Correspondence.

From Michigan.

Editor Farmer's Advocate.

SIR,—Southern Michigan has suffered more with severe cold since the 1st of January than for many years, if ever before. Mercury has fallen lower for a short time, but never have we had such continual severe cold. Fruit of all kinds has been greatly injured, and peaches and peach trees are, without doubt, all killed. At the Sinawee Farmers' Club, a few nights since, a number of members reported their apple trees as being split with freezing from the ground to the limbs, and some of the large limbs also have opened. Some trees cracked in four or five places the entire length of the trunk, so that one can put his finger near to the heart in each crack. There is, of course, some speculation as to the result of this, and many questions as to what can be done, if anything, to save the trees.

It has occurred to me that, as your climate is usually more severe than that of Southern Michigan, your readers may, many of them, have had such experience with their orchards as we are now having, and could give us some hints through your columns which might be of value, and for which we should feel grateful indeed.

Our Club had the pleasure, a few evenings since, of listening to a very able address by Prof. Beal, of the Michigan Agricultural College at Lansing. The most interesting portion, perhaps, was on the Codling Moth or Apple Worm. In speaking of the best remedies for the destruction of this pest, the Professor gave as his opinion that the "band" was the only true plan yet known, which was to first clear off the rough bark to destroy all natural hiding places possible, and then put one or more bands about six inches wide, made of thick carpet, paper or the like, around a smooth place in the trunk of the tree. The insect will hide under this. These should be put on about the 20th of June in this latitude, and should be changed about every eight days till the 20th of August, when they can be left till winter. His method was to take off the band and kill the worm with his thumb and fingers, and then put the same on again. Others used a rubber-faced mallet to pound the band as it remained on the tree, and not remove it at all These bands can be lapped around the tree and fastened with one carpet tack driven through both ends. This should be done by all farmers in the neighborhood, as the insect will fly from one orchard to another, and, to make it a success, all must unite in the work faithfully. M——.

Adrian, Mich., March 2nd, 1875.

Fruit Culture.

Editor Farmer's Advocate.

Sir,—I have noticed the remarks on planting and pruning apple trees in the March No. of the ADVOCATE. Forming the trees with high or low heads is one of those questions on which much may be said on both sides. When the branches are trimmed high the bark is sometimes sunburnt, and the tree dies; this never happens except on the south side of the tree, and is generally the case when the tree leans to the north or north-west. Low branches, by shading the trunk of the tree, tend to prevent this; besides, some varieties, such as the Bellefleur and Snow Apple, naturally form low spreading heads with drooping branches, and if we endeavor to counteract this by a free use of the knife, we shall get plenty of leaves but no fruit. Other varieties naturally form close, upright heads. We may assist nature, but if we try to force her we shall assuredly fail. Besides, the situation of the orchard must be taken into account. If it be a high, exposed situation, I should prefer to head the trees rather low, say about four feet from the ground, as the bark of the tree would be better shaded from the sun, and the trees would not be so liable to be uprooted by a strong wind.

As for the distance apart, I think twenty feet is altogether too close, except for the very upright growers, for, when the branches meet at the top, the roots meet at the bottom, and unless the ground is naturally very rich or kept well manured with top dressing, the trees could not be expected to bear well, not only for want of nourishment, but because the sun and air would be excluded too much from all but the topmost branches, and there is no room to work under them to keep the weeds down. Raising any kind of a crop in such an orchard must be out of the question, and laying it down in grass is scarcely feasible either.

I am not prepared to say that ants are injurious to large bearing trees, but I consider they are injurious to young grafted trees, as they make the leaves curl up and check the growth of the gratt. I have been told that spreading chip dirt for a space of two or three feet around the trees will keep them off, but if they will destroy caterpillars on cabbages, why will they not destroy them on apple trees also, unless the caterpillars are protected by a web so that the ants cannot get at them.

Deep planting for fruit trees may do very well on light soils, but on heavy soils either the ground must be deeply underdrained or the trees will soon die out. I planted an orchard about ten years ago and was induced to procure the trees from a Rochester nursery, which I am not likely to do again. The printed forms for orders contain a condition that if the trees ordered are not in stock, others equally good shall be substituted, and they take advantage of this condition to send out trees of an inferior quality. I planted the standards thirty feet apart each way, and should do so again if I were to plant another orchard, and also plant either two dwarf pear trees or one standard plum tree between every two apple trees in the row.—These would come into bearing in a few years, but would not last long, so that when the standard apple trees were twenty years old the others would have finished bearing and might be cut out. I would not plant any between the rows of apple trees, as I consider the ground is better to be cultivated, at least until the trees have attained a large growth.

Beans, potatoes or any root crops will do no harm, if well cultivated, and the plow not suffered to go too near the trees or deep enough to cut the roots. Some N. Y. orchardists who have tried it say it is better to raise no crops in an orchard, but to keep the ground well plowed and cultivated, so as to allow no weeds to grow, and that the increased growth of the trees will compensate for the loss of any crop. I noticed a statement a few years ago in the *Register of Rural Affairs* that there was not a single orchard in the State of New York of 20 years of age in good bearing condition, that was laid down in grass in the first ten years of its life. After that age it might be laid down in early red clover, and cut for soiling purposes. The Botchara clover, it is claimed, may be cut three times in a year. I procured some seed on one occasion, and sowed it in the spring without grain, but the seed failed to grow and I have not tried it since. It is sold at 50 cts. per lb., not too high a price if it were everything that is claimed for it, and if any of your readers have tried it I hope they will report the result.

When the proposal was first made that the Fruit Growers' Association of Ontario should hold their July meeting last year in Owen Sound, some of the members observed that they might as well go to the North Pole. However, the proposal was carried out, and the deputation spent two days in Owen Sound and neighborhood, and went away satisfied that this was, on the whole, the best fruit growing district in the Province. Apples, pears and grapes thrive well here; peaches will generally ripen well on the sandy knolls, whilst plums are a specialty, as neither Curculio nor Borer have yet made their appearance amongst us. The Black Knot is troublesome in some places, but that may be kept in check by a vigilant use of the knife. When plums were a failure everywhere else the year before last, about 2,000 bushels were shipped off from Owen Sound. The greater part was purchased by two persons and sent to New York, where they sold for $10 per bushel. Formerly, plums were a drug in the Owen Sound market, but since the completion of the T. G. & B. R. they can be shipped off to any part of the country where they may be a failure, and I have no doubt but that if any person who understands drying plums was to settle in this neighborhood and plant a plum orchard of the proper varieties for making prunes, he would find it a profitable speculation. A variety called the French Prune was spoken highly of at a meeting of the F. G. A. last year, but although I have written to two or three of our Ontario nurserymen, I cannot obtain any.

I find the Concord and Hartford Prolific grape vines stand well here without any protection, but they are not quite early enough for this section of the country. A neighbor of mine has cultivated a green grape these last two years which has ripened two weeks earlier than my Concord, but he does not know the name of it. It is not so large either in bunch or berry as the Concord, but its earliness is very much in its favor.

Gooseberries, currants and strawberries, if well attended to, do as well here as anywhere in the Province; so do tomatoes and melons, if started in a hot-bed and then planted out.

The Hulless Oat man has not yet favored us with a visit, and if he did I do not think he would get many customers. It is perhaps well that there are so many gulls in the world, or what would become of the knaves? They, poor fellows, must eat as well as other people, and if the breed of gulls could be eradicated, the knaves would die out.

CHARLES JULYAN.

Sarawark, April 2nd, 1875.

"Old Subscriber," Wellington Co., need not dread any evil effects to his land nor to the potatoes from Paris green, used as a remedy against the potato bugs. We have now had trial of it for some years, without any injurious results from its use. Professor Croft says that as this salt is entirely insoluble in water, it does not appear likely that it would of itself be taken up into any plants growing in the soil. He examined in the field a few plants of potatoes which had been drenched with the poison as long as they were growing. "The stalks were washed as carefully as possible, but, on examination, yielded a most minute trace of arsenic, arising, no doubt, from the difficulty of washing off every trace of the adhering powder. The tubers were then carefully washed and skinned, and the pure potatoes examined in three different trials. Not the slightest trace of arsenic could be detected in either case, from which it is fair to conclude that the Paris green itself is not absorbed, or else that if decomposed in the soil, the products are not assimilated by the plants which have apparently a power of solution." From this our subscriber will see the examinations of the subject by scientific men are in entire agreement with the results of our own experience.

Rotation—Preparing Seed Wheat.

Sir,—I am a farmer, and feel interested in what I read concerning the best modes of tillage and the best kinds of manures that help to enrich our land, so as to secure the largest possible yield of grain, roots and grasses without impoverishing it. Why, sir, our lands should be getting better and richer every year, and I am satisfied that they would, if but properly managed, while we at the same time would be receiving an increase of their products.

Now, I shall not find fault with what has been written. I have been benefited by reading the ADVOCATE, and I think, sir, you are engaged in a good work in helping to advance the interests of the farming community, which in the past have been neglected, and the farmers are still too much neglected by those who make our laws and enact them.

But, to return, that which is most wanted is the result of practice; theory is good if it can be put in successful practice, otherwise it is of no use. I believe in the rotation system; I have practiced it a little, but I am only learning, although I have been farming for nearly forty years. My practice for some years has been to seed down with grass seed, every spring, all the land that is fit. I mow it two years; as soon as the second year's crop of hay is off the ground, I take a good sod plow and team, and a good plowman; I plow what I can before harvest, finishing often after harvest; I let the land lay three or four weeks before I touch it, certainly not less than three. I then begin to harrow and cultivate, and work it occasionally till it is time to put in the seed. I drill in two bushels to the acre.

I don't boast of extra crops of wheat, but I get better than I can by summer fallowing, and my land is improving all the time. Then I take the wheat stubble manure, and put it in with corn and roots, potatoes, &c. The season following I sow barley, and seed down again.

A word about lime. I see it recommended to be applied in one way by some, and in another by others. Some years ago—the year the frost injured the wheat so much—I soaked my seed wheat in a strong brine. I bought new lime, and after throwing the wheat on the barn floor, I sifted lime on it to dry it; it took a great quantity of lime to dry it