Brindle loves to be handled, but by a gentle hand. This touches her domesticity, of which she has a large share. If this is abused or neglected she will suffer. She will especially not give so much milk, the lactreai or maternal seeming intimately related to the domestic. Hence, where cows are herded, or neglected, or abused, they are less profit-able than those that receive the opposite treatment, as is usually the case where but a single store is kept. Such a cow is petted and made, as itwere, one of the family. She is seldom fat, though in fair flesh, giving milk largely in proportion to the food she consumes; that is, she is disposed to give milk rather than to take on flesh; and this is precisely what the dairyman wants-he wants all the milk he can get for the amount of food he feeds. If his food is expensive, there is less gain, sometimes none at all, sometimes loss. But this need not be. To feed largely of grain will never realize large profits. Grass is the cheapest, not as pasture, but cut and fed, in the way of soiling. When we say grass we include clover. This plant is the cheapest growth on the farm; it realizes most getting so largely from the atmosphere most, getting so largely from the atmosphere, and ammonia at that. And clover it is found is the best plant for soiling; it may be cut the season through, the small or medium kind quite early. Rye may be used a little earlier. Clover in all its earlier stages of cutting-and it should never be done later than full blossom—is better for being a little dried or withered; it should never be fed with the dew or rain on; whether for pasture or for soiling, as bloat is threatened in such case. We know this by experience, having lost several cows, and the best are apt to be taken, being the most gready feeders. The best way is to mix clover with one or more of the grasses for pasture; clover alone, or mostly, for soiling; and clover, or clover and well cured corn stalks, for winter. This is the practice of some of our best dairy men, and is a success. Soon as the corn is glazed it is cut and put up so as to cure well and yet be protected from the rain. This is the cheapest feed, and affords a full amount of milk, dispensing with the dear grains, oil meal, &c. It also enriches the land at the same time.

To treat Brindle kindly, and give her this food, which she will relish if properly secured, will realize the most profit. A large herd should be divided, and the unruly members kept or disposed of. Clean stables, with soft (finely-littered) floors, ventilation, yet sufficient warmth to prevent suffering, and ready access to good water, are elements that cannot be dispensed without sacrifice. Dairying is much as we make it.—Utica

As to wintering dairy cows the first thing needful is a good, warm, comfortable stable, well ventilated, and supplied with plenty of straw for bedding. The cows should be fed regularly; let it be either twice or thrice a day, with good nutritious food, salted every other days and finally good approximately their day; and, finally, good, pure water at their pleasure. Treat them kindly, keep them clean, milk fast and at a regular hour, and allow no talking while milking. Never wet the teats, as it is considered, above all things, the most filthy, causing them to crack. Give a few bran mashes before and after calving. Always take the chill off the water given to the cow for a day or so after calving.

## The Harvest of 1873.

We are unable as yet to give a complete report of the produce of the year; but from all we can learn the crops, though they cannot be called abundant, are much heavier From than was at one time anticipated. the G.W.R. returns we glean the following summary:—Of 67 places reported from, the gives a yield of 25 bushels or over. Spring wheat generally a very light crop. wheat generally a very light crop. Hay generally light. Potatoes, where the ravages of the bug have been prevented, give a good return, especially the early potatoes. Apples not so plentiful as last year. Plums a failure. Cherries and strawberries have been abundant. From Nova Scotia and New Brunswick the reports are favorable. The hay farmers are promising themselves a highly remunerative season, as, from the light hay crops in the New England States, it is expected to be high. The latest reports from Europe are rather favorable, though England will need large additional supplies.

The apple crop in Wisconsin is not likely to be an average one, but the other kinds of fruit grown there generally promise well.

#### Science and Agriculture.

FROM AN ADDRESS AT A MEETING OF THE ONTARIO TEACHERS' ASSOCIATION BY PROF. WILSON, OF TORONTO.

Lastly, as regards Agriculture, it is chiefly of importance to note that this subject is not a science at all, in the strict and proper application of the term. Agriculture is what is sometimes, though improperly, termed an "applied science." It is an "art." In other words, scientific agriculture consists in the application to husbandry of the scichemistry, natural history, botany and geology. These sciences can, as regards their elements, be taught with profit in schools, but agriculture can only be learnt on the farm, and should find no place in ordinary school education, nor, indeed, in any course of study which cannot be carried out and enforced practically.

We are pleased to find the opinion we have always entertained on Collegiate Agricultural Education borne testimony to by so high an authority as Prof. Wilson. Let the young man preparing to pursue the profession of agriculture get as good an education as possible. Let him, if he can attain to such studies, learn the subsidiary sciences, nor think any branch of learning unprofitable and let him study agriculture on his father's farm, receiving the benefit of his experience Or if from any circumstances it be deemed fit that he should have another instructor in the art of farming, let him serve an apprenticeship to the profession to one who understands it thoroughly, and is successful in its practice. Such a course would make a good farm-We would say, in addition, let not the want of the thorough instruction attained to by this system prevent others from the pur-suit of the art. Though they who are so trained have an advantage over others, all who have a willing, resolute mind may eventually succeed. They can profit by the experience of others. "Where there is a will there is a way." The writer of this advice, when a boy, imbibing his first love of agriculture from reading and translating Visil's culture from reading and translating Virgil's Georgies, had his first lessons in practical farming from an illiterate farm laborer-lessons not forgotten to this day. There is nothing more useful in agriculture than the habit of observation. Indeed, to this habit the world is indebted for many of the most important discoveries of science.—Ass. Ed.

#### The Canadian Agricultural Emporium.

As the farmers' busiest season is now passed, the evenings are lengthening and money begins to return from the results of the season of toil, more time can now be devoted to reading and laying plans for future operations.

The charter for the Emporium was granted by the Legislature of Ontario at its last session; it was published in the June number of the Advocate. Turn again to that paper and read the charter carefully; you will see that you may be benefitted very materially by Leing a shareholder, and that you could not be injured beyond the amount you subscribe for, if you should invest in it.

Circulars have been sent to the County Clerks and to the Wardens of each county in Ontario, in regard to it, but very few of the County Councils have as yet taken any notice of them, or have reported to us in regard to them. The County Coun-cil of Wellington has left it over for further consideration, and Oxford County has also taken a similar step; in Kent there has been a desire expressed by some to endeavor to secure it in that County; from Brant we hear that it was thought the Government Farm would be sufficient, but glorious York Township Council has eclipsed all others in tendering the first requisite the law grants to the institution. We happened to be at Eglington just as the Council was sitting; we addressed them briefly regarding the Emporium. The Reeve at once said we could safely depend on having what land was required for the institution free from taxation, if that township should be selected as the place for the site, and further stated that should the Directors of the Agricultural Emporium desire to select land in that townporium desire to select land in that township, further aid might be relied on. The nitrate potass, 1 pint water; mix well.

Council gave their united consent to this favorable offer.

It is rather remarkable that the whole of the councilmen of the Township of York are either Reeves or Deputy Reeves, and all sit in the County Conneil. We heard from the Reeve of York that no circular had been before their County Council resolution the Representation of the Proposition of the Representation of the Proposition of the Representation garding the Emporium. Our clerk addressed one to each Warden and County Clerk, and they were duly mailed. This is to be regretted, as perhaps other County Councils have not had them, or perhaps some may have ommitted to notice them in the hurry of business.

Subscribers to this paper in sections that might be suitable for the Emporium to be established in, might enquire of their Warden or County Clerk regarding the circular.

We believe that the Canadian Agricultural Emporium, carried on by farmers that have an interest in it, will be or far more advantage to the country than the Government Farm, and we feel quite sure that it may be made as profitable as any other investment in Canada. The far-mers of Canada will soon be sick enough of the Government Farm, and will vote it down as a most gigantic sink for their money. That institution was intended to entirely quelch this little enterprise, the Canadian Agricultural Emporium. Ontario Farmer was to have superseded the FARMERS' ADVOCATE, but both are gaining strength; the ADVOCATE doubled its circulation when the Government paper existed, which paper could only live on public money extracted from us by taxation.

The Agricultural Emporium we feel sure, will, with the support of the far-mers, gain the ascendancy of its rival, the Government Farm.

It is in contemplation to form two companies, one for carrying on the paper, the other for the Emporium. If you desire to join either of them, you will do well to let us know immediately, as stock books will soon be open.

## Tom Thumb Melon.

We procured a few seeds of this melon from B. K. Bliss & Sons, of New York .-We now have two hills growing; they are



expect to exhibit a few among the fruits at the Exhibition. If no one else has any there we shall not enter for a prize, but show it merely to let you see this little novelty. We do not think they will be much sought after by consumers, as they are so very small. They may be delicious but we have not tasted them yet.

WE would call the attention of stockmen to the sales advertised in this paper. Col. Taylor, near this city, has a herd that in regard to pedigree, stands unsurpassed in this western section of Ontario.

Mr. Stone's stock has such a wide reputation, and as he is about to give up his farm to the Government, the sale will be largely attended by Canadians and Ameri-

EPIZOOTIC.—A correspondent of the Live Stock Journal cured this disease in three days by giving one tablespoonful per day to five fowls of the following epizootic mixture: 1 oz.

# Miscellaneous.

STEAM PLOUGHS IN EUROPE.

In a report to a Farmers' Club in England, the manufacturers of the Fowler plough say :

We are making about 100 plows a year for the English market, and about 50 or 60 for foreign countries. They are principally of the double-engine class. About two-thirds of those sold in England are let out on hire, and one-third for private firms. Steam cultivation is very much retarded in this country, because little or nothing is done to assist it in the shape of roads, enlargement of fields, etc., so as to make the farms more suitable for the use of steam power. About 50 of our steam ploughs are working in the district of Madgeburg, Germany, in the cultivation of beet-root for sugar. The best grown on steam-ploughed land shows a gain of about 2 per cent. of sugar, and about 20 per cent gain in the weight per acre. This included all the sugar cultivators to employ the sugar cultivators to employ and the sugar cultivators to has induced all the sugar-cultivators to employ steam. They usually work to a depth of from 12 to 15 inches, but never less than 12 inches.

#### EXCELLENT WHITEWASH.

The following is said to be the very best of the numerous recipes for whitewashing:— White chalk is the best substitute for lime as a wash. A very fine and brilliant whitewash preparation of chalk is called the "Paris White." This we buy at the paint store for three cents a pound, retail. For each sixteen pounds of Paris White we procure half a pound of the white transparent glue, costing twenty-five cents (fifty cents a pound). The sixteen pounds of Paris White is about as much as a person will use in a day. It is prepared as pounds of Paris White is about as much as a person will use in a day. It is prepared as follows:—The glue is covered with cold water at night, and in the morning is carefully heated, without scorching, until dissolved. The Paris White is stirred in with hot water to give, it the proper milky consistency for applying to walls, and the dissolved glue is then added and thoroughly mixed. It is then applied with a brush like the common lime whitewash. Except on very dark and smoky walls, a single coat is sufficient. It is nearly equal in brilliancy to "zinc white," a far more expensive article. expensive article.

## LOCATION OF BUILDINGS.

The point which determines a man's comfort or his misery may often centre in the position of his dwelling. Of almost equal importance to a farmer is the relative position of his barn and stables. Buildings generally last a life time, and therefore the selection of their sites should be a matter of mature deliberation and study. The healthiness of a site first, then its convenience, and then its picturesqueness and the beauty of its indings should be considered. An ele vated site, with ground gradually sloping in all directions, is the most desirable. It should be sufficiently distant from the road to afford privacy and freedom from dust and noise, also that room for intervening shade and ornamental trees may be secured. together with that most pleasing and grateful of all household accessaries, a green, smooth-shaven lawn. The outbuildings should then be placed so that the milk pail can easily be carried to the dairy, that the horse stable may be within hearing distance, that the dairy may be convenient of access, that the lanes separating the buildings may not be cut up into mud in spring or fall, or drifted full of snow in winter. In short, a man should not blindly copy his neighbor's plan without considering its adaptability to his own surroundings, and the configuration of his own ground.—N. Y. Tribune.

We see by our American exchanges' that the remnant of the Modoc Indians, who are now prisoners in the hands of the United States authorities, are all to be hanged. These Indians were defending their rights after their own manner. They had been continually swindled by the Government agents, and at last rose in arms. They made a bold fight, but at last gave in to numbers, and now they will be hanged for it. Why cannot the United States authorities borrow a leaf from our book. We have no trouble with the Indians—just because we try to keep our bargains with them honorably. Assuredly the swindling agents deserve hanging more than the poor Modocs, who were only fighting for their rights. Cannot our exchanges use their power in defending the poor aboriginies, and not allow such a blot of dishonor to tarnish the pages of American history.

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