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HORTICULTURE

Repairing the Orchard

By J. B. Frith, Ontario Co., Ont.

THE season for overhauling the orchard is rapidly approaching, some farmers do not realize the necessity of going carefully over every tree and giving it a certain amount of repairing. Nevertheless, it is all im- portant, and time spent in this way will yield a good profit.

The heavy crops of apples of the previous autumn may have split or cracked some portion of the trunk or a limb may have become partially de- tached from the main body of the tree. An iron rod with large washers on each end placed through the limb and parent trunk may prolong the life of this limb for many years. The rod should be made sufficiently long, so that the future growth will not be in- terfered with. Wounds caused by pruning knife or saw should receive careful attention. It may be that some old wounds have not healed and decay has set in. The decaying wood should be cut out and the space filled with some waterproof substance, as cement.

The storms of winter may have caused damage, large limbs may have been broken off and the bark of the tree injured. All splinters and stubs of limbs should be trimmed with the pruning saw so as the moisture can- not collect on the damaged surface and start decay.

In young orchards and even in fair- ly old plantations there is always a danger of priding from mice or rab- bits. The life of many trees can be saved where this has happened if prompt measures are employed. As an instance of this let me tell of a tree that came under my observation a few years ago. This Talman Sweet tree was about fifteen years old, and had been bearing for some time. It was valued quite highly by its owner, but was almost completely girdled and he expected it was lost. An old orchard- ist was consulted and he instructed the new man to bridge-graft the injured parts and to trim back the top. This was done and the tree continued to live and today is apparently as healthy as ever.

In order that anyone can intelligently repair trees of any description it is important that they understand some- thing of its life and manner of growth. To quote an article that recently came to my notice,

"To many of us, the structure, growth and physiology of a tree are practically unknown. We have a vague notion about trees adding a new ring of wood each year. The new man to bridge-graft the injured parts and to trim back the top. This was done and the tree continued to live and today is apparently as healthy as ever.

"As a matter of fact, the mineral salts and the water that the roots take up are in such crude form that they are of no use whatever to the tree until they have been brought through what is really a desiccative process. This process takes place in the leaves, so the trunk of the tree must act as the circulation medium for the leaves and again for the dried sap to flow back and give nourishment to all the living tree cells, even the roots.

"The crude stream flows upward through an inner circle of the tree trunk, and the digested stream flows downward through an outer circle. It is this life-giving sap, flowing through the outer portion of the trunk, that gives the added layer of new growth to the tree. This vital circle lies just next the bark, and is called the cam-

bium. A cross section of a tree shows this to be softer and more moist than any other part.

"Being thus soft and lying so near the outer surface, it is naturally liable to injury, and the injury of this most vital part means danger to the tree. With these few simple facts in mind, it is easily seen why trees should be protected from the teeth of horses curiously hitched to them, why gus- bers should not be fastened to them, and why all the other brutal abuses of trees should be taken in hand by law if necessary.

"Nature has her own way of healing tree wounds, whether made by man's carelessness or by severe storms. When a limb is broken off the ex- posed bit of cambium receives a gener- ous supply of the sap, and because this sap gives growth it in the spring it forms a fold or lip about the wound which gradually covers and protects it.

"The great danger to a tree is not in losing a limb, but in having a wound made in which water can stand and cause decay, or in which injurious insects can find lodging. Nature heals the wound wisely, but she cannot heal it rapidly enough to eliminate these dangers, and this is where man's skill comes in to hasten the process of healing."

Wintering Cattle Cheaply

OCASIONALLY there comes a winter when, owing to the scarcity of feed, the average farmer is driven to the end of his resources to get his cattle through. It is a very easy matter to criticize him for sell- ing his stock and to call down anathemas on his head for jeopardiz- ing the live stock industry, but it is not so easy to bring a herd through without sacrificing. It is doubtless true that much stock is sacrificed that

could with a little more resourceful- ness be brought through, to the im- mediate profit of the farmer himself and to the advantage of the live stock industry in the future. Those who have their own interests and the inter- ests of live stock in general at heart, will keep as many of their cattle as can be conveniently wintered, and if any are sacrificed, it will not be the breeding stock. It will, therefore, be possible to bring the herds up to the usual strength within a year or two should we be blessed with favorable seasons.

With all concentrated feed at the present unheard of levels, it may be sound business to rough the vigorous young stock and even the dry cows through the winter on the cheaper feeds, even if in so doing they do not come out in the spring as well fleshed and conditioned as is usually the case after more abundant seasons. To rough the animal through, does not mean that they will be half starved and left exposed to the rigors of the winter in open and draughty sheds and around straw stacks. It means to pull them through so that in the spring they will come out, at least, in good hearty condition. Growing stuff especially should not be allowed to come through to a standstill. If they are growing a little and in a thrifty and hearty condition, so that even if they lose a little in flesh, it will im- mediately start gaining upon being re- turned to pasture. Adequate protec- tion, rest and sufficient water and regular feeding of the coarse feeds are the first requisites in roughing the cattle through the winter successfully. The best combination for cheap win- tering is alfalfa and alfalfa or clover hay. Straw alone is not sufficient. It has not nutriment enough to keep cattle in a thrifty condition. They must have something more. The past season fortunately, was a good one for hay and most, if not all, have a larger supply of this than usual to round out the ration.

The Life of Chilean Nitrate Deposits A. D. 1917

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For Reliable Information Write

Dr. W. M. S. MYERS, Director Chilean Nitrate Propaganda 25 Madison Avenue, New York

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