same amount scattered over the apiary, out of sight, and covered with bees. But the bees can take care of the honey better than the beekeeper can, and it should be left in their charge until the season is well over, or at least until it is practically all sealed, and then extracted and canned up tight to preserve all the natural flavor and aroma, so that, whether it be kept a month, a year, or ten years, when a can is uncandied and opened up it will be found in just as good condition as when it was put away. F. F.

GARDEN AND ORCHARD.

Pistillate Variety Planted Alone.

I am sending you by this mail a sample of strawberry bloom, also one of the plants. I question if you ever saw finer plants than these, which stand, on an average, 18 inches high, with any amount of bloom. They were simply white with blossoms, but positively no berries formed. The patch is of this variety exclusively. C. T.

Strawberry Blossoms.
(1) Perfect; (2) Pistillate or Imperfect.

Ans.—The reason your plants do not produce fruit is because they are all pistillate-flowered; that is, there are no stamens present in the flower to furnish pollen for fertilization of the blossoms. These are what are sometimes spoken of as "female plants." To insure fruitfulness with varieties of this kind it is necessary to plant near them some perfect-flowered varieties, which will furnish pollen for fertilization of the blossoms. I would recommend you to get a few new varieties. It is well to have at least three or four varieties to furnish a succession of fruit from early to late. I would recommend the following as good varieties to cover the season from the earliest to the latest: Splendid, Warfield, Clyde, and Irene. Both Warfield and Irene are pistillate varieties, but the others bear perfect flowers and will ensure good fertilization.

H. L. HUTT, Horticulturist.
Ontario Agricultural College.

Small Canning Factories in Virginia.

To the Editor "Farmer's Advocate":

Sir,—In many sections of Canada the question of the establishment of a canning factory has been considered, but, in the majority of cases, only to be given up as impracticable, the common impression being that it requires a very large amount of capital, especial training or skill in processing or in the management of the business, and the fear that farmers would not plant a sufficient acreage, and that an expensive plant would be idle; or, on the other hand, that they would plant too much, and the packed goods would have to be sold at a loss.

Now, the advantages of small factories are many. First, in a community where there has been little or no experience with such a factory, it is far better to start in a small way. Such a factory could be easily enlarged afterwards, as success warranted. A very small amount of capital is required, so that one person, or at most two or three, could manage the factory to suit themselves, and thus avoid the organization of a stock company. Such companies are often failures, owing to inexperienced men being at the head of them, or to friction among the members. No large amount of money is lying idle if the factory does not run each year, and it does not take so much money to run a small factory. In fact, one can be built simply to can the surplus fruit in good years, which would otherwise go to waste. It can then be held until such time as a profitable market can be found. In years when the prices of fruits and vegetables are good it could be allowed to lie idle, with no very great loss. Another strong point is the superior quality of goods which can be kept up by hand packing in a small factory. More personal attention can be given to sorting and packing, and in the majority of cases they can be packed fresh from the field, while in many cases in the large factories they have to be hauled long distances on dusty roads or on railroads, and then frequently held in stock, when the supply is large, until they are partly spoiled, or, at least, until the flavor has depreciated to a large extent. I was forcibly impressed with the advantages of the small factory during my recent trip through the Counties of Roanoke and Botetourt, Virginia. These two counties are largely devoted to the growing and canning of tomatoes and other fruits and vegetables. The larger number of the factories are owned by the growers themselves. A very small building, or what we would call in Ontario a shed, answers for the factory, while in many cases I saw a threshing engine being used as a means of furnishing the steam. I was greatly surprised on being told by one man that his factory only cost $500, and the capacity was estimated at 5,000 cans per day.

The following estimates, given by Prof. Price, Horticulturist, Virginia Experimental Station, who has managed a small factory on his own farm, will probably be interesting to your readers, in giving them an idea of what is really necessary.

THE COST OF A CANNING OUTFIT.

The cost will depend largely upon local conditions, the number of cans expected to be put up each day, or the kind of goods canned.

Prof. Price places the cost of a factory, estimated at 3,000 No. 3 cans or 5,000 No. 2 cans per day, as follows:

1 process kettle, 36 inches diameter by 36 inches deep	$18 00
1 exhaust kettle, 36 inches diameter, by 24 inches deep	16 00
1 scalding kettle, 36 inches diameter by 24 inches deep	14 00
3 set of grate bars (or 3 steam coils, if boiler is used) and 3 furnace doors	15 00
2 gasoline fire pots (complete)	32 00
2 six-tier process crates	14 00
2 one-tier exhaust crates	7 00
1 set crane fixtures	10 00
4 capping machines	3 00
4 capping coppers	4 00
2 tipping coppers	1 00
2 scalding baskets	2 00
1 forging handle	25
1 forging stake	2 50
1 vise	2 50
½ dozen files	1 35
1 pair can tongs	70
1 forging hammer	1 10
1 floor truck	12 00
1 dozen peeling knives	2 00
Total	$158 40

This estimate is exclusive of the building and the boiler. The kettles may be set in brickwork, or be attached to a boiler (a 20-horse-power would be required. Prof. Price prefers a building with two rooms, and gives the following instructions: The processing may be carried on in the room where the boiler is, and the peeling and preparing in the other, where there is not so much heat. The building in which the peeling is carried on should be well ventilated, so that the fruit will keep better. If the kettles are set in brick the cost will be much less than if a boiler is used, but canning will be more inconvenient and the capacity of the factory will be lessened. A boiler is much preferable. In the list just given no close top kettle is given for canning corn and beans. If this piece of machinery is added it will run the cost up $125 additional.

Some tables on which to pack, cut and tip are necessary. Any ordinary carpenter can make them, and rough lumber may be used to lessen cost. A good supply of clean water is necessary.

G. F. MARSH.

Paris Green for Potato Bugs.

Of late years there has arisen a howl against the use of Paris green for potato bugs, on the ground that it is injurious to the vines. That badly-made Paris green will, occasionally, burn the foliage of the potato plants is not denied; but that the pure article rightly used may be depended on not to do so, and that it is still the best standby for the potato grower is the verdict of the New York Agricultural Experiment Station, in a series of experiments undertaken with a view to establishing the efficacy or otherwise of the old-fashioned remedy.

In Bulletin No. 267, issued by the Station, a full description of the tests is given. Five rows were especially treated, the first with Paris green and water; the second with Paris green in lime water; the third with Paris green in Bordeaux mixture; the fourth with Bordeaux mixture alone; while the fifth was left unsprayed. The bugs were kept off the 5th and 6th by hand-picking. This series of five rows was repeated five times, and the plants were sprayed five times between July 7th and August 25th, one pound of the poison being used to each 50 gals. of liquid. In the lime mixture 2 lbs. of freshly-slacked lime were used for each 50 gals. of water.

All of the rows upon which the poison was used were found throughout to be quite free from bugs, and the foliage, especially in the rows upon which the Bordeaux mixture was used, was found to be much greener and fresher than that upon rows in which the picking was done by hand. From this it was argued that the Paris green actually helped in controlling blight as well as in killing bugs. There was no difference between the foliage of rows upon which lime was used and those on which the poison was used in water alone; nor was there any difference between the Bordeaux sprayed rows with and without Paris green. At digging time, however, the Paris green was found to have had a very beneficial effect, while the lime was shown to have been even injurious. The following table will show the exact improvement shown by the different treatments:

Paris green in water, increased the yield 46 bush. 9 lbs. per acre.
Paris green in lime water, increased the yield 33 bush. 53 lbs. per acre.
Paris green with Bordeaux, increased the yield 150 bush. per acre.
Bordeaux alone, increased the yield 142 bush. 30 lbs. per acre.

From this it will be seen that Bordeaux with Paris green is the best mixture yet discovered for potato plants.

Arsenite of lime in Bordeaux was also found effective, but unless prepared with great care is dangerous to use, hence cannot be recommended as a general remedy.

NEWS OF THE DAY.

Canadian.

Floods in Algoma stopped traffic on the C.N.R., between Port Arthur and Winnipeg, on July 6th.

Peterborough, Ont., was incorporated as a city on July 1st.

A heavy fire has been raging in the Temagami forest reserve.

Hon. Mr. Fielding has given notice of a resolution, fixing the salaries of the Governors of the new Provinces of Alberta and Saskatchewan at $9,000.

Mr. John Bell, K.C., senior consulting solicitor of the Grand Trunk Railway Co., died in Belleville on July 5th, at the age of 84 years.

The ten Grand Trunk men who risked their lives in trying to rescue men from the St. Clair Tunnel last October have been presented with medals.

The freight traffic through the Sault Canals for the month of June has broken all records. The total tonnage for the month was 6,057,491, as compared with 3,139,236 for the corresponding time last year.

Rich discoveries of silver-cobalt, averaging $3,000 to the ton, is reported from Kerr Lake, in the Temiscaming district, by Prof. Miller, Provincial Geologist for Ontario.

A surveying party will go over the country between Lake Abitibi and James Bay, with a view to reporting upon the advisability of extending the Temiscaming line northward to that point.

British and Foreign.

It is rumored that M. Witte may soon appear as full leader of the Liberal party in Russia.

General Sakharoff, Minister of War for Russia, has resigned.

Premier Rouvier has agreed to a conference, on condition that the Anglo-French entente will neither be judged upon nor interfered with.

The Russian battleship Peresviet, which was sunk at Port Arthur, has been successfully floated by the Japanese.

The town of Guanajuato, Mexico, has been devastated by a flood, in which over 500 people lost their lives.

It is stated on good authority that France has been drawn into the alliance between Great Britain and Japan.

During a tornado and thunderstorm which passed near Nocana, Texas, recently, twenty-five people were killed and many others injured. Hundreds of cattle were also killed.

Rockefeller has donated $11,000,000 for the furtherance of higher education in the United States, $1,000,000 to Yale, and $10,000,000 to the Education Bureau at Washington.

Troops are being trained in Norway, but the Norwegians deny that they are to be moved against Sweden. It is reported also that orders have been issued for the mobilization of the Swedish army.

Lord Kitchener and Lord Curzon have come to an agreement regarding the erection of a line of fortifications along Northern India as a safeguard against possible Russian encroachments.

Colonel John Hay, Secretary of State of the United States, and one of the most eminent statesmen of the present time, died suddenly at his summer residence at Lake Sunapee on July 1st. Elihu Root has been appointed as his successor.

In one of the most fashionable churches in East