

### Fruit Farming on Clay Soil.

[Read before the last meeting of the Ontario Fruit Growers' Association by T. G. H. Patterson.]

For a long time it was supposed, at all events in the section of the country in which I am situated, that fruit would not succeed except upon a light soil, preferably a sandy one, consequently those who had the temerity to plant fruit on clay were laughed at by their neighbors as being likely to have nothing but their labor. Even now the same impression prevails largely, especially among those who own farms of sandy texture; to aid, then, in dispelling this idea is one of the objects of this paper. From a personal experience in the heart of one of the best known fruit sections of Ontario extending over eight years, and from observations of the operations of others over a longer period, I have come to a conclusion slightly different from the foregoing, and I ask permission to present the other side of the case. Now, in my experience clay soil, and especially high red clay, is peculiarly well adapted to growing profitably the following kinds of fruit, namely:—Grapes, pears, plums, apples, quinces, red and black currants. Peaches and cherries will also do fairly well; the former must, however, be given exceptionally good attention and cultivation, when they will bear fruit some seasons when there is little or none on the sand, and the quality will be very fine. Still for profit clay does not compare with sand in the case of the peach, which naturally loves a light, warm soil. Small fruits also, with the exception of red and black currants, cannot be profitably grown upon clay to any great extent, although an excellent supply for home use can be easily obtained; but let us examine into those fruits I have already said can be profitably grown there. To begin with grapes, for them I claim the following advantages on clay soil: 1st. Earliness. On the high red clay most varieties will ripen from ten days to three weeks earlier than on sand in the same locality. This is of great importance from a pecuniary point of view, especially in an early section, frequently from this cause alone doubling the profit to be obtained from the vineyard. 2nd. Healthiness. Grapes on clay are not nearly so subject to diseases, especially of rot and mildew. 3rd. The quality of the fruit is vastly superior; so much is this the case that the same fruit grown on clay is like a totally different and superior variety compared to that grown on sand, although the name be the same. To give you an example from my own experience, which is the more valuable as it was purely voluntary and quite, unbiased, a year or more ago a young friend of mine who had been staying with me a considerable time, and had been accustomed to eat my grapes grown upon clay soil, expressed a wish to go through some of the large vineyards in my neighborhood upon the sand. It was a fine day in the early part of October, and as we walked through the vineyards the grapes hung in tempting clusters perfectly ripe. Naturally enough he sampled them as he went along, but after doing so his face did not express the satisfaction one might have looked for under the circumstances. Instead of which he said: "Whatever is the matter with these grapes, they have no flavor?" I suggested it might be the variety, so he tried other varieties, but with the same results—no flavor. It was quite true, for I have no hesitation in saying that grapes grown upon sand are insipid, watery, flavorless productions, and are as much inferior to those grown upon clay as those grown out of doors are inferior to the hot house varieties in a cool climate. I am informed by a neighbor who is in the habit of attending the Hamilton market that the dealers and buyers there eagerly seek for grapes grown on clay soil, the effect of which is it is hard to find them grown upon any other soil, at all events when they have reached market. I am also informed that wine makers at Hamilton and St. Catharines vastly prefer grapes from clay, indeed will not purchase any others if they can help it.

Now we come to pears, and here again the quality and flavor are much superior, some varieties almost favorless on sand being excellent on clay, that is Flemish Beauty; Clapp's Favorite, too, which rots at the core if allowed to hang on the tree on sandy soil, will hang for weeks upon the clay without suffering deterioration. Trees are healthier, bear as well, and are much less subject to blight, that fell enemy of the pear grower.

Plums revel in clay soil. They bear early, last long and produce abundant crops of excellent quality, often bearing heavily in seasons when there are none upon the sand. They are also less subject to disease and to the curculio.

Apples do excellently on high clay. They come into bearing early and do not feel climatic changes as much as on the sand. The fruit is of finer quality and keeps better, the trees as a rule bear more fruit and less wood, and do not require so much feeding.

Quinces will do well on clay if given good cultivation and a moderate supply of manure; also red and black currants.

Yet two other points in favor of high clay, and I have done. 1st. It does not require under-draining to produce fruit profitably of excellent quality. This is frequently a very important item in the expense of putting out fruit. One of our prominent members declared at a meeting of the farmers' institute held at Grimsby last winter that it was quite useless to under-drain high red clay. While not going so far as this, I am of the opinion that it will make so little difference as to be not worth doing. 2nd. The fertility of the clay for fruit is not easily exhausted, and can be kept up for an indefinite period with a very moderate supply of manure. Now, on sand it is feed, feed, feed, all the time if you wish to obtain the two Q's, viz., quantity and quality, and I am convinced the reason a great many orchards do not bear upon the sand is from no other cause but soil exhaustion. Now, the clay, like the Scotchman of whom it was said on some one asking if he kept the Sabbath, "Yes, he keeps the Sabbath and everything else he can lay his hand on," will retain the fertility you apply to it, and will unlock it gradually.

Summing up, we may firstly say that the fruits I have mentioned, viz., grapes, pears, plums, apples, quinces, red and black currants, cannot only be profitably grown on clay, but will excel those grown upon almost any other soil.

### POULTRY.

#### Poultry on the Farm.

BY MRS. IDA E. TILSON, WEST SALEM, WIS.

I was lately asked whether I would ever be "written out" on this poultry subject. Well, anyone who interestedly cares for a real, live, wide-awake flock, like mine, will find experience piling up every day faster than pen can tell. Then, too, experience begets observation. Those who have been "through the mill" and found our poultry business requires so much skill, science and patience, can never after get enough of observing how other poulterers are doing and coming out. When I was a little girl, I heard a showman at the door of his place say over and over, "This will go right on merrily all the time." So, whether merrily or not, poultry culture and poultry love do go right on. Our Ex-Secretary of Agriculture, Mr. Rusk, said in one of his later reports, the poultry industry could no longer be ignored, since it had risen from insignificance to national extent and importance.

We have now reached a sort of yearly "round up." Probably our chicks are all hatched, and discoursing as follows:—

"It's wonderful," said a chick.  
"That a small shell, not very thick,  
Held me, I'm such a big bird.  
No doubt it's untrue. Pooh! Absurd!  
That shell, 'twas none the less true.  
Once held that chick, the old hen knew,  
Who did her young one advise,  
The day of small things not to despise."

Sustaining the vitality and growth of our chickens, sorting out and selling surplus cockerels and fat hens, clearing up premises for the autumn and winter campaign, is now our work. Keep the grass run well-mowed, for it is thus tenderer eating and does not bedraggle chicks. My "bump" of caution prompts a word on the careful use of eyes and scythe. I have known a cat's leg nearly severed and of several narrow escapes by hens. Farm poultry ought to have the blessings of a large run. Plant a little more garden, allowing enough corn and tomatoes for both yourselves and fowls. We have always done so, and get sufficient garden stuff to bestow even on those who shut up their hens. For when brought up, from the first, around a garden, biddy is less likely to do damage than when allowed in only now and then, or getting there by chance, reminding us of the half-starved boy at a picnic. Biddy's main aim is extermination of bugs, and her injury to plants chiefly accidental and incidental. We thought our hens disposed of the currant worms and preserved some of the bushes alive without other remedy. An acquaintance tried, by dissecting a number of sick chickens, to learn the cause of some mysterious malady visiting her flock, and was surprised at the large number of familiar insects found in the crops even of those partially disabled individuals. Other poulterers take an opposite course from strict confinement, and think when grass grows well and chicks are a few weeks old, their whole flock can entirely shift for itself. I go, breakfast in hand, to unlock my houses mornings and feed my fowls before they scatter, thus preventing many from plunging into a wet bath, as hungry birds do, among rank, dewy weeds and grass. Supper served at the hen-house also calls fowls earlier out of the chilling night dew. If cockerels ready for early sale before the market is glutted and prices fall, if hens fit for the table without special fattening, and if precocious pullets are desired, all three classes must be well kept up. I had to stop writing at this point and make my remarks practical by washing and boiling a kettle of potatoes, what I had already provided having gone away faster than the morning dew. Potatoes are a little clogging, and not so good, of course, for very young chicks as for those half-grown and older. A ten-cent vegetable brush, or even a scrubbing one, hastens the work of preparation. When potatoes are cheap, I take larger ones, as they are easier washed and more wholesome, but if dear, small specimens do very well. I also continue my onion chopping quite into the summer, since some

doctors rank raw onions among the best liver medicines going. An old saying is, "You can't eat your cake and have it too," but onions are different, and a lady who relishes my eggs very much said to me lately, "I am so glad you don't feed your hens onions." I told her I did and must provide them for the health of the fowls, but that I added so many other flavors, and seldom fed any strong thing two days running, that my patrons detected onions in neither flesh nor eggs. My "Dutch Cheese" is not ropy, but crumbly, and best when made slowly. I have an asbestos or "augite" stove-mat, on which I set a pan of clabber that then cooks without attention, and is turned into a pan perforated like a skimmer, for draining off the whey. Though we have grass, sunshine and fresh air now, bowel trouble is more frequent than in winter's nipping air, which kills every germ and vile thing. If bowel complaint comes, a little alum or lime in their drinking water, two or three days, will restore the sufferers. If you cannot guess how strong to make the solution, taste of it once or twice, as I have done. If you undertake to doctor a whole flock through their drinking water, every pool in the vicinity must be medicated, too, or covered. A reduced amount of pudding, and powdered charcoal in it, are good remedies. By the way, you can get a firmer hold of a large, round, wooden stirrer than of a spoon handle, and thus mix puddings easier. Corn is so cheap and handy, people often ask why they cannot feed it freely, as our forefathers did. They could if the modern hen had as much exercise and as few demands upon her, and it is true to-day that our farm fowls stand more corn than confined, artificially-raised birds can. If hens get over-fat, reduce their grain ration of every kind, or they become lousy, not being active enough to rid themselves of pests; their feathers grow scanty on rear and breast, where the fat is thickest and body hottest, and occasional clots of blood in their eggs show some of the little internal blood vessels are probably breaking under such pressure. Before chickens come into market, the surplus of fat hens can be sold well without special fattening in a close, dark place, and cockerels, if sold or separated early from the pullets, need not undergo caponizing. The same butcher who took my fowls last year came to ask for them this year, and said he had never found a poor one among them. The home market always has room for the best.

As people become experienced, the wider they see the field of knowledge opening before them. Such realize that neither themselves nor others know and have tried everything. They "prove all things and hold fast that which is good." Comparison of experiences in their farm paper or an exclusive poultry paper, or suggestions from any kindly, courteous source, are welcome and helpful to them. A recent poultry paper contained a plaint from a person who, having read so much in it about oatmeal, had fed little chicks first and entirely on coarse, unhulled, domestic-ground oats, till many died. Although writers should be both accurate and explicit, I long ago studied out that table oatmeal was intended. So it would be difficult to recommend a faultless writer or a paper which had left nothing unsaid. I am reminded of that story about a small church that desired a learned, humble, brilliant, careful, and, in short, perfect minister. Their presiding elder wrote back they had better call good old Dr. Smith down from heaven, as there were none such on earth.

I have been weighing eggs, which is a rather interesting, profitable investigation, since those of the same size vary in density. I have heard those old enough to remember the ancient hen say our modern biddy is meatier and her eggs heavier, developed thus by continuous attention in feeding and breeding, a progress desirable when both poultry and eggs are sold by the pound, instead of by the fowl or the dozen. Probably many readers have noticed how much substance Plymouth Rock eggs give custards and cakes. An acquaintance told me she had customers who gave two cents a dozen more for them than for White Leghorn eggs. I have had buyers who much preferred the Plymouth Rocks at the same price, and many grocers sort their eggs into dark and light lots. Leghorn fowls compensate, I think, for any deficiency in matter by laying more eggs in number. This may be given as a sort of general rule, with exceptions, of course, that the more eggs a hen lays the less substance and vitality each egg can have. My hens are kept laying for all that is in them, since egg-production is my department, but I do not claim large hatches. An average of a little over seven chicks to a setting has been an almost yearly result, over one-half of which are cockerels in early broods. Later hatches usually give more pullets. Eggs where less of a forcing process is employed probably yield a larger number of chicks, but can hardly produce better layers in turn. I have learned not to be faithless concerning any setting, however much appearances may be against hope. One such this year—an exception, I am happy to say—was thrice left till cool, and placed under three successive hens in two different houses, but finally yielded five fine chicks, after searching so long for a suitable mother and a spot for the soles of their feet. So, those high-priced eggs we buy ought to stand some banging by the expressman and do fairly at last. I am quite satisfied with my choice of pullets for setters and mothers. Josh Billings says, "When yer don't know what ter dew, don't dew it." A pullet proceeds on his plan. She moves about less and treads on fewer. An old bird is all a-fire to show those chicks she knows a