

Alsike and Alfalfa.

No other preparation of land is necessary than is given for other grass seeds. Sow alsike at the usual time of sowing red clover, in spring, with rye, oats, wheat or barley, at the rate of about four pounds to the acre. Alfalfa is sown alone generally, in northern experiments, in drills about a foot apart. In California where it thrives luxuriantly, it is often sown broadcast. It is generally considered that it will not do well so far north as this, though there are cases reported in Indiana and Illinois where it has grown finely. If sown in drills, about ten pounds of seed are required per acre. If broadcast eighteen or twenty will be required.

The American Newspaper Advertising Agency of Geo. P. Rowell & Co., New York is the only establishment of the kind in the United States which keeps itself persistently before the people by advertising in newspapers. They evidently receive their reward, for we have it from a reliable source that advertising orders issued by them for their customers have exceeded three thousand dollars a day since the commencement of the year, and this is not a very good year for advertising either.

N. B.—The expense in searching for grain and in purchasing, testing, and preparing it for you must add to the cost. The stock being only small therefore, to cover expenses we are obliged to charge a high price for it, and can only supply it in small quantities. We do not propose sending more than 100 lbs. to one person, perhaps our stock will not bear this; in case it should not, the small orders will be filled, and less quantity sent to those wishing it by the 100 pounds. We guarantee the crop if properly attended and the season favorable will give satisfaction to 9 out of every 10 of our subscribers that procure either variety, and that it will return 100 per cent profit to you. To claim our guarantee, you must follow our instruction, examine your grain closely, and should you see a black oat or a piece of barley pick it out. Go through your field twice before harvest and pull out any foreign grain that may be in it. Thus you will have a pure sample to supply us; and your neighbors.

The above applies to the Emporium Oats and Emporium wheat. Our subscribers will be first supplied. Farmers that have taken Stock in the Agricultural Emporium will participate in the profits or losses in the introduction of these new seeds, and will be informed of all particulars regarding the same. Grangers have examined testimonials and rates, and aided in fixing prices, and consider our statements and terms are right.

We have heard accounts and seen samples of wheat called the Golden Globe, the Mantony, the Jackson wheat; from some of which we hear good reports, and seen samples, but the mixtures of dangerous seeds prevent us from attempting to introduce them to our readers.

If any of our subscribers have more clean and pure Silver Hulled Buckwheat than they require, please send us a sample, state quantity, and price wanted.—W. W.

Also we want to procure Pea Vine Clover seed direct from a subscriber that has raised it.

On account of a dispute regarding the Red Fern Wheat, we will call it the Emporium Wheat; and as the oats, have no name we will also give them the name of the Emporium Oats; feeling quite justified in doing so, and believing they will do credit on the establishment.

Wheat Maure.

The *Delaware State Journal* says: "Wherever organic matter abounds in the soil, a free use of bones and potash will speedily restore it to its original fertility. In sandy soils organic matter in the form of peat, muck or leaf mold should be combined with the bones and potash. The finer the bones are ground in a raw state—that is, with steaming or burning—and ground very fine, and mixed with three times their weight of fine muck or peat or leaf mold, and kept moist for three weeks before being used, they will generate all the ammonia necessary to the rapid growth of wheat or other growing crops, without the addition of other substances."

Straw Feed.

At the New York Farmers' Club, M. George May Powell, of the Oriental Telegraph Corps, said that when in Syria last year, he was informed by some of the large farmers who are trying to introduce the improvements of the west in the Orient, that they found difficulty in using our threshing machines, because they only break instead of bruise the straw. As a result the cattle would eat only a portion of the straw thus threshed, while that threshed by the method in use in the land for centuries is entirely eaten up. While we are teaching much to the east, he said, may we not learn something there ourselves? Millions of tons of straw are annually burned up in the west. May not these facts lead to experiments in straw-feeding, which will turn part of this waste into millions of dollars worth of beef and mutton?

SIR,—Please find enclosed one dollar for the *ADVOCATE*, being my subscription for 1875. I assure you there is no paper or periodical more looked for, or read with greater relish, than the *FARMER'S ADVOCATE* with my boys, although not farmers.

Mr. Editor; I have an apple orchard planted on the side of a hill, fronting south-west, these thirteen or fourteen years. Trees from about 15 to 20 feet apart; the trees are about meeting at top. Many say I have them planted too thick; however, I differ with them, especially in the Northern country. I would like to hear what you would say about it, for the sake of others and myself.

I see it mentioned in the last number of the *ADVOCATE*, that to provide ants and put them among cabbage plants that they will destroy grubs &c. This might do, providing there was no apple trees in the garden. My opinion is, that ants are injurious to apple blossoms; for I have observed them run up the trees in hundreds, and probe into the very heart of the flower and my impression is, that they eat the germ of the apple or poison the flower, I always endeavor to banish them instead of encouraging them. Let us hear what your experience is concerning this on apple trees.

MATHEW B. COUCH.

Walkerton, Feb. 6th, 1875.]

There is great difference of opinion on the proper distance at which trees should be planted. Much depends on the kind of trees, as some trees from their greater growth, and their branches less upright than others, require greater space. 20 feet apart we do not think too great on the whole. We have not observed any injury to apple blossoms; if you have reason to believe that they are injurious of course banish them, as it is not a difficult matter; they preserve the young cabbages from the grubs, and having planted fruit trees, we should by all means protect them.

Mr. James Mair, Bridgetown. We have no knowledge from actual trial of the fall rye sown in spring; but we do know that it the hardiest cereal plants we have sown or seen sown in Canada; and from our knowledge of its great hardness, rapidity of growth, forage and—yielding capacity we think, that it sown in spring, it is the best cereal plant for early soiling.

The other question we deter replying to, till we can give more definite information.

Tares and Mammoth Clover will be supplied at such prices, according to the market supply. We will not guarantee the Mammoth Clover, unless we can procure it direct from fens from growers, otherwise we shall supply it from the most reliable sources from which we can procure it.

Planting and Pruning Fruit Trees.

I am satisfied from much observation and reflection, that the system of planting and pruning fruit trees, vogue throughout the Northwest, and universally recommended by nurserymen, is altogether wrong. That system is substantially as follows: "Plant the trees a trifle lower than they stood in the nursery, and make the heads as low as possible."

I have examined carefully and critically the old orchards in Lafayette, Iowa, and Grant counties, orchards that have been planted from 15 to 30 years, and there is not a single orchard of them that is not now old and worn out. Every one of them was planted and pruned in accordance with the system named, and every one is a decided failure. There is not a single exception. Some have been taken care of better than others, and consequently are in somewhat better condition; but in the three countries there is not an orchard 25 years old, which pays a reasonable interest upon the ground it occupies.

We have learned from experience that only a few varieties of apples and other fruit will thrive, do well and bear well here. Why is it that they are so short lived? As the general rule, I think more care is taken of fruit trees here than in any other country I ever saw. The fruit, therefore, is not in the want of care, nor is it in the soil or climate; for we have demonstrated by patient experience, that some hardy varieties of fruit trees, for a time, will do well here; they ought to do well for a longer time. Why don't they? In our states and countries upon the same latitude and upon the isothermal line, apple trees live and bear well for 75 or 100 years. Why don't they do so here? Of course there is some good reasons for this state of things. What is it?

Let us commence with the top of the tree. Go into any old orchard in Southern Wisconsin or Northern Illinois and examine carefully the trees. In some varieties the tendency to make croches is very strong, and all croches are nuisances; in other varieties the tendency to make strong, upright bodies, with lateral limbs forming strong shoulders at the junction with the body, in some the tendency is to make low, and in others, high heads. Now in the whole section of the country there is not an apple tree 25 years old, with a croch, or a very low head that is good for anything but fuel. Not one! And in the old orchards croched and low-headed trees have invariably given out and died. On the contrary, trees with high, upright heads and free from croches, have survived and still bear tolerably well. This is the absolute rule pertaining to Northern Illinois and Southern Wisconsin, and there are no exceptions to it.

Experience is better than all theories, and it has demonstrated to the most thoughtful horticulturists in this section that we must always avoid croches, and make the tops of trees as remote from the ground as we possibly can. In my judgment, that theory is correct. In my opinion an apple tree should never be permitted to form branches less than seven or eight feet from the ground. Now as to planting the trees and the root. Judge McGonigal, of Lancaster, plants his grape vines at least 15 inches deep. I plant my fruit trees and grape roots just about the same depth. Rothius Scott has two orchards, containing 2,000 of the finest trees I ever saw in any country, and every one of them is planted at least 2 feet deep, and sometimes 2½ feet! Scott does not fill up the holes the first season; he covers the roots 7 or 8 inches deep. Late in the fall he fills in the holes, and takes out part of the dirt next spring; the hole is completely and finally filled for a year or two. Every season he cuts off with a sharp shovel all the lateral roots that have formed above those the trees had when it was planted, and pulls them out. His main object is to get the roots deeply covered and entirely out of the reach of climatic changes. So far as he can, he endeavors to make the roots take a downward direction. I don't think it is necessary to plant so deep, but I know it is right to plant a great deal deeper than we have been in the habit of planting. By deep planting we avoid mulching, and we protect the roots from drought, heat, frost and all other injurious climatic changes. And there is another important advantage gained by deep planting. The sap does not start so soon in the spring. I think the heavy clay subsoil we have in this part of the West is better for fruit trees than the light, friable, alluvial, prairie soil.

Get the roots down deep into the ground and get the tops removed as far as possible from the roots, thereby preventing too speedy connection between