

winter, the bees would starve at one side of the hive with honey at the other side; or the entrance may have become choked with dead bees, snow and ice, and the bees smothered. It is well in wintering bees out of doors to have a rim between the hive and bottom-board, which will leave about two inches of space between the bottom bars of the frames and the floor of the hive. Dead bees can accumulate there without piling up between the combs, and if the opening for entrance is at the top of this rim it will not be choked.

2. If you had dry, clean worker combs to exchange for mouldy ones it would be well. If you have no extras, you might take the worst ones from weak colonies and exchange for clean combs from strong colonies. They will have no difficulty cleaning up one or two mouldy combs at a time.

3. Yes.

4. No; except in very special cases.

5. The best grade made by any manufacturer is good. They should be advertised in the "Farmer's Advocate."

MORLEY PETTIT.

GARDEN AND ORCHARD.

Fruit Pulp Business.

We have an enquiry as to the making of what is called "fruit pulp" in Canada, and how carried on. In reply, we might say we understand that most of the canned-fruit establishments put up more or less of fruit pulps. They are packed in gallon tin and oak barrels to be sent the purchaser. The kinds of fruit usually put up for pulp are red and black currants, gooseberries, plums, red and black raspberries, strawberries and peaches. We learn that they are cooked, and the skins and pits (of the tree fruits) removed, and canned without sugar. There is an enormous quantity of jam made in the Old Country, and pulp is used for that purpose. Fruit men are anxious to see the business developed, as it would relieve the situation in times of glutted fruit markets, provided it can be made profitable. Supplies of fruit pulp, we believe, can be obtained from the head office of the Canadian Canners' Association, South St., Hamilton, Ont. In reply to a letter of enquiry on the subject from the "Farmer's Advocate," Mr. W. A. McKinnon, Chief of the Fruit Division, Dominion Department of Agriculture, gives the following specific information:

(1) Raspberries, strawberries, plums and peaches are sometimes put up, without sugar, as fruit pulp, either for export or for keeping until the winter season, when most canning factories are idle. In the latter case, it is then mixed with apple jelly and sweetened with glucose, to be sold to the trade as jam of various kinds.

(2) Nearly all our prominent canning factories make fruit pulp, and I am sure would furnish details regarding the process.

(3) The favorite package, when the pulp is to be used in Canada, is the large cask, glucose barrels being often used for the purpose. For export, gallon tins, especially for stoned fruit, have been found preferable.

(4) THE BRITISH MARKETS.—There appears to be a somewhat fluctuating demand for raspberry pulp from Canada, which reaches important dimensions only in years when the Old Country berry crop is a failure. Light color is considered a sign of good quality, and any pulp showing a darker tint will suffer in price. This pulp is usually put up in seven-pound (gallon) tins, and packed twelve to the case. It is estimated that an average price in England would be eight or nine dollars a hundredweight (112 pounds).

Black currant pulp, consisting of the whole fruit (not mashed), is an article that is in almost constant demand, the export of which would probably be profitable from year to year. The usual package seen in the British markets is the ten-pound tin, packed ten to a case. Australian shippers use a square ten-pound tin, packed securely four to a case. This is described as an excellent traveller. The cask appears to be universally unpopular. The price varies greatly, according to the supply from near-by sources, but has been averaged by a large importer at from six to nine dollars c. i. f. London in ordinary years. It has run as high as twelve dollars when there was a shortage.

The Easter Beurre for Export.

Mr. W. A. MacKinnon, Chief of the Fruit Division, Ottawa, recommends the Easter Beurre as one of the pears most in demand in Great Britain. Market reports just received from London show that California Easters have been selling remarkably well recently, and it seems as if our growers might with advantage undertake to raise this variety extensively and place it upon the British market during the winter months. At Floral Hall, on March 7th, small lots of Californian Easters sold at 10s., 9s. 3d., and 9s. per half case. On March 11th, Garcia Jacobs & Co., who handle the bulk of this line of fruit, sold several hundred half cases at an average of about 9s. 6d., and two lots, of 36 and 10 packages, respectively, brought 10s. Only one small lot went below 5s. While the Easter Beurre is not at present largely grown in Canada, its value for export should induce growers to give it a fair test in order to ascertain if it is suitable for general culture.

Back-yard Gardening.

By Anna L. Jack.

"Nelson," I said, to the small son of my friend, when making a call in the spring, "I am surprised that you haven't made a garden of that little back-yard." My friend smiled, and said, "You know we have just moved in, and I paid a man yesterday to clear away the last tenant's tomato cans and other refuse. It cost me a dollar." "The same money would have dug them in," I said, convincingly, "and then your garden would have been all ready to sow, though I rather think the soil is tough." We were on the upstairs balcony, looking down on the narrow strip below, and I noticed that an unusual amount of light and sunshine came in to it. When I left, my friend had promised to get a man to dig the ground, and Nelson was to have it raked if I would help them to sow the seed when it was ready. But, going round two days later, the ground looked very unpromising. It had been tramped over for years, and was so solid that it turned up in chunks, and Nelson was quite discouraged trying to break them with the back of the hoe, for the result had been that he broke the hoe. I sent him to the keeper of a livery stable near by, who, for a dollar, sent one of the men to the yard with four bags of stable sweepings, chiefly fine manure. This was spread over the ground, and a heavy rain which fell soon after washed it in, and brought the coarse soil into such a condition that it could be pulverized a little, and made fit to plant after vigorous pounding.

It did not seem likely that this miniature garden would be of much account the first year, but, as my friend had a lease of the house, it seemed worth while putting in a few things for future years. So, at the steps, they planted two large roots of clematis paniculata, as shown in illustration the second year. The ground was best nearest the house, and that was appropriated by widow plants, the scarlet salvia contrasting well with the white clematis in August and September, and the lower plants, being whatever survived the winter. But, the first season, instead of sowing seed of pansies and petunias, as intended, the



Clematis Paniculata, a Beautiful Flowering Climber.

land was left to the sun and atmospheric influence for another week or two, when a few good-sized bedding plants, set in after a shower, filled the ground with promise. The sweet peas were sown further off and given a trellis of wire on which to climb, and they grew at once, luxuriant and beautiful, hiding the dilapidated fence, and giving their fragrant butterfly bloom until frost.

Nelson bought some radish and lettuce seed, and found a corner for them, and was very proud when he could bring to the table the product of his own garden, for the boy claimed the back-yard, and it did wonders for him in more ways than one. It gave him healthful exercise and an interest in nature's wonderful works, and some of his chums were so charmed with the result that they followed his example the next year. Besides, many a summer evening they gathered in that pleasant back-yard to enjoy the flowers, and often gathered some to take to friends who were ill, or make little donations where they would be appreciated.

About the same time, I was out in the country, and my hostess lamented the untidy dooryard. She did it so frequently that at last I ventured to say, "Why do you have it so if you do not like it?" "How can I help it," she answered; "George is so busy, and he never takes the trouble to tidy up the dooryard." I pondered a few minutes, and then said, "You told me that you had the egg money for yourself. Spend a little of it hiring a man to dig in all that chip dirt and rubbish, and then plant it as you fancy. You can have a background of dahlias and cannas, and set your house plants in front of them. There is no reason why the place should look so untidy; you are too good a housekeeper to allow it any longer."

Since then the dooryard, once given over to chips and rubbish, is the admiration of the neighborhood. Castor beans and cannas are the background, and a long border of choice perennials—larkspurs, campanulas and foxgloves—fill the mid-season and the middle part of the border, leaving the front for such gay flowers as geraniums and other household treasures. Sometimes the dogs make havoc in the newly-planted border, and cause a despairing consternation; but the sturdy

farmer has learned to value the renovated chip-yard, and is training them to better manners. Poultry were troublesome the first year, but it was no wonder, for they had been accustomed to wallow in the chip dust, but the next season's chickens were raised on the other side of the barn, and early taught that they must not wander on forbidden ground. Mishaps sometimes befall the plants from these sources, but are being gradually overcome. This yard is only one among many that can be made to blossom in the waste places about the kitchen door.

Layering Apples in Barrels.

A Grosvemor Square fruit dealer and florist has suggested to the Fruit Division, Ottawa, the idea of layering choice apples in barrels, using a pulp paper circle between layers. He thinks that fancy apples packed in this manner would land in far better condition, and fetch correspondingly higher prices, much more than sufficient to pay for the increased trouble and expense involved in the packing. It might be advisable for some of our exporters to experiment along this line when the shipping season comes round again.

Kerosene Emulsion.

Coal oil, two gallons; rain water, one gallon; soap, one-half pound, or, soft soap, one pint. Dissolve soap in water by boiling; take off fire, and while hot add coal oil. Mix by churning briskly for five minutes. Dilute before using, with nine or ten parts of water, i. e.: one quart of the emulsion to ten quarts of water. Spray on plants for lice and all sucking insects.

P. S.—Slacked lime, road dust, etc., may also be used for plant lice.

EVENTS OF THE WORLD.

The railroad across Lake Baikal has ceased operations, in consequence of the breaking up of the ice, and is being removed; 100,000 men and 6,000 horses, besides artillery, have crossed upon it since the opening of the war.

Three hundred and twenty-six paintings by Canadian artists are on exhibition at the Royal Canadian Academy, Montreal. From these may be chosen the pictures that are to represent Canadian art at the World's Fair, St. Louis.

The steamship Discovery, which conveyed a British exploring expedition to the Antarctic Ocean in 1901, arrived safely at Lyttleton, N. Z., on April 1st, after having been in the icy regions for two years. Much scientific knowledge has been gained by the expedition.

A royal decree retiring twelve of the higher army officers has been issued at Belgrade. These officers were among the regicides of King Alexander and Queen Draga, and the step has been taken with the object of conciliating the powers which broke off diplomatic relations with Serbia so long as the regicides remained in power.

An Association known as the Western Canada Immigration Association, has been formed for the purpose of maintaining the tide of American immigration to the Northwest Territories. The promoters are chiefly business men who recognize the American farmer as the best settler from a business point of view who comes into the West.

Terrible outrages have been committed in Macedonia by Bashi-Bazouks, who, in revenge for the shooting of a Turkish tax-collector by a peasant, massacred all the men and most of the women in the village of Ptchima. The occurrence has given an added impetus to the spirit of insurrection seething among the Macedonians, who, it is reported, are again ready to take the field.

Mr. A. W. Grindley, the agent of the Department of Agriculture in Great Britain, protests against Canadian goods being labelled as from some other country. He says Canadian goods are coming into favor across the sea, and attributes this to the better quality of goods shipped from Canada. He believes the improvement to be greatly due to the Government cool-curing rooms, and the improved cold storage for food products in steamship lines running from Canada to British ports.

The engagement at Guru, near Tuna, Thibet, which resulted in the killing of nearly 500 Thibetans, was solely due, according to British reports from India, to a wild onslaught of the Thibetans themselves, the British being compelled to act in self defence. The slaughter, however, is receiving unstinted censure from the Liberal press in England, where there is much depression lest