particularly on heavy clayey soil.—Put a good coat of coal ashes on such soil and it will make the soil light and mellow—more so than anything I ever tried. There are pieces of grass in this place where top-dressing with stable manure seemed to have little or no effect; but a coat of coal ashes acted like magic, and produced two large crops in a season. I believe it a good manure for almost any kind of soil. Our Alms House farm collects all the manure from the streets in the city, and there is an abundance of coal ashes among it; and the keeper informs me that the more ashes the better the manure. I was told the other day by one of our principal hotel keepers, when I applied to him for his ashes, that he had sold them all to a farmer in Farmington, who had to cart them about ten miles, and no man would be fool enough to cart them so far, if they were not of great value.

We have had a long and severe drought, so much so that our hay crop will be light. Our uplands, where we have cut two tons to the acre, will not yield us this season one ton. We will not have more than half a crop, if we