

they can. Where the trunk and limbs of the tree are sound, there is no reason why a new growth should not be started on the lower portion of the limbs. This new growth can be induced by cutting back the ends of the lower limbs along with the thinning of the finer brush towards the outside of the tree. This would, of course, temporarily reduce the bearing area somewhat; nevertheless, the result in the end would be beneficial. The bearing area is seldom too large, but it is unevenly distributed over the whole tree. Usually in these old trees, it is confined to the tips of the limbs, where the fruit spurs are much too crowded. The effect of thinning the finer brush, and cutting back the larger limbs moderately, would be to induce the growth of suckers or water sprouts on the naked limbs towards the centre. One or more of these may be selected on each limb, and so pruned as to fill up the vacant space in the centre of the tree.

These water sprouts usually grow very vigorously the first year. A growth of three or four feet is not unusual. The spring of the second year, the new growth that best suited the purpose of filling the vacant space, should be selected, and all others cut off close to the main limb. One year old shoots left should be pruned

the tree fairly well filled with bearing wood. During this time the outside of the tree has been carefully thinned, but some bearing wood would have developed, and if this is pruned to correspond with the new wood induced in the centre of the tree, you have now a good bearing tree ready to renew its youth, the younger wood growing from the centre taking the place of the older wood towards the outside.

BAD NURSERY STOCK

In the young orchards it can be seen very distinctly that the farmers are not well informed in the quality of the stock. In one case I saw an orchard of twelve or fifteen acres in extent planted with trees which must have been stunted stock, six or seven years old, severely cut back in the nursery, and making a very poor showing after being planted a year in their permanent position in the orchard.

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Sow Thistle

I have been interested in reading Mr. Brethen's article which appeared in your issue of July 29th, on this infestor of our fields—sow thistle.

The following plan has been adopted successfully by some farmers in the East:

Manure the land very heavily in the Spring; let the thistle grow till the first of June; when under the influence of the manure, it will have assumed a rapid and rank growth. Then plow it under with a broad plow; cultivate thoroughly with a rotary cultivator; then cross-cultivate with an ordinary harrow; plant to corn or potatoes, and cultivate often and thoroughly during the season. The result is, that with the heavy growth and the manure plowed under, the roots and weeds are thoroughly rotted and destroyed.

I am told that "twitch" or "quack" grass can be eradicated in the same way, providing that it is plowed in during the Fall instead of in the Spring.

Has anyone of your readers had this experience with "quack" grass? — "Farmer from the East."

The Draught Horse

To the breeder of high class draught horses there are two essentials of prime importance, viz: weight and quality. A horse that weighs under 1600 lbs., I care not how much quality he may possess, we have to strain a point to call him a draught horse at all. On the other hand a horse may weigh a ton, and if deficient in quality be only a poor kind of cart horse. Weight in an animal is easily determined by the weigh scales. The question of quality is much more difficult to decide, and is to a certain extent (even in the hands of an expert) a matter of opinion. However all horsemen are agreed as to most of the essential properties, such as a clean, flat hard bone, oblique pasterns, an absence of puffiness about the hocks, standing squarely on all feet. When in motion, a

free, prompt, springy gait, lifting the feet well up from the ground and extending them in a straight line. These qualities together with a rather clean cut head, broad between the eyes, with the latter organs large and bright and standing well out in the head, coupled with a well developed and symmetrical muscular system go far to produce what is termed quality in a horse.

It has always been a matter of more or less difference of opinion as to whether weight or quality was the most important in a draught horse. The skillful breeder will always aim to get a happy blending of both. But while we cannot produce too heavy a horse, provided he has quality, care should be taken not to sacrifice quality for weight. I would use a sire of good quality weighing 1800 lbs. sooner than one that weighed a ton but was deficient in quality.

While high class draught horses are not confined to any one breed (for we have good and bad in all breeds) still as a rule where you find a really good horse he is a well bred animal, that is, he is a high grade or pure bred horse. So far as Ontario is concerned, the most popular breeds are the Clyde and Shire, especially the former. Breeders with grade mares of either of these breeds would make a mistake to mate them with a Percheron or Belgian or any other breed.—"Centaur."

Food Value of Milk and its Products

Geo. Rice, Oxford County, Ont.

Although milk has been used as food throughout all the ages, and most people use it from birth to old age, yet very little is understood by the average person as to the value of milk and milk products. Now that food values are increasing and that in some quarters the financial stringency is felt and less work is going on, the food value of milk should be better known. The greater use of milk would be a great saving to the consuming public. Greater attention is being paid to the producing of milk under conditions that will insure a pure product. The most effective way to bring about more up-to-date and progressive methods in handling milk to insure its purity and cleanliness, is to pay better prices for the milk. When it is suggested that we increase the price of milk, then there is a kick coming right away from the consumer, who probably does not know what value the milk is as a food.

Scientists tell us that a quart of milk is of equal food value to a pound of our best beef steak. Yet, at one city where beef steak retails at from 15c to 18c a lb., milk retails at six cents a quart, or actually three times less than one would pay for the same value of other food.

MILK MORE ECONOMIC THAN MEAT

The consumer kicks about paying more for milk giving as a reason that he has to pay so much for meat. If he is looking for an economical ration, why eat meat at all? Cheese can very well take the place of meat. In fact the old country laborers use cheese instead of meat. I have noticed some that come to this country still keep up the practice of cheese eating, and I have seen Englishmen's tables set with cheese in plenty, with no meat at all. If economy were desired that certainly was making for it, because a pound of cheese has the food value of more than three pounds of beef steak. Besides it does not sell for any more than the beef-steak, even at retail prices, and if a man would be forehanded and go to the factory to buy cheese, he could get it practically at wholesale prices.

My attention has been drawn to this subject at this time on account of a letter appearing in a paper from a consumer of milk making a kick because he had to pay a retailer 6 cents a quart for milk. If there is any man who earns his money, surely it is the retailer of milk.



Institute Meeting in Wilbur Winter's Orchard, Wicklow, Ont.

Those in the illustration are: Back row, from the left: A. Waite, (partially showing), S. Jayson, J. Davis, W. Gleason, D. Kerrighan, T. B. Rivett, Dept. of Agriculture, Toronto; M. J. Gillard, John Kellogg. Front row, from the left: Captain Brown, Dom. Fruit Inspector, R. J. Rutherford, Dom. Fruit Inspector, H. Russell, C. E. Wilton, E. B. Hinshaw, T. J. Carey, Dom. Fruit Inspector, and W. Winter.

back to within four or five inches from the main limb. This would induce nearly all the buds upon the remaining stub to grow. Three or four of these would be selected and the remainder pinched out soon after growth began. By the end of the season the shoots left would usually make a growth, not as vigorous as the growth of the preceding year but still more vigorous than they would from the older branches. These again should be cut the following spring to the extent of one-half their growth. It is quite possible that, after this treatment, the fruit spurs will form on these side shoots, the end buds developing into wood growth. This wood growth should again be thinned to two or more shoots as the case may require, and cut back slightly the third season. The third season fruit spurs will develop on the one year old wood, and after this very little cutting back will be needed.

If the original sprouts have been judiciously selected, you have three years afterwards the cen-