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SIR,—We have (mostly) a good crop of wheat—Clawson variety almost entirely. I have tried Arnold's Gold Medal. It has done well, but not like the Clawson. You in Canada can raise as good crops as we do if you will do justice to your land. When I have been in Canada buying sheep I have been struck with the natural goodness of your land, killed with water. Want of draining is one of your great drawbacks. When I came here, twenty-eight years ago, my first crop of wheat averaged five bushels per acre; or, I had two hundred bushels on forty acres of land. Last year I had forty-four bushels per acre, average, on forty acres of land, and the same field. I have not been troubled with Hessian fly. I sow late—begin to sow the 20th of September. All the early sown wheat was more or less injured by the fly, and some very badly. I have sown phosphate to good advantage, and think and know that it has benefitted my crops very materially. It makes the crop ripen more evenly, and I think, and so do my neighbors think also, that it prevents the ravages of the Hessian fly, and I have one field of very heavy wheat, after wheat which last year was slightly touched with the fly that this year is altogether free from fly, and is a capital crop. I wish you could see my currant bushes and quince trees. I have had currants by the bushel and no currant worm. My quince trees are full of very fine orange quinces. No twig blight on my apple orchard, and the fruit fine. Now all this I attribute to a free use of coal ashes round the currant and quince and apple trees. I have not used hebleore on my currant bushes, and before I used coal ashes my currant bushes were all eaten up and the fruit was very sour—hardly fit for the pigs to eat. My quince trees were formerly destroyed by the borer, and I hardly procured quinces enough for my own use. I now sell large quantities out of the garden of quinces—sometimes seventy to eighty dollars worth. What I have done others can do likewise by using the same means. I have much to say, but I must not tire you. I commenced to cut my wheat on the 8th inst, and have one hundred acres cut. I cut my barley on the 11th, so you see we are early this year.

Yours, &c., R. J. S.
Rose Hill Farm, Geneva, N. Y.,
July 19, 1878.

Sowing Grass Seed with Turnips.

SIR,—Would you kindly tell me in your next issue how you can sow grass seed with turnips successfully, as I see in many farmers' papers this plan advocated to ensure a good catch. If sown at the same time with the turnip seed, how is the hoeing done? The whole operation is a puzzle to me. As you see, I am at present in England, where I have come on a visit till the fall, and I have your paper forwarded to me. The hay making is nearly over, and the late fine weather has saved most of the crop in fine order, and a heavy one it is, too. The grain crop has suffered rather from a superabundance of rain this spring, and it requires some warm weather to fill out the ears. The Royal Agricultural Society holds its Show here next week, and I expect to see something worth seeing. I hear there are great improvements in machinery this year, and there will be a fine show of cattle. Hoping this will interest you, I remain yours,
A WELL-WISHER.

Clifton Park, Bristol, England; July 1, '78.

[The principal object of sowing turnips with grass seeds is by this means to secure a good catch of grass, which is often not easily secured in this climate, with its generally dry summer. By this means the ground, and, with it, the young grasses, are shaded by the turnip leaves after a few weeks. For either crop the land should be well prepared,

and the more is this necessary when both are sown together. The best preparation is to fallow, manure and plow the land in autumn, and leave it in rough, dry ridges during the winter; then in spring cultivate it thoroughly with the cultivator. This brings the land into good tilth and cleanliness. If the autumn plowing and manuring have been neglected, the spring tillage must suffice, and if farm yard manure be applied, it is necessary that it be well rotted. Raw manure would not only be useless—it would be positively injurious. It would be a means of permitting any moisture in the soil to evaporate. The seed, when sown with grass seeds, is sown broadcast on the flat with the same machine that is used for sowing clover and grass seeds. Sometimes they are sown with the hand, but it is a mistake to sow them evenly. Sow the seed, if possible, when the soil is yet fresh from the tilling; this is an important matter in the sowing of any seed in dry weather. Cultivate for the seed, and sow it early in the morning and late in the afternoon, but never during the heat of the day. This is very important. An old English farmer says he knows an instance where the most signal success has attended this mode of operation, and where the manager has never failed to secure a plant. This rule we always follow. After sowing the seed and covering lightly with a seed harrow, roll the ground; it aids in the detention of moisture in the soil. We have known instances of this mode—sowing turnips with grass seed, but it was only between stumps, after the logging, and the result was about half a good crop of turnips, with a good catch of the grass seeds. But we cannot expect a good crop of both. The turnips especially will not be more than a half crop, as they can not get the necessary hoeing and tillage. It is said that when the turnips are pulled the grass will spread and cover the place that they had occupied, but we would not leave a foot of ground to chance, such as this. All the land should have its due share of seed.]

Potomac Fruit-Growers.

JULY MEETING.

The specimen tables were well supplied with seasonable fruit. Of them we noticed Prince's Early, Beatrice, Hungerford, Sweet Bough, Juncunda Straw, Howett, Astrachan Red, River Pea, June and Edward's Apples; Amsden and Troth Peaches; Philadelphia and other Raspberries; Wild Goose Plums, etc., etc.

Dr. Howland read a paper on

WHAT WE DON'T KNOW ABOUT FRUIT-GROWING.

NOTICE 1. Some things which we don't know, that we can know.
2. Which neither we nor others know, but which must be known before fruit-growing will always be a success.

Thousands of tree and vine planters have spent thousands of dollars and made a failure of fruit-growing, because they were ignorant of the best and most successful varieties; when this dear-bought experience might have been avoided, and the best methods and varieties have been learned by consulting intelligent fruit-growers and nurserymen.

Many don't know how to keep their trees from the depredations of insects, when the "how" may be learned from any standard work of fruit-growing.

"That to grow trees and fruit the orchards should be cultivated and fertilized in a similar manner as of a field corn, from which a full crop would be gathered.

How to pick and market fruits in the manner and condition to realize the most money; which knowledge could be learned from intelligent fruit-shippers and commission merchants.

On the second head I remark:

We don't know how to grow in the Potomac region such fruits as Esopus Spitzenbergs and R. I. Greenings, etc., when they are grown so successfully in other localities.

Why certain fruits can be grown successfully in some localities and not in others, or why some varieties are a success for a number of years and then fail, and afterwards are grown successfully.

The cause or remedy of many of the diseases and blights that destroy our trees, vines and fruits:

Examples.—A friend settled here some 25 years since in the eastern part of the District of Columbia, and planted a vineyard of Catawba grapes. The vines produced abundantly for many years, and from which he realized a small fortune; when, without apparent cause, the vines mildewed and

grapes rotted, both on the old and young wood. This continuing for several years, the vineyard was abandoned.

Within a mile of Mt. Vernon Springs during the last six years I have set out over 3,000 Apricot trees, and the blight has nearly destroyed them all. But not like my Catawba friend after he had realized his fortune;—for instead of a probable income of \$5,000 a year, I am many thousands of dollars out of pocket.

With all the investigations with the microscope and the experiments of fruit-growers, we are as much in the dark as ever as to the cause and remedy of blight.

The depredations of many insects also are still beyond our control, and every failure should be a warning to others not to follow the same path. We should investigate every unknown cause, and give the world the benefit of our failures as well as our successes.

Millions of dollars might be saved to the United States if original investigators were employed to discover the unknown cause and remedy; but for the investigators of all this great and widespread destruction, our agricultural department employs one entomologist and one microscopist.

If ten plantations of fruits should be made in different parts of the country, and ten microscopists be employed to investigate the causes of blight, etc., millions of dollars would be saved to the country; and a similar course should be pursued in regard to the cholera in hogs and fowls, from which cause the State of Ohio alone, during the last year, lost millions of dollars.

In fruit-growing many fail; but more will succeed, and the balance sheet will be largely in favor of the persevering. The more we know of the laws of nature, and live and work according to them, the greater will be our success and happiness.

G. F. N., Washington, D. C., July, 1878

SIR,—You make two mistakes in announcing my report of the July meeting of the Potomac Fruit Growers, viz: you call me Mr. Newman, and speak of me as Secretary. I am simply an enthusiastic horticulturist, and report the proceedings in a condensed and readable form, *con amore* and *pro bono publico*.

Everybody should raise fruit, and the more information that can be diffused, the more intelligently will "everybody and his wife" cultivate the fruits.

I would be pleased to receive catalogues from the nurserymen of Ontario.

N. F. NEEDHAM, Washington, D. C., 1878.

How to Free Land From Weeds.

SIR,—Will you be good enough to give in the next number of the ADVOCATE some directions as to the best and most expeditious method of freeing land from weeds. Cockle, mayweed, mustard and others had possession of a large part of my farm before it came into my hands. Besides there is in one corner of it a large space covered with Canada thistles, and one field has much quack grass in it. The land is a light sandy loam.

A YOUNG FARMER, West Williams, July, 1878.

[On a farm so entirely overrun with weeds as the one you describe yours to be the only thorough remedy is fallowing—either bare fallowing, a seasons work, without any crop—or green fallowing. For very dirty land, such as yours is it will perhaps be found necessary to have the recourse to the bare fallow for that which is most infested with weeds, especially those parts where the quack grass and the Canada thistle have taken hold. They can be best eradicated by a summer fallow. Plough the land in Autumn shallow, and harrow it. This will cause the seeds of weeds that are on or near the surface to germinate. Then plough deep in the fall, throwing up the ground with rough scores in high ridges, to remain so till the early spring. Then cross plough and leave it so till your crops are all planted and sown. By manuring and sowing this fallowed land with turnips &c. you would have a good green fallow, and the cultivating between the rows would free the land of any weeds except such permanent roots as quack grass and Canada thistles. By sowing rape and grass or rye seeds instead of turnips and pasturing it with sheep in the fall, and again in the early summer you would be able to keep down any weeds, if not to kill them. Such cultivation would improve land permanently.]