

scarcely get a paper but reports the death of some of our old neighbors by freezing, and who would not freeze when the mercury gets down to 48 below zero? I would say to the farmers and farmers' sons, go west if you please, but when I make up my mind to leave Ontario I will go to New Brunswick. I have good reliable authority to say that the St. Croix River, which divides New Brunswick from the State of Maine, has not frozen over in ten years to stop shipping. We can't say as much for any river in Ontario. It is my intention to pay a visit to New Brunswick at no very distant day, and see for myself these great inducements, and the advisability of starting a colony from Ontario. And I may say that I see by the Maritime Farmer that they have just as wide-awake Agricultural Societies as Ontario or any other country. At all events, there are just as live men there, which can be seen by your last issue of the ADVOCATE. Depend upon it, New Brunswick is destined to become the most valuable Province of this Dominion, on account of its nearness to the European markets. I am sure it is second to no other Province for stock raising. It is one of the best watered Provinces of the whole Dominion. St. John will yet be one of the greatest shipping ports on this side of the Atlantic. In conclusion, I would recommend all who desire to leave Ontario to consider well before they leap, and bear in mind that the east is as good as the west, and likewise that it is far more congenial for Europeans or us Canadians than the Far West. If any one can say anything against what is herein contained let us hear through the ADVOCATE.

G. H., Stamford, Ont.

#### How to Start a Farmers' Club.

SIR,—We are about forming a Farmers' Club, to meet weekly for discussion of matters relating to the improvement of agriculture, and reading papers on same subject. Can you assist me with rules of any such clubs. I may be able to give you an account of our meetings and readings when any subject of importance comes up.

N. G., Oakville, Ont.

[We received several other inquiries on same subject from various parts of the Dominion. We are glad to see Canadian farmers take an interest in this subject; there should be one such club in each township, which should meet weekly, or once in two weeks throughout the winter months; it might be discontinued when the busy season sets in, but resumed early in the fall. Your first duty when wishing to form a club would be to get together as many good farmers of your vicinity as possible, appoint a chairman, draft out your constitution, which should consist of a few simple rules to govern your meetings. These should state where your meeting place should be, how often you should meet, what the initiation fee shall be, how your expenses shall be met, the number of officers, when they shall be elected, and how.

All the officers you will require will be a President, a Secretary and a Treasurer.

A small initiation fee should be imposed on all who join the club, also monthly or quarterly fees should be paid by each member; the sum thus obtained should be used to meet the necessary expenses, which will be very light; each member will be taxed accordingly. For further particulars see May number (1880) of ADVOCATE, page 111.]

#### The Most Profitable Kind of Sheep.

SIR,—What kind of sheep would you recommend as most profitable to the Canadian farmer?

C. C. M., Kinsall, Ont.

[As we have frequently stated before, we believed a systematic improvement of the common herds and flocks of the country would prove the most profitable course for the general farmer. In the case of our correspondent, we would advise him to get as good grade ewes of the Leicester or Cotswold breeds as is convenient—we believe the latter are the most profitable—and cross these with a Shropshire or Southdown ram. This cross produces a sheep which sells well in the English or other large markets. Alter all your male lambs; select the best females of each year's crop to breed from; weed out and fatten the most inferior animals each year; always breed from a pure-bred male; select a male of the breed best suited to your wants. In most cases it will be found advisable to always select your males from one special breed. Shropshires are the most promising breed at the present time to use as crosses.]

#### Transplanting Large Trees.

SIR,—Being a great admirer of trees, I used to have an ambition to remove some quite large ones, thinking I might thus gain a few years of tree-growth, but it is done at much greater expense and risk than that of planting younger trees; besides, in many instances, the smaller trees will grow so much thriftier than large ones when transplanted as to often outstrip them in size after a few years, so that now I am generally content to plant out small trees and wait for them to develop. But from my experience with the resetting of large trees I have found it of almost vital importance to stay the body by ropes or poles, bracing it so that it cannot be swayed by the winds in the summer after the foliage is well out, for that would have a great power for such a tree to resist, and if left to itself, or allowed to be swayed much, the young rootlets that have begun to knit into the new soil will be broken or disconnected, and such movement will prove fatal to any tree, even if it had made ever so promising a start up to that time, and the planter, nearly assured of success, would see his tree droop almost in a day. But if a tree of such size is properly braced it will be most likely to live. As for cutting off the tops of trees when setting them out, which is recommended by many, I don't believe it to be according to nature or to science, but it is barely allowable if a man will not in some way secure such trees against the action of winds for the first year or two, for, with their tops thus denuded, the leverage which the wind will have on the roots by the body of the tree is, of course, much reduced.

H. I.

#### Apples, Pears, Plums and Peaches.

SIR,—Do you think it would be a profitable investment for a young farmer to set out large apple orchards. We ship to the English market at about \$1.50 expense per barrel. I feel afraid that in a very few years the supply will exceed the demand, and consequently prove unremunerative to the grower.

Do you think it more profitable to raise pears than apples where favorable, and what kinds would you recommend for this latitude?

Do you think plums and quinces would pay better than either apples or pears, and if so, what are your reasons?

My soil is a heavy loam inclined to clay.

J. P., Middleton, Annapolis Co., N. S.

[Apple orchards have been fairly remunerative for some years wherever judiciously planted and properly cared for, and we see no valid reason to fear that the supply will exceed the demand. The demand in Great Britain for good Canadian apples is very great and the home demand has greatly increased. Fruit is no longer considered merely a luxury; it is an article of food of daily consumption, and its true value is as yet scarcely sufficiently appreciated. Pears command higher prices than apples, but the crop is more uncertain, the more so now, from the pear blight. Plums would be more profitable than apples, if in a favorable locality, and you could prevent the ravages of the curculio. The price paid for quinces is very high; but they are less productive than apples, and not in such demand, being only used for preserves; besides the trees are short-lived and not so hardy as apple trees.]

#### DURHAMS—BOUND VOLUMES OF THE ADVOCATE.

SIR,—Are there any breeders in Ontario who are breeding pure-bred Durhams for their milking qualities? Have you the ADVOCATE on hand for 1880, bound, and what price? A SUBSCRIBER.

[Bound volumes for 1880 can be had, price \$1.50. Back volumes are scarce. Four dollars are offered for a complete number of vol. 1. Anyone having that volume in good order might inform us, and we will give the address of the applicant. Many Canadian breeders have good milking families of Shorthorns in their herds. See "Breeder's Directory."]

#### DYNAMITE.

SIR,—I had seen some time ago, by an advertisement in the ADVOCATE, about the using of dynamite for the purpose of blasting oak stumps. Would you be kind enough to publish in what way it should be done, also where we can purchase the dynamite, and at what expense.

[We have had no experience with dynamite. Will some one who has had experience answer?]

#### Shad Fishing.

SIR,—Shad fishing is a favorite branch of industry in this locality, therefore answers to the following questions would be of interest: 1.—Where do shad have their spawning beds? 2.—Are there shad hatching establishments in the United States? If so, give some particulars. 3.—We often tend our set nets in the night; by reason of the darkness and fast retreating tide, fail to ground our boats in the right place. What phosphorescent substance attached to a stake would prove a beacon after the water leaves it?

A. B., Kings Co., N. S.

[In order to give correct information on this subject, we inquired of Mr. Wilmet, of Newcastle, Commissioner of Fisheries for Ontario. The following is his reply:—

Yours received with note asking certain questions about shad.

1.—Shad are a migratory fish, coming from salt water to fresh water rivers and bays to breed, generally in June. The Hudson and Connecticut in the U. S. and the St. John and Miramichi in N. B. are some of the places frequented by shad for spawning purposes.

2.—There are several shad hatcheries, or places where these fish are artificially bred, viz., in the Hudson, Connecticut, Merrimac, and many other rivers throughout the United States. Shad are not usually hatched out in fish-breeding establishments, like salmon and trout. The eggs are gathered from the fish in the open river and immediately placed in hatching boxes expressly made for the purpose, where in time (varying according to temperature), from two to three and four days, they hatch out into small fry, which shortly afterwards pass down to salt water to get their growth. For special information regarding the hatching of shad, apply to Seth Green, Esq., Rochester, N. Y.

3.—The best phosphorescent substance by which the stakes of the nets can be found at night is the fisherman's brains; but there must not be any "forty-rod mixture" in them.]

#### Starch and Cheese Factories.

SIR,—Last autumn a starch factory was erected at St. Peter's Bay, P. E. I.; the farmers in that direction agreeing to sell their potatoes for 14c. per bushel for five years. At the present time farmers are holding meetings in various sections of the Island for the purpose of starting similar factories.

I am of opinion that farmers can utilize their potato crop much better by converting it into milk, cheese, butter, beef, mutton, pork, eggs, &c., which would be more remunerative than disposing of them for the paltry sum of 14 cents. In my opinion, a cheese factory would be much better and cheaper, and could be got up on the same principle—the farmers agreeing to sell their milk for a given price. This would encourage and stimulate the farmers to raise and feed better cattle for milking purposes; as the more milk, more money.

As we are strangers in this Island to the working of cheese factories, and as your paper is purely in the interests of all agricultural pursuits, will you be kind enough to give us your opinion on the subject, and the manner in which these factories are conducted in Canada.

J. D. D., Montage Bridge, P. E. I.

[However anxious the farmers of P. E. I. may be to build up a home market for potatoes by the establishment of starch factories in the Island, they would, we think, be "paying pretty high for their whistle," by raising potatoes to sell at 14 cents per bushel. We see that they are sold at 20c. to 25c. per bushel in the Maritime Provinces, for export to New England and New York. Better to do as you suggest—convert their potatoes into butter and cheese and into beef. This will bring some remuneration, and increased fertility of the soil by the application of the manure from the cattle being fed on the premises, will be no little additional profit. Farmers do not sufficiently appreciate the value of potatoes as food for cattle. The way to conduct a cheese factory:—Engage a man practically acquainted with the business to open the factory; the farmers in the vicinity undertaking to supply him milk, each a given quantity. He makes the cheese and sells it, giving to each one the proceeds in proportion to the milk supplied, having deducted the expenses. We would advise you to procure Prof. Arnold's work on dairying.]