

a smaller number—from three to five—and, by heading these back, cause them to branch out, until the requisite number is secured. Stouter and stronger branches can be developed in this way.

A third reason for modifying the form of trees is in order that the maximum area of bearing surface may be developed. Some varieties naturally produce very few branches, and grow, consequently, with very open heads. Additional



Fig. 7.—Northern Spy tree in summer. Head very dense; impossible for light to penetrate to center of tree.

bearing area may be secured in such cases by heading back the branches at the proper stage, in order to increase their number, thereby filling up the head of the tree to the desired extent. On the other hand, a good many varieties produce so many branches that it becomes necessary to reduce their number in order to admit light to the center of the tree in sufficient quantities to insure the development of fruit buds. Well-developed leaves are necessary for the production of well-developed fruit buds, and it is a matter of



Fig. 8.—Same tree in winter—before and after pruning. The dense habit of growth of this variety undoubtedly delays fruiting very considerably. Light must reach the area within the dotted line before fruit buds can be expected to develop. Trees of this type should not be headed back more than is absolutely necessary in order to start the head properly. These trees will be referred to next week, in connection with summer pruning.

common observation that the development of leaves depends very largely upon light conditions.

Where high winds prevail, it is sometimes found necessary to prune in such a way that the growth of the tree may be directed towards the wind, instead of away from it. If this matter is disregarded, trees become unsymmetrical in shape, and considerable areas of bearing surface may be lost.

In Victoria, Australia, the demonstration-orchard idea is being vigorously worked on a new principle. The fact that numbers of varieties of valuable fruit trees refuse to bear good crops in certain localities or situations; or that they bear irregularly; and, also, that many fruit trees do not carry the crops that their size and age demand they should carry, has led fruit-growers and experts to consider that the whole question of the stock and stock management should be reopened. In these orchards, not only will apple trees on Northern Spy and Majetin stocks be planted, but trees will be worked on as many kinds of stock as may be obtained. Already, in the nursery, the usual dwarfing stocks, the French Paradise, and Cole's Blight-proof Paradise, are planted out for testing, as well as stocks from England, Spain, and Japan.

THE FARM BULLETIN.

Our Scottish Letter.

THE GLASGOW STALLION SHOW.

This must of necessity be a horse letter. The week is that of the Glasgow Stallion Show, and so much was crowded into the one day that many books might be written concerning it. The judges were somewhat numerous, because the purposes for which Clydesdale stallions were being looked for were numerous. The opinions of the judges were almost as varied as their numbers, and in the end of the day we enjoyed the rare spectacle of seeing the Cawdor Cup, almost the supreme honor of the show, awarded to a horse which was only third in his classes, and these positions meant the decisions of five judges. Nothing like this has ever happened before, and the most remarkable fact connected with it is that the final award was generally conceded to be the right one. But in view of such things, is there not room for some codification of opinion as to the points of Clydesdale horses? The tyro who wished to learn something at the Glasgow Show could only have been bewildered, and the student who attempted to improve his knowledge must have wondered what had happened to his monitors.

To let the uninitiated understand the position we will explain. Two sets of judges (three each) are appointed to select a horse over three years old, and a horse rising three years old, to travel in the Glasgow district during season 1911. These judges must be directors of the society, and, if possible, probable users of the horses. This year these two benches were composed as follows: For the older horse—Messrs. Robert Hamilton, High Motherwell, Hamilton; John McAlister, Ardyne, Toward; and J. Cairns, Abercrombie, St. Monance, Fife. For the younger horse—Messrs. John Hastie, Eddlewood, Hamilton; Alexander Buchanan, Garscadden Mains, Bearsden; and Arthur Lang, West Kilbride, Kilmacollm. The horses chosen by these benches, out of respective lots of 25, were John Pollock's Montrave Viceroy 14278, rising five years old, and Wm. Renwick's Blackstone 15152, a black horse, rising three years old. Both are thick draft horses, of the lorry type, with good middlepieces, as well as the faultless feet and legs which are essential in a high-class Clydesdale. Both horses are out of mares by Baron's Pride 9122, and Montrave Viceroy has the unique distinction of claiming Cawdor Cup champions for both his sire and dam. This is conclusive proof that prize animals are not consistently disappointing as breeders. On the contrary, the history of modern Clydesdales proves that so far as they are concerned this theory no longer holds. Hiawatha 10067 is sire of Montrave Viceroy, and Marmion 11429 is sire of Blackstone. The reserves placed by these benches of judges were in the older class: (1) A. M. Simpson's High Merit 14677, a horse with marvellous action and very showy; and (2) Mr. Taylor's stylish horse, Sir Winston 14867, beautifully moulded, but a little hampered in his action. In the younger class: (1) Perfection, a roan horse, by Baronson 10981, and a good mover, with plenty of strength and substance; and (2) Mr. Marshall's Macaroon 15936, a stylish, quality bay horse, of the fashionable type, got by Baron Burgie 13345. This horse in the end of the day became Cawdor-cup champion. But of this anon.

These decisions came under review in what are called the open classes. These include all the horses entered to compete for the Glasgow district premiums, and any others that may be entered for ordinary class prizes. In the aged class four additional were entered, and the judges were Messrs. Robert Murdoch, Hallside, Newton, and William Spittal, Kenmuir, Tollcrops. These gentlemen did not seriously upset what the bench of three had done, although having one or two additional horses to deal with there were modifications in the results. Their awards were: 1, Montrave Viceroy; 2, Mr. Taylor's Sir Dighton 13760, which would have made a popular first; 3, the same owner's Sir Winston; 4, Mr. Simpson's High Merit; 5, Mr. Kilpatrick's Baron Belmont 13973; 6, Mr. Todd's Marcellus A. 15310; 7, Mr. Marshall's Royal Review 16036. It was in the three-year-old class that the upheaval took place. The open class contained ten more horses than the confined, and, of course, these had to be taken into the reckoning. But the two judges, Messrs. James Fleming, Frioeh Mains, Ambroath, and A. B. Matthews, Newton Stewart, did more than this; they overturned the previous decisions in a spirited wholesale fashion, as the following results show: They placed Wm. Dunlop's celebrated Dunure Footprint 15203, the champion of last year, first, and Mr. Taylor's Sir Rudolph 16086, a greatly-improved, handsome, dark-brown horse, which won several prizes last year, second. These had not been before the other judges. In third place they put Mr. Marshall's Macaroon; 4, Mr. Kilpatrick's Craigie Dorando 15186; 5, Mr. Johnston's Montrave Imperial, which the three judges did not include in their first four; 6, Mr. Pollock's Lord Archie 15285, and 7, Mr. Renwick's Rubio 15381, to both of which the

same remark applies, and they placed Blackstone, which the three had put first, eighth, and Perfection, which they had put second, ninth.

There were also classes for two-year-old and yearling colts. These were judged by Messrs. James Weir, Sandilands, Lanark, and Richard Fleming, Bent, Strathaven. In the former class there were 18 entries, and in the latter eleven. The winners in both classes were owned by



Fig. 9.—Mature Spy tree, badly in need of pruning—too many small branches. Can only be properly pruned by working on the outside of a tree from a ladder, using hand clippers and light hand saw. The area within the line is entirely unproductive, all the small branches having died for lack of sunlight. In northern districts trees of this type should be opened up gradually, as there is serious danger of sunscald occurring on the exposed sides of the large branches. In southern districts this tree should get a severe thinning out, and no injury would be likely to follow.

Wm. Dunlop, Dunure Mains, who thus won three first prizes, and all with sons of Baron of Buchlyvie 11263. The first-prize two-year-old is Dunure Index 15809, own brother to Dunure Footprint, and the first-prize yearling The Dunure.

There are two champion trophies at the show: the 50-gs. Cawdor Cup, which is open to registered horses of all ages, which have passed a veterinary examination, and the 100-gs. Brydon Challenge Shield, which is open to horses rising three years old and over, which have passed a

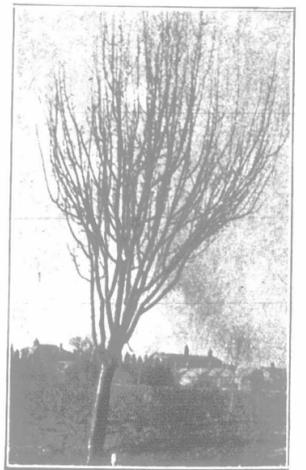


Fig. 10.—Upright habit, typical of many varieties of pears. This tree could be headed very low; in fact, it has no real need of a trunk. Branches should be reduced in number, and directed outward.

veterinary examination. All horses competing for the Cawdor Cup must be "vetted" before they compete; in the case of the Brydon Shield, a horse may compete which has not been "vetted," but he cannot win until he has passed as sound. No horse can win either trophy twice. Dunure Footprint, therefore, did not compete for the Cawdor Cup, which he won last year, and Montrave Viceroy did not compete for the Brydon Shield, which he won last year. Two new benches of judges awarded these trophies. The bench for the Cawdor Cup consisted of Messrs. James Weir, Sandilands, Lanark; J. Ernest Kerr, of Harviestown, Dollar, and Robert Murdoch, Hallside, Newton. The animals which came before them were Montrave Viceroy, The Dunure, Dunure Index, Sir Rudolph, Macaroon, and High Merit. This was practically a new class. One of the judges, Mr. Kerr, had never seen any of the horses before; Mr. Weir had only seen the two younger horses, and Mr. Murdoch had seen Montrave Viceroy and High Merit only. There were, therefore, possibilities of change in previous form, especially as neither of the five who had judged the three-year-old classes was on the bench. The