

From the United States.

WASHINGTON, D. C.,
Dec. 19th, 1881.

The new Commissioner of Agriculture thinks that the poverty of the soil in South Carolina and Georgia, where the Government experimental tea plantation was located, will prevent the realization of that success in the cultivation of the plant heretofore promised. He has, accordingly, put a stop to the extension of the work, and, for a while yet, at least, the U. S. and Canada must look to China and India for their supply of tea. Speaking of China reminds me that the Celestial Empire is becoming progressive. Information has been received here, through official sources, that an extensive stock farm has been established in China, stocked with the best cattle, sheep, &c., and conducted on the most approved American plan. A number of small shoots of the Laurus tree have been brought from China to this country. They grow very rapidly, and attain a height of one hundred feet. The wood is very valuable for its durability, and is used for building bridges, &c. It is said, in illustration of its great durability and freedom from decay, that the pillars of the Tamler of the Mingos, made of this wood, are 300 years old, and are perfectly sound.

The Commissioner of Agriculture, in his report just made to the President, says in reference to the experimental culture and propagation of seeds, plants, &c.:—"The facts, as well as the principles involved in the systematic rotation of crops, rest in comparative obscurity; but little is known about it, except that it is a practice absolutely essential to profitable culture. The same remarks apply to the value of *changing seeds from one soil and climate to another soil and climate*. It is well known that results follow such change, sometimes favorably and sometimes unfavorably; but how far these are influenced by soil alone, by climate alone, or their combination, has not reached a decision of practical applicability."

"All of our cultivated plants have run into numerous varieties, many of them comparatively worthless, and many others of *local value* only, or of limited special utility." He proposes comparative tests in different latitudes, the result of which tests will also indicate the line of operation to be pursued in improving the plants or crops by crossing or by hybridizing varieties combining special values.

The botanist, in his report upon *blue-joint grass*, says: "It is a stout, erect, tall perennial, growing chiefly in wet ground or low meadows. Its favorite situation is in cool, elevated regions. It prevails in all western portions of the U. S. and British America. Farmers report that they consider it one of the best grasses of the meadow." He reports on eight or ten other varieties, none of which are suited to the climate of Canada.

This Government is still manifesting great interest in the investigation of contagious and other diseases of domestic animals. Two good sized volumes have been issued on the subject within the past year.

Dr. H. J. Detmey, V. S., Department of Agriculture, has been intrusted to continue his experiments with the disease known as swine plague, with special reference to ascertaining what agents seem to offer the best results when used as prophylactics. He was advised to put to a practical test, on a large scale, the subjects selected for experiment. By studying the disease in large herds, and watching closely the effects of the agents used, it is thought that a cheap, simple and efficient preventive of this destructive disease might be discovered, and a lasting benefit thus conferred on the farming community. A full report of his experiments will be given in a short time.

Dr. Lyman, a veterinary surgeon, who has been employed by this Government to investigate the alleged existence of contagious diseases among domesticated animals, landed in England from the U. S., reports, in reference to American cattle effected with the foot and mouth disease, that "careful investigation shows that the disease, if it existed, was caused by infection communicated to the cattle *after they were shipped from American ports*, and is to be attributed to exposure to the virus imported into England from France, and spread abroad from Deptford market, where it was first discovered. It is considered possible that the disease may be imported to American cattle (including Canadian) by the use of the head-ropes, which are often taken from diseased European animals and used on board American vessels employed in the cattle trade, and also by taking on board these vessels articles for shipment from wharves where diseased animals have been landed." Dr. Lyman also reports that during his stay in Great Britain, no diseased hogs were landed from the U. S.; that the report of the Veterinary Department of the Privy Council for 1879, shows, that out of 279 portions of swine flesh taken from American hogs that have been condemned and slaughtered on account of swine fever, only three were found to contain living trichinae. The report of the Privy Council in giving its reasons for not prohibiting the importation of American pork, says: "Such a measure would have damaged the trade without producing any satisfactory results." * * * Besides, trichinosis among swine is known to exist in Germany, and it probably exists in other exporting countries, so that nothing short of prohibition of swine flesh in all forms from all foreign sources would be effectual."

The Agricultural Department has been engaged within the last year in an examination and measurement of the fineness of wools and animal fibers. They have measured, in all, about 600 samples of wool of different qualities, making, in all, 2,100, and among them wools from Germany, graded by one of high authority on the German system of classification. From these examinations it is found that it is possible to produce in the U. S. and Canada as fine wool as can be produced in any other part of the world, and that the fineness of the products of the Saxony and Spanish merinos have not deteriorated since their introduction into this country, wherever the maintenance or this quality has been kept in view of the breeders.

[See editorial on correspondence.]

I like your paper very much, and think it among the best publications of its class; indeed I am giving it the preference. May success attend you in your laudable efforts to spread information upon the subject of Agriculture.—A. LONGLEY, M.P.P., Paradise, N. S.

At a late meeting of the Ma kham, Ontario, Farmers' Club, CANADA THISTLES was the main subject of discussion. Members generally agreed that deep ploughing only makes them thrive, but ploughing shallow, or any means of cutting them off just below the surface, soon subdues them. A good cultivator, and especially the heavy English scufflers, six or seven feet wide, do it effectually and rapidly, killing quack grass as well as thistles with the aid of our hot, dry summer weather. Shallow ploughing and scuffling, or scarifying, were approved as preparation for crops, the subsoil being loosened but not turned up on the surface. On the same occasion Mr. Gibson said that millions of dollars are lost by TEAMING GRAIN TO MARKET IN THE FALL, with dear labor, instead of working at the right season to prepare the land for clean and good crops. He is quite sure he could afford to take 10 cents a bushel less for his wheat in winter rather than haul it in during the fine weather, when there is so much necessary and profitable work to be done.

The Dairy.

Make-rooms in Cheese Factories.

BY L. B. ARVOLD.

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Now that cheese factories are not in operation it is a good time to overhaul them generally, and make repairs, if there is any occasion. There are few factories which do not get out of order, more or less, in the course of a season's use. The make-rooms, in particular, generally keep in order but a short time. The constant wetting and drying of the floors soon rots them away and also the timbers that support them. The alternate shrinking and swelling of the flooring opens cracks and crevices into which whey enters and remains till it sours and decays, and fills the room with its vitiating odors. In most factories this becomes a source of constant contamination to the air of the factory. There are but few factories in which a person accustomed to breathe the pure out-of-door air, will not, upon entering the make-room, at once detect the peculiar smell of sour and decaying whey, but which the maker, from being daily in it, fails to appreciate till it becomes extreme.

The development of such odors in a factory are objectionable first, on the score of health, and second, because more or less of them are taken into the cheese to its injury. Milk, before it is made into cheese, is a powerful absorbent of every odor which comes in contact with it, and moist and warm curd is but little inferior to milk in the readiness with which it takes in and retains any offensive or foreign smell.

The cheese, after it has been pressed, and banded and greased, is less receptive of odors, so much so that many have denied that cheese, after pressing, takes in any odors at all. But this is a mistake. Cheese only differs from milk and curd in the degree of its absorption power. I saw a good demonstration of this in Crawford county, Pennsylvania, in the summer of 1879. A factory was built some forty or fifty rods from the site of an old tannery, from the scent of which the factory was protected by a ridge of high ground and the intervention of adjacent buildings. In hot weather, cheese was cured in the second story with the windows open. In one corner of the room the cheese became affected with a peculiar taste and smell which grew more intense till they were cured and sent off. When they were out of the way others were put in their places, which became affected in the same way as often as a change was made. The fact became a source of annoyance for which neither the maker nor proprietor of the factory could account. When examined by an expert the smell peculiar to the decomposing animal matter about the old tannery was detected in the cheese, and an inspection of the situation showed that one corner of the curing room—the one in which the affected cheese lay—projected enough beyond the other buildings to allow the wind, when in the right direction, to blow obliquely into the extreme window upon one side, and pass out at the nearest window in the adjacent end. By passing over the cheese in that corner of the room, they had absorbed the foul odors it was sweeping away from the putrifying debris in the tan-yard. Closing the windows abated the annoyance.

Upon closing my factory one fall, I put some cheese into a room in a cellar to finish curing, and left them in boxes with the covers off. The room was done off for a milk room, but at that season was used for other purposes, and the door was frequently opened. It was not long before the cheese, though nearly cured, tasted distinctly of the cabbage and turnips stored in the other part of the cellar. I have, upon several occasions, found cheese, after being placed in the curing room, to