

linated, and that will be one of the reasons why we have nubbins instead of strawberries.
King's Co., N. S. EUNICE WATTS.

COMMENT BY PROF. H. L. HUTT.

The four causes assigned for nubbins or imperfectly formed fruit on strawberries are the ones usually recognized. Another cause which might be assigned is an inherent weakness in the pistils in the center of the flower of some varieties of strawberries, so that they are not capable of being fertilized, even from their own or foreign pollen. This is usually seen in fruits having dried or blackened tips, from the fact that the pistils on the end of the receptacle have not fertilized, and the pulp surrounding them does not develop.

This article is carefully prepared and thoroughly practical. The only statement to which I would take exception is that contained in the last paragraph, in which the writer says, "imperfect flowers produce imperfect fruit." This does not always follow. Imperfect flowers may produce perfect fruit if thoroughly pollinized with pollen from some bi-sexual variety. The last statement, too, is hardly correct, in that it is not absolutely necessary that the perfect and imperfect varieties should be in alternate rows, although, of course, this is better. A row of a good, strong pollinizing variety, that is, one bearing plenty of pollen, may furnish pollen enough for three or four rows of a pistillate kind, provided there are plenty of bees or insects to distribute the pollen. Another point in this connection, which the writer has not mentioned, is that there is a considerable difference in the blooming period of different varieties. Early pistillate varieties require early-blooming bi-sexual varieties to insure fertilization of the early blossoms. A lack of this sometimes results in the early flowers on pistillate varieties failing to set fruit until a bi-sexual variety comes in flower to provide the pollen necessary. We have made careful notes and dates of bloom of over four hundred varieties tested at the Ontario Agricultural College, and find that this is a matter to which strawberry-growers should give careful attention.

MAKING A HOTBED.

Please give through your columns full directions for making a small hotbed. W. S. McL.
Lanark Co., Ont.

Ans.—Select the warmest, most sheltered place available; mark out the bed, and dig it out to the depth of four feet. Then build a framework of 1 x 10-inch boards about the pit, one board being placed at the front end, and two at the back, to give the necessary slope towards the south. To prepare the material for filling the bed, take fresh horse manure, fork it over, water it if very dry, let stand a few days, then fork over again to allow a second fermentation. Place in the bed and tramp down well, until a depth of about 3 feet has been secured. Put on the sash, bank up all around the sides with manure, and leave to ferment; then put on the soil, which should be light and rich. Manure from old hotbeds mixed with about two-thirds loam is excellent. About six inches of soil will be required. The heat at first will be violent, but when it has cooled down to ninety degrees, the seed may be planted. Afterwards, but ordinary care in watering, and ventilating, by raising the sashes somewhat during the warmest part of the day, will be necessary. For a covering at night, or on exceptionally cold days, place a light mattress filled with straw, or even old carpet or sacking, covered with boards, over the sash.

It may be necessary to remark that, while ventilating the bed, care should be taken to prevent cold drafts of air from rushing over the young plants. The essentials in caring for a hotbed are uniform heat, plenty of air, no cold drafts, and a proper amount of moisture.

THE FARM BULLETIN.

PROF. DAY COMES BACK.

Editor "The Farmer's Advocate":

In "The Farmer's Advocate" of February 27th there appears a letter from Mr. T. C. Johnston, in reference to my letter of January 23rd, which was written in reply to his of December 26th.

In his last letter, Mr. Johnston asked why I say that he and "J. G." apparently have no use for experimental work. In reply to this question, I quote from his letter of December 26th as follows: "Those feeding trials are all very well, but it is not what we are after. It is the farmers that produce the hogs of this country, and not experimental farms, and it is how they can the farmer produce them." If I drew a wrong inference from this statement, I am ready to apologize; but I do not think that even Mr. Johnston will blame me very much for misunderstanding his meaning.

Mr. Johnston says that the maximum or the minimum of grain in a farmer's barn has nothing to do with the amount of food required to make a pound of pork. Certainly it has not. The paragraph in my letter, however, was called forth by a statement in his letter of December 26th, where, referring to myself, he says: "He must have been looking into the storehouse bins instead of the farmers' granaries, for they are not as full as he claims." As I had never made any such

claim, I was merely trying to show how unfair this statement is.

I am glad to hear that Mr. Johnston is anxious to get at the truth, and that he is experimenting on his own account, but I am sorry he does not give the public his results. The figures I offered are the best I have, and I would welcome additional facts regarding this important industry. In his first letter, however, he offered no figures, but seemed to be especially concerned in heaping ridicule upon my results and suggestions. The fact that advice similar to my own has been offered by all our leading agricultural papers, editorially and otherwise, without protest from Mr. Johnston or "J. G.," led me to infer that there must be some personal reason behind the attack made upon my modest suggestions. Had I been able to find in Mr. Johnston's first letter any evidence of a disposition to discuss the question upon its merits, he would have had nothing to complain of in my method of meeting his arguments; but when a man deals out hard knocks, he should be prepared to take a few in return.

No one regrets the present occurrence more than I do, as it is no pleasure to me to engage in a controversy of this nature, but I do not see how I could have pursued any other course than the one I have taken, and maintained my self respect. G. E. DAY.

AUTOMOBILES A PUBLIC NUISANCE.

Editor "The Farmer's Advocate":

I have been a reader of "The Farmer's Advocate" for a number of years, and enjoy looking over its pages. I find the market reports valuable. I have been especially interested in the complaints against the automobile. I agree with one of your correspondents that it is a blessing we have a winter so that we can drive on our roads with our faithful animal, the horse, and be contented that we will not meet one of them. It is useless to try to cover the horse's eyes, as I have seen stated, for the horse is just as much scared at the nasty smell as at seeing the object. There are, of course, a few horses that will pass an automobile very nicely, but the most of them will "cut up," and have no respect for the ditch, with an outcome of perhaps someone killed or badly hurt.

This style of occupying our country roads makes it very inconvenient for us farmers. It seems as if our country roads were made by us, for the pleasure and convenience of the city people with their automobiles. I cannot see how it is that in the summer-time, when the farmer is so busy, his wife or children cannot have one day in the week to drive out to town or village to do their shopping, and be clear of the automobile, so that the farmer himself could work with ease regarding their safety.

I also think that automobiles should carry the number in front as well as behind, for it is impossible to catch the number behind for dust.

I hope my plea is not too much for one day a week to the farmer; it should be Saturday.
Huron Co., Ont. READER.

FAVORS MILITARY DRILL.

Editor "The Farmer's Advocate":

I have read, with a great deal of interest, an article in your issue of February 27th, by Eunice Watts, on "Military Drill and Tuberculosis." Although I differ with the writer of the article in many points, she, nevertheless, gives good advice in many ways, and I believe, were she more conversant with military drill and calisthenics, as taught in some of the more progressive of our schools, she would change many of her views.

"How is military drill to affect our boys?" It will make them better citizens in every way. It makes them sharper in their movements, ready to obey their parents or teachers instantaneously, improves their physique, and by strengthening their bodies, also strengthens their minds, enabling them to resist evil and do good.

"Will it affect the girls of our country?" Yes. A good course in extension motions is an efficient method of building up their bodies, and thereby resisting tuberculosis. Let them be taught fencing, and even practice with the despised punching balls, and you will have a healthy lot of girls, fit in every way to be the mothers of the next generation.

Again the writer says: "If our boys enter the militia, will it not make them discontented with the quiet life of the old homestead?"

To this I say, decidedly: "No!" They take their annual drill as an outing, and come home more contented than they went away. I have heard many a farm boy say he lived the whole year to go to camp, and I know by my own experience that I come home each year strengthened, in fact, built up for the rest of the year, and fit to resist the germs of tuberculosis.

"A military-drilled farmer would be a ludicrous object."

If all military-drilled farmers are ludicrous objects, I am afraid Ontario must be a ridiculous Province, for it is full of them. Eunice Watts is behind the times. Farming is a profession in Ontario. Our O. A. C. and the Provincial Government have done much for the farmer. He, in Ontario, is not looked on as a "mossback," or "hayseed," but as our most progressive citizen, to the front in every movement which he believes beneficial to the welfare of his country.

"The old ax would be an efficient substitute for Indian clubs."

Here the writer, whose aim is to keep the young

people on the farm, advocates a very efficient method to send them to the city. There is no surer way to do this than by condemning them to a life of unremitting drudgery, to deny them possible advantages—as in the present instance—where a very good substitute for the much-envied gymnasiums of the city, is attainable.

"Would it not be wise to teach our school children to combat the deadly disease, consumption?"

To this I say, "Yes." And one of the ways to accomplish this is to teach the child military drill. By so doing, you are teaching him, not only to combat consumption, but also a foe that is far from being imaginary.

"But ye say, 'It will mar our comfort;' ye say, 'It will minish our trade.'"

Do ye wait for the spattered shrapnel, ere ye learn how a gun is laid?"

A MILITARY-DRILLED FARMER.

COMBINATION SALE AT GUELPH.

The Provincial sale of pure-bred cattle, held under the auspices of the Provincial Live-stock Associations, at Guelph, on March 4th, was fairly well attended, considering the state of the roads in the country, and though no high prices were realized, the buyers met good bargains; some of the animals being of very good quality. Following is the sale list:

Tiddlewinks, 1902; S. B. Snyder, Berlin	\$ 70
Wanderer's Chief, 1906; Z. D. Kay, Hawkesville..	95
Red Rover, 1906; O. Rapsit, Morriston	45
Old Meldrum, 1906, William McDermott, Living Springs	135
Fyvie, 1906; A. Moore, Tavistock	105
Gilliat; A. W. Kaufman, Tavistock	85
Elm Grove Hero, 1907; S. Millson, Eramosa	45
Royal Hero, 1907; J. C. Blackstock, Campbellville.	50
Royal Senator; J. A. Watt, Salem	90
Fergus Duke, 1907; Baker Bros., Guelph	50
Woodfield Glory; Jeremiah Wright, Marden	115
Woodfield Prince; A. W. Gardner, Treadburg	100
Chief Matchless, 1906; J. Hatlin, Guelph	40
King Matchless; Milton Smith, Alma	40
Earl Buckingham; William Kappy, Spencer	55
Bonnie Hero; J. H. Lackner, Hawkesville	80
Prince Charley; Moses Shultz, Wellesley	50
Belmont Marquis; A. Mader, Breslau	55
Hero Boy; Ed. Doughty, Eramosa	70
Lavender's Choice; George Prior, Aberfoyle	40
Wanderer's Lad; W. T. Lawrence, Westover	50
Scottish Chief; John Clare, Guelph	40
Supremacy; R. Jamieson, Valens	95
Roan Lad; Patrick McGarr, Marden	60
Victor Reliance; William Beaton, Freeton	80
Fristrom; David Salkeld, Goderich	55
Elmbrooke Lad; John Young, Brighton	75
Duke of Ratho; George Zettle, New Germany	45
Scottie; J. M. Young, Harriston	45
Wattie; Thomas Duff, Dufferton	85
Snowball; William Paft, Wellesley	35
Gilden Signet; John Dermis, Walton	60

THE RIGHT KIND OF AN IMMIGRANT.

Editor "The Farmer's Advocate":

I have been reading the discussions re immigrants that have appeared in your paper, and, although an immigrant of five months' standing, I feel that I ought to have something to say in the matter. The man who calls for a Canadian or none has evidently had somebody of the worthless sort, and naturally thinks everyone is like them. I know some Canadians that I would back any of the worst Englishmen against, and "John Bull" would come out best man. The man who had the carpenter must have had one of the smart sort. I guess the majority of English are willing to learn, if they have somebody who will teach them, although perhaps lots of them are no good at all. Those who come from the city think they have learned their work, and it is all plain sailing. I myself come from the country, and when I came I thought I knew something, but I am willing to admit that I know scarcely anything. It is the different way of doing things, I suppose. Wishing the immigrants every success, and the same to "The Farmer's Advocate."

SIXTEEN-YEAR-OLD IMMIGRANT.

Muskoka, Ont.

LET MAPLE PRODUCERS ORGANIZE.

Editor "The Farmer's Advocate":

I consider your paper one of the best means for the best farmers of this country to become united. I would like to see the pure maple-syrup manufacturers united to increase the industry, as I believe the quality could be improved; a better way found to handle the goods; a better way to put it on the market, and, also, a better way to open up the market. The market is a wide one, and a very small amount was widely distributed last season. I shipped some to points in Ontario, in Manitoba, in Saskatchewan, in Wisconsin (U. S.), and also to Ireland; so, you can see how broad the trade is, if it were only larger in quantity; and, I believe the way to increase it is for the farmers of Ontario who manufacture syrup to unite and have a meeting each year, or twice a year, if necessary.

Now, I would like to know what some other manufacturers think along this line; and, as it is too late to take many steps before this season starts, we could take some before another season begins.

Frontenac Co., Ont.

H. A. BUCK.