PROTECTION AGAINST WIND.—A correspondent asks:—"What kind of an evergreen will make the best wind-brake and be a protection for an apple orchard, some of the trees of which will be 300 feet off? How far apart should they be planted, and how trimmed?"

ANS.—We know of nothing better than a double row of Norway Spruce, planted six feet apart each way, set in such a manner that the trees, in one row, shall stand opposite the spaces in the other, and never trimmed at all.

SKIRVING'S AND LAING'S TURNIPS. "Freelton" writes:- "The farmers in this neighbourhood are now about sowing their turnips. Much perplexity exists among them as to what kind of turnips they are sowing by the names of the different kinds of the seed given by the vendors here. We have two descriptions of Swedish turnips. One is a large sized one with a long leaf, said by some to be 'Skirving's.' The other is a small sized turnip, said to be 'Laing's Improved,' with leaf extending down the stalk from the tip to the "bulb." The different kinds are confounded with each other. Will you give a description of each in your next issue?"

ANS.—Our correspondent has given a pretty good description of the two kinds of turnip he names, and we cannot add much to it. The purple-top Swede varieties are not always distinguished by seedsmen as accurately as is desirable. "Skirving's" turnip belongs to the tankard class, and is prone in this country to grow long and very much out of the ground. "Laing's" is a good firm round turnip, but we have heard the complaint that as a field crop it does not yield so largely as some others. The common Improved Purple-Top is probably as good as the best.

GRAFTING TREES.—In reference to this subject, we have received replies to the inquiry of J. A. P., from Mr. Henry Bell, and Mr. Jos. N. Doan. They both recommend that the grafts intended for use be taken from the trees in the spring, when there is no frost in the limbs, and kept in damp moss in a cellar. The object is to keep the scions from becoming dry and shrivelled, and any means that will accomplish this, will answer the purpose. The time to begin grafting they place from the middle of April to the first of May, and it may be continued until June. Mr. Doan gives as a recipe for grafting wax, 3 lbs. of rosin, ½ lb. of bees-wax, ½ pint of linseed oil. Mr. Bell uses three parts rosin, two parts bees-wax, and two parts tallow. This wax is used to cover all the cuts and wounds made in grafting. Mr. Doan says, "cut the scions with a regular and equal slant on each side, but leaving the outer edge a trifle the thicker. Check the stump through the centre, opening it by means of a wedge, sufficiently to admit the scion, which insert in such a manner as to bring its bark in contact with the bark of the limb, take out the wedge and cover with wax. When the limbs are large I insert a pine wedge, on removing the hard-wood wedge with which I have split the stump, and when I have properly adjusted the scion, I slacken the pine wedge until the scion is held firmly, but not pressed enough to injure the bark. I then break the wedge off, leaving the remainder in the limb."

SCRATCHES OR GREASE IN HORSES.—"J. K. S." of Kilsyth, writes: "I have a horse very bad with the scratches, you would oblige me if you would let me know through the columns of THE CANADA FARMER, what would cure him."

ANS.—This disease like most of those to which horseflesh is heir to, is the result of neglect. It may be easily prevented, and speedily cured in its first stages, but is very inveterate and hard to get rid off, if of long standing. It begins with inflammation of the oil glands of the skin about the hind feet. These vessels, named *sebaceous* glands, supply a fluid to soften the skin, and prevent its cracking. They are liable to inflammation from sudden cold, as when a horse after exercise over wet roads is allowed to stand in the stable without cleaning and drying the hair about the feet. Leaving mud to dry on the legs and feet is another fruitful cause of the disease. Or it may result from a filthy stable—the wet straw and excrements tending to produce cold, and irritate the skin. The parts at first become hot, then assume a swollen appearance, soon the hair drops off, the skin has a glared look, becomes covered with pustules, and at length emits an unctuous discharge which becomes very offensive. If suffered to grow worse the leg half way to the hock is crusted over with thick, horny scabs, divided by deep cracks, when the affection is hardly curable. Prevention consists in clean stables, and thorough drying and rubbing of the legs after work. Should the disease appear, the affected parts should be thoroughly washed with castile soap. A flannel bandage moistened with warm water, and suffered to dry on the part is also good. To soften the skin apply an ointment of one drachm of sugar of lead in an ounce of lard. When there are cracks, wash them with a solution of four ounces of alum in a pint of water. The beast should be fed on bran mashes, carrots and green food. This treatment will be found effectual in all but the worst forms of the disease. For these a dose of four or five drachms of aloes at intervals of two days—a poultice of boiled and smashed carrots put on pretty hot, and an ointment of one part rosin, three of lard, and one of calamine powder, are recommended.

COTTONIZING FLAX.—In reply to the enquiry of a Kingston correspondent about the process used to cottonize flax, we cannot do better than give a brief digest of the report of a joint committee of the Rhode Island Society for the encouragement of domestic industry, and the New York Agricultural Society, who inspected very carefully the process employed by the Lockport Flax Cotton Company, and thus describe it.—1. Breaking, by passing through revolving fluted rollers, 2. Dusting, by passing through a machine similar to the "willow" of the cotton manufacturers; 3. Scutching; 4. Combing, by a process like that for preparing worsted yarn; 5. Dusting again; 6. Steeping the fibre twenty-four hours in tepid water. 7. Boiling in soap and soda ash (three pounds of the latter per one hundred pounds of fibre) for eight to twelve hours; 8. Immersing in chlorine for two hours or more, as necessary for bleaching; 9. Immersing in sulphuric acid for two hours, (of one degree of strength); 10. Dipping in a solution of alum, borax and salt; 11. Washing in distilled water with a little sal soda; 12. Drying by heat from steam pipes; 13. The fibre is passed through a lapper; 14. Carded on machines similar to wool cards; 15. Passed through a railway head with rotary gills; 16. Passed through a drawing frame. The loss in passing through the breaker is estimated at thirty per cent.; through the duster, thirty per cent. more; in scutching, five per cent. The entire loss, from straw to cottonized flax, seventy-five per cent.

The Canada Farmer.

TORONTO, UPPER CANADA, JULY 1, 1864.

Canada as a Field for the Capitalist Farmer.

A COMMUNICATION, signed "A Stock Farmer," appeared in our issue of June 1st, having been transferred to our columns from the *Canadian News* of a late date. The writer enquires whether Canada offers any inducements to farmers with capital, which may be sufficiently tempting to induce agriculturists in Britain to emigrate. We deem it of the highest importance that the enquiry should be answered by those who have entered largely into agricultural pursuits here, so that proper information, as to our resources, may be furnished and placed in the hands of farmers in Britain possessed of capital, and who may be tempted to transfer their operations to this country. We therefore invite communications on this subject from all who may feel an interest in it. We will publish such of the communications as may be likely to be of special use, and we will collate from all a general synopsis of information obtained, and put it in such a form as will be most likely to attract attention.

The subject naturally divides itself into two heads, *first*, the purchase and clearing up of large tracts of wild forest land; and, *secondly*, the obtaining large tracts of improved property, which would be suitable for stock raising and feeding operations, on a large scale. It is a matter of great interest to our young country, and one that cannot be quickly responded to; nevertheless, the following observations will, in the meantime, we trust be found useful to such persons as may intend to make Canada their future home, with the idea of entering largely into stock raising and feeding.

First, as to purchasing and clearing up large tracts of wild forest land. We have now under survey many new townships in the government lands, which are open to purchase and occupation. These lands can be purchased for cash at 5s. per acre, and in all the townships tracts of from 1000 to 5000 acres can be selected of excellent quality—there is no doubt that in the new townships there is a great deal of bad land, but these inferior tracts are interspersed with some of the finest land in the world. The townships on the several new government emigration roads, are generally more or less rocky, the surface is uneven, the land on the elevations is of course inferior, but in the valleys it is of the most fertile description. There is a great deal of valuable merchantable timber, and no part of Canada is so well watered with lakes and streams. The situation of the largest portions of these lands is far from the navigable waters, but that is of little consequence to stock farmers, whose produce will of course come to market on foot.

The clearing up of wild land in Canada is a substantive fact—do as you will, it will cost about a certain sum per acre. We have several methods of clearing up wild land, but one and all they come to the same thing in the end the cheapest methods take most time, the most expensive is to the capitalist really the cheapest, as he not only gets the use of the land sooner, but the first results in potash and merchantable timber, come to hand more readily, and afford some return for the outlay. Wild land, such as we speak of, will cost to clear by the hundred or thousand acres from $11 to $16 per acre—the time occupied is governed by the number of hands employed, but it may always be considered that before a crop can be put in, 12 months must elapse. A capitalist commencing such a job, would get together a number of hands, say in the first place from 10 to 15 in number; these are most easily procured in gangs, in Lower Canada, as the population of that part of the province is used to lumbering operations, and to face the bush far from the requirements of civilized life. These people, under a proper foreman, and provided with sufficient provisions, pork in barrels, flour and tea and sugar, would proceed to the location in September; their first work is to provide shanties for themselves and their stores, which are soon erected. If the employer attends in person, he will require a separate establishment for himself, but it is believed that an old countryman can be equally well served by his foreman, and at much less inconvenience to himself, until matters have progressed farther than the first steps. All requisite house accommodation having been raised and made good against the weather, which is by no means a long job—the men proceed with underbrushing, that is they cut down all bushes, saplings and small trees, to the diameter of 4 inches, and pile them in heaps, at the same time cutting up all fallen and dead logs and timber that may be lying on the ground. These and the brush heaps are piled together in the most convenient places, and as soon as the party has underbrushed as much as will be likely to be choped during the ensuing winter, they proceed to chopping. Chopping is cutting down all the larger trees,—each tree is felled by itself, leaving the stumps about three feet high.—the heads of the trees are thrown together as much as possible, into what is called jam-heaps; as each tree is thrown with its head of brush on the heaps, the choppers cut down the branches (or as they say, "nick them down,") so as to make everything lie compactly, then other trees are felled in a similar manner, until all within the reach of the heap have been cut. Meantime the stem of each tree is cut up into such lengths that a yoke of oxen can haul them, or rather haul one end of them round—the larger ones are selected to form the middle of the log heaps, and as little time is expended in the chopping as is compatible with the power of moving the logs in the future part of the operation. The chopping continues