

native spruce, blue spruce, white spruce, and others. Cedars also furnish a long list of varieties from which to select—the little, round dwarf arbor vitae, the pyramidal arbor vitae, and all the long list of American species, which adapt themselves to all classes of soil and climate. In the growing of these conifers there is an unbounded delight; the fresh greenness is always exhilarating, and their services as wind-breaks are of inestimable value. The month of June is the season for transplanting them, and there could be no better way of employing a few days than by making a plantation of these useful and beautiful trees.

California Fruit Prices.

The California deciduous fruit season opened April 30th, with the shipment of a box of Sacramento Valley cherries on that date. The first box, which was grown near Vacaville, Solano County, was closely followed by a box of cherries grown near Sacramento, and others grown in the Winters district in Yolo County, and in the Newcastle district of Placer County. Following these, shipments were made from various fruit districts of the Sacramento Valley. Notwithstanding the fact that ripe California cherries are usually shipped earlier in the season, sometimes as early as March, the initial shipments brought very fancy prices. The first box was sold in Chicago for \$25.00, \$3.12 a pound. The second sale was made in New York, and the figure was \$21.00. The third sale, made in Philadelphia, at auction, was a record breaker, eight pounds of cherries bringing the remarkable price of \$70.00. These shipments marked the beginning of California's fruit season. Carload shipments from Sacramento Valley districts began May 18th, when a carload of cherries was shipped from Vacaville. The fruit crop of California will probably be slightly below average in quantity this year. The Sacramento Valley fruit districts, which provide the bulk of California's deciduous fruits, report heavy crops of pears, but slight shortage in most other fruits. Apricots are ripening.

Summer Cultivation of the Beet Crop.

How many farmers allow the root field to crust, dry, harden and grow weedy before they begin in earnest to cultivate? All roots, and particularly the sugar beet, produce an extensive growth of fibrous rootlets at the very outset, which system of rootlets is by nature calculated to collect from the soil into which they extend and permeate large quantities of moisture and soil food to support the rapid leaf growth that is to follow. But should the soil be permitted to crust, overharden and dry out, the necessary growth of fibrous roots is checked and stunted because they become burned in the hot, dry soil, and are insufficiently supplied with air, which is as necessary to the roots of plants as it is to the lungs of animals.

If sown on the flat, it is all-important to observe conditions of manuring, cultivating and sowing, that will give healthy, distinct and growthy rows of plants, which enable the cultivator to start right early to keep the crust broken and free from weeds. If sown on drills, which should have been rolled almost flat after sowing, cultivation with the horse may be commenced any time the formation of a crust is feared, for the slightly-elevated drills themselves are a guide to the horse. The loosened cultivated surface preserves a warm moisture in the under layers of soil in which the rootlets will grow rapidly, and very soon support a rapid healthy upper growth.

Singling may then be accomplished early, rapidly, and at the least cost. Spacing to ten inches in the row, is, for a beginner, advisable, but ideal spacing on any particular field or soil to give the very best practical results to the grower can be learned only by practice. The object should be to obtain the greatest possible tonnage of ripe beets at the least cost of production. Neither the hand nor horse cultivation of the sugar-beet crop should move to nor take away the soil from the plant, but leave the surface even.

The next all-important point is to deepen the horse cultivation until the soil between the rows is loosened and stirred to a depth of six inches. Such cultivation retains soil moisture and mellows the subsoil into which the beet root penetrates and develops a long, smooth parsnip form. Failing this deep stirring of the soil between the rows, the dry hot weather in August prematurely ripens the beet, which then yields a lighter tonnage and a lower sugar per cent. But the deep stirring enables the beet to endure long periods of drouth without checking its normal growth, and therefore it yields high in both tonnage and sugar.

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Most of the Michigan beet-sugar factories are securing a larger acreage this year than in 1903.

Rose Culture in Canada.

While roses will grow in but few parts of Canada to the same size and luxuriance which they attain in those countries where the winters are less severe, yet, by careful selection as regards the species suitable to each locality, and by giving a little extra care in the way of winter protection, such satisfactory results may be obtained that it seems a pity that this Queen of Flowers should be so seldom seen on the lawns of our Dominion farms. When it is known that Hybrid Perpetual roses have been successfully grown in Newfoundland and in the Laurentian Mountains; that at Regina moss roses and some of the hardest perpetuals have been safely wintered for years, and that at Prince Albert in the Saskatchewan district, very fair success has also been attained with these shrubs, it would seem that few in most parts of Canada need be deterred from attempting their culture through fear of climatic influences. Bush roses are, as a rule, more easily wintered than either the tree or the climbing varieties, the latter of which often requires to be laid down in winter in order to give it sufficient protection.

The situation in which roses are grown should invariably be the sunniest and most sheltered available, and the soil should be rich garden loam, in which old, well-rotted manure has been incorporated. During the summer frequent cultivation should be given, and a mulch of lawn clippings applied frequently, the clippings being worked into the soil according as they decay. In the fall a mulch of coarse manure should be placed about the bushes, and the tops protected with wisps of straw bound about the stems.

In regard to pruning, it should be remembered that it is only on the new wood that the flowers grow, hence the old wood should be cut out, and growth of the new encouraged as much as possible. If large flowers are desired, but few shoots should be permitted to develop. This pruning may be done in early spring; some of the old shoots may also be cut out after the bushes have done flowering in June.

As all roses (except tea-roses) are rather subject to plant pests, some vigilance will be required to guard against damage from these enemies, the most common of which are the rose-slug, the aphids, and thrips. The rose-slug is light green, something like a cabbage worm, only much smaller, and usually arrives late in May, taking up his position, often, on the under side of the leaves. Liberal and regular applications of Paris Green will, however, usually quiet him effectually. Aphides, or plant lice may be treated with tobacco spray or kerosene emulsion. Thrips are most numerous in June. They are small, whitish, and very lively, usually collecting on the under sides of the leaves, which they perforate into fine network. Sulpho-tobacco soap, or whale-oil soap solutions have been recommended as effectual "quieters" of thrips. In applying any of these solutions, a brass garden spray will be found as good as any, as it may be easily manipulated so that the spray will reach every part of the plant.

British Fruit Prospects.

In the Glasgow Herald, of May 14th, a special correspondent of that paper gives a detailed account of the prospects of the British fruit crop, in which Canadian fruit-growers are especially interested, owing to its influence on the price of our export fruit. The apple crop will be well up to the average; the pear crop heavy, probably a record one; strawberries and gooseberries promise big crops, but black currants will be below the average; cherries and plums will give medium yields.

APIARY.

Do Not Let Bees Starve.

By Morley Pettit.

Time was when the faithful horse which had outlived its usefulness would be turned out to starve. That time is past, but, through ignorance or neglect, bees which would soon be wage-earners, often meet the same death at this time of year.

Cold and wet have delayed fruit-bloom past its time. Now the heat may dry it up before it has yielded more than daily food for the bees. The majority of colonies still alive in Ontario are weak, and require all the help they can get to make them of any use in June and July. With the stimulus of nectar coming in from fruit-bloom, large quantities of brood is started; but this must be well fed from day to day, else it will perish or develop but poorly. The queen also requires constant feeding to make her lay her full number of eggs daily. This is the work of the bees in the hive; but unless they are getting feed daily, they will neglect both queen and brood.

The reader will see, then, the advantage of a daily feed of thin sweet for the bees at this time of year. As soon as this cannot be got from natural sources, it must be artificially supplied. Where no other apiary is near, feed can be given in the open air. It is best to give about one-half pound per colony daily of white honey or syrup thinned until it is little more than sweetened water. Place in shallow pans about the yard with straw or shavings to keep the bees from drowning. If the feed is quite thin the bees will work quietly without danger of robbing.

As soon as white clover honey starts, extract all combs in both super and brood-chamber not contain-

ing brood, and uncap any rims of honey around brood, to get it used up. This prevents any danger of syrup or dark honey getting mixed with the white honey.

Should Presence of Foul Brood be Concealed?

The American Bee Journal says:

"One answer to the question might be found in some of the foul brood laws, the one in Canada, for example, which makes anyone subject to a fine who does not report to the proper officer if he knows of a case of foul brood in his own apiary or anywhere else.

"But that refers only to making it known to the proper officer, so that the case shall be sure to be looked after, which is a very different thing to telling it to everybody. It is very desirable that no case should be concealed from the foul-brood inspector, but would it be the right thing for the inspector to tell everyone in the neighborhood—or out of it, for that matter—that John Smith has foul brood in his apiary? Suppose John Smith sells bees or queens, what chance has he for making sales if it is generally known that his bees have foul brood?

"That might disturb the business of John Smith, especially if he were dishonest enough to send out a consignment of foul brood with each sale made, but would it not be a good thing for others? And should not the rule be the greatest good to the greatest number?

"When a contagious disease exists in John Smith's house, the city authorities promptly put upon that house a placard, so that everyone who passes by may know that scarlet fever or some other dangerous disease is there. They do not wait to enquire whether John Smith's business will be injured by it; they are not doing it to help John Smith; the general good is saved by it. The fullest publicity is sought. Should it not be the same with foul brood? Should inspectors or anyone else conceal knowledge of cases of foul brood, wherever found?"

EVENTS OF THE WORLD.

There are rumors of unrest among the native tribes of South Africa.

A subscription is being taken up to send a team of Boers to the rifle meet at Bisley.

In the British House of Lords it has been formally announced that Great Britain is at war with Thibet.

The Ontario Bureau of Mines has sent a party to explore the region north and west of Lake Abitibi.

The iron industries of Russian Poland are suffering as a result of the war, and thousands of workmen are idle.

Fifty-three Filipino employees of the U. S. Military Government, on the Island of Mindanao, have been murdered by the rebels.

The Russian Admiralty officials, after a searching investigation, now admit that the sinking of the Petropavlovsk was due to her being torpedoed by a submarine boat used by the Japanese.

Royal engineers have completed the work of thoroughly mining all the ship channels at Halifax. Two hundred mines, which are controlled and operated from three observatory stations, have been laid.

The steamer Turret Bay was wrecked off the coast of Nova Scotia on May 20th. Fourteen of the crew were saved by the Government life-boat crew from St. Paul's Island, but the captain and thirteen men perished.

A St. Petersburg despatch to the London Times says Russia has decided to make all the ports in her possession on the Pacific coast free. This measure is advanced in hope of removing British and American objection to the Russian occupation of Manchuria.

A proclamation signed by Admiral Alexieff, has been posted throughout Manchuria warning the Chinese against harboring bandits, and declaring that those who do so will be shot. The village of Tsilandan, between Mukden and Harbin, was burned under the proclamation on May 15th.

The revolt of the natives in the Cross River Territory, which extended to that point from the rebellion in German South-west Africa, has been completely suppressed, after a sharp fight, by a British force in Southern Nigeria. The British lost thirteen officers and non-commissioned officers.

An engineer named Huelsmeyer, of Dusseldorf, gave a demonstration before representatives of the shipping interests at Cologne on May 18th, of an invention called the telemobilescope, by which a steamer captain will be able to detect the presence and direction of any other steamer three miles away. The apparatus