

The Farmer as a Mechanic.

There are those who uphold the work of the specialist until they would have the farmer as helpless as the city man who only has to give an order through the telephone and the mechanic is on hand to do any work in any line needed. With the farmer all this is changed; he is at some distance from the city, and any mechanic that may reside in the neighboring village is likely to be only a third-rate hand, or he would have gone to a centre where better work and greater skill are better paid.

In doing his work the farm hand of necessity has to learn something of handling tools of all descriptions: there are breakdowns on the road in which his ingenuity is brought out in a thousand ways. Sometimes a man would be so badly stuck that he would not venture out alone if he were not equal to the occasion in fixing up an unfortunate break that otherwise would disappoint all his calculations. A broken trace or other part of his harness must be mended without loss of time, or the load will not reach the market in time. Again, the majority of farms are so isolated that it requires more time to go to a carpenter or blacksmith shop than it requires to mend the break.

As winter approaches there are a number of jobs that require doing, in order that stables may be placed in readiness when the first blast of winter comes. For this and a hundred other reasons a farm workshop is required, where tools of all sorts are kept to fix up wood or iron work when needed. There should be a room large enough for a stove, so that there will be comfort for those who intend working at any job which is required, and many a rainy day may be spent to great advantage there.

Boils of all sizes should be kept to replace those worn or broken in any machine, and different wrenches should be on hand when wanted. This is an example of how a few dollars spent on tools required would supply many a convenience that is done without. Machines would be mended in time to prevent a general collapse. It does not require an expert to paint the implement, that has of necessity to be out in much of the weather, and for want of which they very soon get old looking. The water gets in and swells and rots the wood, and valuable machines get out of order and have to be replaced with new, which takes much of the profit which is made from the farm. Again, if a man learns how to repair a machine or implement he will take more care to prevent its abuse, and will take more pride in having them in the best working order, which, last of itself, will save much of the wear and tear which a badly running machine entails.

Farmers must give time to kitchen gardens or else they go without vegetables. If they have the time to go after and buy what is required, how different from the fresh, crispy lettuce and other garden stuff that is at once healthy and delicious, is the faded, wilted stuff that has been hawked to a town and stood in the sun until every vestige of freshness is gone. A few hours spent at this time of the year on asparagus and rhubarb beds will plant out enough to last for years. The fall is the time when the garden should be plowed, so that it will be in readiness to sow the seed, and do what planning is contemplated in the right season when hurried

spring work comes on. A few boards will make a cold frame that will start many a delicate vegetable. Why not turn them to account and have early lettuce, tomatoes, cucumbers, or any other vegetable you fancy, that not only contributes to enjoyment, but is necessary to health.

Preserve the Mares.

The love of farm stock of all descriptions, which is so thoroughly engrafted in the Anglo-Saxon race in the old world, is just as firmly implanted among the same race of people on this continent. Particularly is this the case among Canadians, who are fond of breeding and caring for stock, and in their hands all varieties appear to flourish. The horse comes in for the largest general share of attention; as he is more closely identified with the co-workers on the farm, therefore, he is of necessity the general favorite. No truer insight into the character of a country's agricultural resources can be gained, or truer idea of the intelligence of the residents, than that which is obtained by viewing the horses that are being produced in it. Just as these abound in variety and in superiority, just so far has the country succeeded in other departments of trade and wealth. In each locality certain types have been developed suitable to the wants of the residents of that part, or the demand that may have arisen by certain qualities that a local breed may possess.

The student of heredity in breeding in any of its branches is impressed with the readiness with which any breed responds to skill, or care in the work of moulding desired types. The distinguished breeders of former years studied the qualities of the subjects they had at their disposal, and by blending these properly together they produced the animals which have done so much to impress their qualities on the different lines of breeding throughout the world. Just as the artist who has brought his picture through from the rough sketch to the perfected painting. It is the finishing touches that betoken the master hand. So it is with a distinguished breeder: he carries his ideal in his mind, and so dictates a cross that he is enabled to produce that which was plainly impressed on his mind, and thus is brought forth that which is admired by all who take an interest in live stock. The old breeder had comparatively imperfect material from which to produce the horse in the variety and perfection in which we now see him. It was the happy blending of the blood of the Arab and Barb on the English mares, on the English soil and English climate, that produced the thoroughbred or English race horse which, much superior in size, possesses greater speed and strength, and is far in advance of the choicest specimens possessed by the ancients; and yet this blood is most potent in improving other sorts. We find the English thoroughbred employed to improve other good sorts, and a mixture or percentage of this blood is always found where light horses of good quality are met with. The French have purchased them freely, and the impress can clearly be seen in the coach horses they are producing. The German breeder has it. The more quality we put in them the more of the thoroughbred blood is detected on analyzing their pedigree. The best English coach horses are largely indebted to the thoroughbred; and of late years additional crosses of this breeding are constantly

being added. The American trotter is bred up largely from cleverly chosen specimens of the galloping thoroughbred, and fresh infusion of this blood has furnished the most wonderful performers at the trot. Thus we see that a certain strain of breeding may be exceedingly powerful in its influence even when diluted by several removes.

The first principles known to early breeders was that "like produces like," and to this law was added the generally accepted rule, "breed from the best." To the successful application of these two rules we are indebted for the advance that has been made, and the high degree of excellence attained. In Canada we have any number of mares suitable for breeding in each line, but it is for want of studying the probable effect of mating that results in such a large proportion of failures. Personal interest often induces a man who is quite competent to judge, to give his advice how a certain mare should be bred, quite contrary to what he would decide if he were the owner himself, and it is strange that men will flock in one direction, and breed to a certain horse without any regard to the type of mare they may possess. For example, we see large useful mares of draught types being bred to a trotter. What the owner expects as a result is hard to conjecture. Then, again, a mare of capital quality, but perhaps a little deficient in size is mated with a draught horse, the owner doubtless looking for an improvement in size. In each case there is a desire to realize what is not possible to obtain without a loss of the most important characteristics. The above may be thought extreme cases, but they occur every day. The art of breeding must be more closely defined before success can be attained. Wherever essential traits are developed in a mare, these should be aided by breeding to a horse that not only has the characteristics in himself, but whose breeding denotes the same points developed in his ancestry. A deficiency or weak point in a mare should be overcome by breeding her to a horse which is especially strong where the mare is weak, but both should be as nearly as possible of the same type. As before mentioned the old breeder's first maxim was "like breeds like," then how can we expect to produce beauty of form where none is present. How obtain strength where nothing but weakness is seen in every essential point. If a certain type is desired, wide crossing is almost certain to end in disappointment. Mating parents to improve certain points is what constitutes true skill in breeding.

DEAR SIR.—We write to say that things are still progressing with us this season even better than we anticipated. We are at present getting out a large shipment for the War Department of Roumania, consisting of wind-mills, pump and tank, also a keystone portable steam drill for drilling artesian wells. We have now got a fair trade in that country, which is gradually increasing. We are also getting out another shipment for England, and have at the present time over twenty men employed erecting wind-mills in the Northwest in addition to our regular staff in this province. As you are aware, our business has been steadily on the increase for the past five or six years, which fact we attribute largely, especially in this country, to the excellent services of the FARMER'S ADVOCATE, in which we commenced to advertise some six or seven years ago. We do not appear to have reached all your subscribers yet, or else your circulation must be increasing, as we still continue to receive enquiries for catalogues, etc., from readers of the ADVOCATE.

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