soil;" heading down in the early stages; summer and winter pruning, &c.; but these subjects, great as their importance may be, are less important than others which, at present, have received but little attention.

Of these, one of the most important is the selection of suitable stocks. Except in a single direction this subject is entirely neglected in the colony. Its importance is capable of easy illustration: a few years ago apple-cultivation was in danger of becoming unprofitable in all the Australian Colonies owing to the ravages of the American blight; when it was discovered that the Majetin, Northern Spy, and a few other kinds were rarely attacked by the insect, and, even when attacked, they suffered but little. This led to experiments with these blight-resisting kinds as stocks for more susceptible varieties; and the experiments proved successful. The varieties grafted on the blight-resisting stocks were in many cases entirely exempted from attack, or the attack was so slight that no serious injury resulted. The roots of blight-resisting stocks are never attacked by the aphis. It is uncertain whether the credit of this discovery must be given to Victoria or New South Wales; but New Zealand may claim the credit of improving the process by the method of double-grafting now generally adopted by the best nurserymen in the colony. This not only enables the blight-proof stock to be propagated cheaply and rapidly, but increases the power to resist the attack of the insect. Strange to say, this discovery, which is of the greatest advantage to fruit-growers, is not appreciated at its real value; and orchards may still be found in which the trees are covered with the white, woolly patches of the insects, forming plague-spots in the district in which they occur. The peach affords an instance of almost equal value. Had the ordinary European plan of working this fruit on the Mussel stock been adopted in the Australian Colonies we should have escaped the terrible destruction which has overtaken the trees during late years, and they would have been able to endure unfavourable seasons without any serious results. No more striking instance of this could be required than was to be seen in an Auckland nursery, where the only trees in good health, not excepting seedlings a few inches in height, were two imported plants worked on the Mussel stock. Every English nurseryman is aware of the importance of adopting the Mussel stock for the peach; but it has been neglected by colonial growers, with the lamentable results which have for some years been patent, and to which they must always be exposed, notwithstanding any partial recovery that may be manifested during an unusually favourable season. The apricot affords another illustration. It is often unprofitable, and the branches are apt to die off—evils which would be promptly remedied by the adoption of the proper stock. Even amongst apple-growers the question of the best kind of blight-resisting stock often causes warm contention. The solution of the difficulty rests in the simple fact that one kind is better adapted to certain varieties than another; but problems of this kind can only be decided by observation and practice. The same conditions are found with regard to the pear, and, in a less degree, the plum; and at the present moment it is not too much to say that the cultivation of the orange in the colony is jeopardized by neglect of this prime factor in successful fruit-growing. The great value of this subject must be my excuse for insisting upon the advantages to be derived from careful theoretical and practical teaching with regard to its absolute necessity.

Another important subject, which in some districts is crippling the fruit industry and reducing the yield to a point which affords no profit, is the prevalence of fungoid and insect pests. I need not insist here upon the extent of the injuries arising from these causes, but will direct attention to the advantages to be derived from a course of training that would enable the fruit-grower to recognize the different kinds when they make their first appearance, and teach him the lines upon which they can be most successfully encountered.

A subject entirely neglected by colonial fruit-growers at present, but which must receive a large amount of attention before New-Zealand-grown fruits can take their proper place in the markets of America and Europe, is that of packing. The wealthy cities of Great Britain, the Continent of Europe, and the United States will be the most profitable customers of colonial fruit-growers; but not until they have learned to grow the best kinds, and to pack them in such a manner that injury during their transit will be reduced to a minimum. Other advantages might be mentioned; but those already stated are sufficient to indicate the benefit to be derived by establishing a school of pomology.

Although the orchard must be looked upon as a source of revenue, and must therefore be of large extent, it will scarcely be advisable to plant the entire area to be devoted to fruit-growing at once. Probably to lay down five acres in fruit-trees will be found as much as can be accomplished this season, and the area should be extended yearly until 100 acres are devoted to fruit-growing. After the second year most of the stocks should be grown on the school reserves, and grafted or budded by the students. This would reduce the cost of formation to a minimum, and give the students greater interest in their work. Every year the newest varieties should be introduced from Europe and America, and their adaptability to the climate of New Zealand properly tested. The school would thus become, not merely an institution for training fruit-growers, but a most efficient means of diffusing pomological knowledge and assisting an important branch of industry.

The Experimental Gardens.

These will prove valuable adjuncts to teaching in forestry, pomology, and agriculture alike, while their value in connection with the introduction and propagation of sub-tropical plants of an economic character, new varieties of pome-fruits, and other plants, yielding drugs, per-