From the United States.

[BY OUR OWN CORRESPONDENT.]

Washington, D.C., March 20, 1880. Scientific investigation and practical experiments by the Agricultural Department of this Government are daily demonstrating the possibilities of our varied soil and climate in the production of plants, fruits and cereals not indigenous thereto, and pointing out to the intelligent agriculturist the usefulness and methods for increased yield, of those which have been struggling in stunted neglect for existence ever since civilization planted its foot on this continent. Take, for instance, the analyses recently made by the chemists of the department of the many varieties of grasses in the United States. One of the most important questions for farmers is, "What grasses shall I grow-what exclude from cultivation?" He sees two grasses growing in his field, and naturally concludes that the one of ranker growth is preferable. This conclusion is in many cases erroneous, as the chemical analysis shows that in many instances the less luxuriant grass is the more nutritious, and on other accounts the more to be desired. The analysis shows further that by the addition of this or that element to the soil, or the neutralization of some exciting element, the luxuriance of the rejected grass may be made to equal and even surpass that whose rank growth only caused it to be preferred. Some grasses produce more milk, others more muscle, and others again more fat. These investigations of chemistry, and the reports based thereon, instruct the farmer and stock man which grass to choose to produce any desired effect.

The experiments of Frau Von Lade in the cultivation of the nettle in Germany, given to the public through our State and Agricultural Departments, has called the attention of many of our agriculturists to that pestiferous and noxious weed, and the consideration of the practicability of utilizing the many excellent qualities which have been in seclusion so long. A practical farmer from the North-west, in referring to this subject a short time ago, said: - I have done more cursing, digging, mowing and burning over that pestiferous weed than any man in my county. Being unable to exterminate, I have concluded to utilize, and my experience and observation confirm much that is said by Frau Von Lade in her pamphlet. It will grow in any kind of soil, requires little or no care, yielding in abundance, and as a fodder is excellent. During the first two or three years it may be harvested two or three times, later four or five times, or as often as the plants are one or two feet high and remain tender. I am convinced from experience, also, that the nettle may be mixed with the cattle fodder or infused and served warm the next day, in which shape cattle are generally fond of it. Cows and goats yield more milk, the milk more better colored butter, evenin winter. Swine fatten quicker and better when fed with this fodder. I find also by acting on the suggestion in Frau Von Lade's pamphlet, that a handful of nettle seed mixed daily with their oats, make horses plump and give them a glossy coat. My experiments for several winters prove that hens, when fed nettle seeds mixed with their food, with few exceptions, lay regularly all winter. The assertion that nettles, by long culture and proper mechanical treatment, will yield a much finer and more beautiful fibre than hemp, I cannot endorse until I live several generations to try it. Those farmers in the United States and Canada who have failed to exterminate the nettle, should, like our western farmer, utilize it, and the translation of the German pamphlet entitled; "Die Nesseleine Gespirmstpflanze," will aid them to that result.

The Commissioner of Agriculture, in a communication just made to the Sub-Committee on Agri. you may look for a good yield of grain.

culture in the House of Representatives, states that the results achieved in the laboratory of his department by various tests, have conclusively proven that, at certain stages in the growth of the plant, and treated in certain ways, the juice of sorghum and common cornstalks will as invariably granulate into pure sugar as will that of the ribbon cane of Louisiana, and giving results quite as favorable per acre as the average there. The effect of this work in the department has been to awaken a wide-spread interest in this industry, and we already see preparation making for planting tens of thousands more acres the coming season than were planted last year. He further states that the people of the United States have consumed since 1849, when gold was first discovered in California, over eighteen hundred millions of dollars worth of imported sugar and its allied products. During the same years there have been taken from the mines of California and other western States and territories, seventeen hundred millions of dollars. We see, then, that it has taken more than all the gold that we have produced to pay for the foreign sugar we have consumed. How this vast sum may be saved to the country in the future is one of the problems taken for solution in the laboratory of this department.

The Commissioner also says, in relation to the benefits resulting to agriculturists from the distribution of seeds and instructions thereon, that the increased production, per acre, of wheat and oats alone, which has resulted from over distribution of those cereals during the past few years, should suffice to convince the most skeptical of the great value of this work. Taking the last three years as compared with the three previous years, the increase in wheat was two bushels per acre. He states that he does not think it at all impossible so to hybridize and improve wheat through the instrumentality of such forms as he has heretofore recommended to be established, as to increase the general production of this cereal five or six bushels per acre. In portions of the country the increase in oats—an increase clearly the result of our distribution-has been as high as from ten to twenty bushels per acre.

Congress has now before it a recommendation for the purchase of one thousand acres of land near this city, to be devoted, under the direction of the Agricultural Department, to the experimental cultivation of all the different plants, cereals, trees, &c., suitable for a climate similar to that of Washington, and especially to the bybridization and production of varieties differing from and better than those now in use. Also for a veterinary surgeon, and a farm hospital for the treatment of all diseases in animals, and a veterinary division of the Department, with such supervising power as would enable it to detect and deal with all diseases of animals throughout the United States, and make known to farmers and stock men the prevention and cure.

OLEOMARGARINE.—The Iowa State Legislature passed a Bill prohibiting the manufacture and sale of oleomargarine in the State under heavy penalties and imprisonment.

The best soil for wheat is where clay predominates. A mixture of sand and clay is the best for a succession of crops, and sand for a bright, stiff straw, but too sandy a soil is too porous for wheat, although good spring wheat is frequently grown on sandy soils. Muck is not well adapted for the growth of wheat, but where the land is rich wheat will succeed on a variety of soils. There is no better preparation for a wheat crop than clover turned under. Nitrogen is needed for the growth of wheat, and if the urine of the horses or cows is applied to the growing crop early in the spring, you may look for a great yield of grain.

Caution. We deem it our duty to our subscribers to advise them not to depend too much on all the printed circulars or pamphlets that flood the country, nor on every advertisement, nor on all the panegyrics you may see in papers. The world is full of deception, and every means devisable is planned to get your money and property from you. It is far better for you to read publications that you pay for than free, gratuitous publications of any kind, even though they may be paid for by a State or nation. Many a State in the Union has expended large sums for publications tending to deceive. Even Canadian expenditures for printed matter are not free from taint. We extract the following from the Globe, March 20th :-

"Last Tuesday morning an on grant train left Ottawa, and by the time it reached Cobourg there were 447 persons on board bound for Dakota, and only three for the Canadian North-west."

This we may partly account for by the neglect of our Legislators to remove the just causes of complaint as shown in the articles on Manitoba commencing in July, 1879, and partly by the glowing reports about the mining in Colorado. Many purchase cheap tickets for Manitoba who wend their way to Dakota and Colorado. We publish the following letter from one of our subscribers, and we can depend on our subscribers being the most reliable, intelligent, unbiassed and unprejudiced class of Canadian farmers:

SIR,-You will do a good turn to many of the young men of Canada if you insert the following. A great many are flocking out here from Canada, trying to get employment, thinking they can pick up money out of the dust of the street. plenty of money here, of course, but it takes a long time for hired men to get much of it. Hundreds of men are here that cannot get work to save their lives, and hundreds are arriving every day without much money in their pockets nor any friends to help them. To such I would say, stay where you are. Dozens of men are working here for one dollar and fifty cents per day, and paying four dollars and a half per week for board. county will be overrun inside of three months, and hardship will be the experience of many that could have lived well in Canada. I send this, as I am an old subscriber, in hope that you will give it a place in your valuable paper, and as it reaches so many homes, some may be wise enough to take friendly advice, thereby saving their friends from having to send for them by purchasing a ticket for them to get home. T. A. R.

Denver City, Colorado, March 16, 1880.

If you have friends that you can depend on and are not succeeding where you are, you may find it advantageous to move to our own unoccupied lands in this Dominion. Many have done well in the States; good inducements are offered to those who can take the hardest oath to fight against their native country; in fact, were it not for such an oath, we might perhaps have been a resident of the States, but probably we may be fastidious. Our advice to the old and middle-aged is, if you can live where you are, use great care before risking a certainty for an uncertainty, although you may hear of gold and silver being obtained in large quantities. The success of one man is in the mouths of thousands; the frozen, the starved, the killed have no voice and are never heard of one mile from where they drop, either from the hand of want or the robber. We have not yet, and perhaps never shall publish the heartrending scenes that we have seen and heard of when in Kansas, Missouri, Arkansas, the Indian Territory and our North-west.

Virginia creepers are being planted by the Pennsylvania Railroad Company on the hill-sides along the tracks. It is done to prevent land-slides, and will add greatly to the beauty of the scenery.