

from the hoops, the cheese are placed one day in the drying-room, and then put into the cool-curing room, where all the exhibition cheese were kept until shipped to the shows."

Bright Factory to Install Septic Tank.

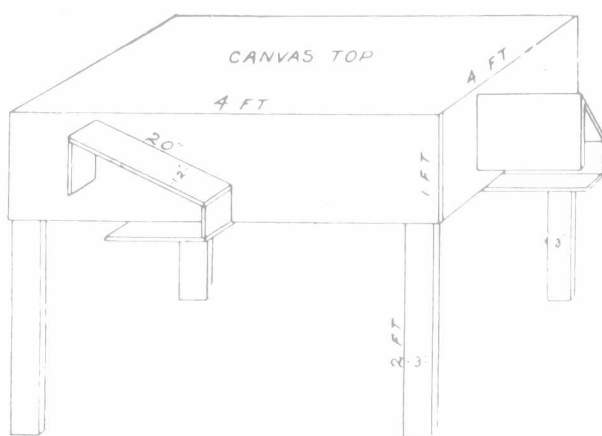
The Bright Cheese and Butter Company, whose splendid factory and cool-curing room was described and illustrated in "The Farmer's Advocate" a few weeks since, at a directors' meeting, on Friday, Sept. 24th, decided to install a septic tank for the disposal of the factory wash water. As previously indicated in these columns, the too common practice has been to run the wash water into the whey tanks, thus diluting the whey, and introducing impurities into it, besides, in some cases, interfering with the pasteurization of the whey, by lowering the temperature through the introduction of cold or cool water. In order that pasteurization may be as effective as it should be, the temperature to which the whey is heated in the tank (155 degrees) ought to be maintained as long as possible. If wash water is run in, it should be heated, as well as the whey; but, unfortunately, this is often neglected, and, anyway, for the reasons noted above, the wash water ought to be kept out of the whey tanks. At the Bright factory the wash water has been run through a tile drain, across a field into an open ditch. This practice is objectionable on sanitary grounds, and another system of disposal was considered advisable. It was first proposed to put in a single-chamber cement tank, and then siphon the liquid into a large glazed tile county drain which runs past the factory. Upon investigation, however, it was found that this drain is open at several farms below the cheese factory, being curbed up in order to provide a convenient watering-place for farm stock, the stream that now flows through it being practically pure spring water. Learning of this, Chief Dairy Instructor Frank Hens, who was present at the meeting to consult with the directors, advised against the plan, pointing out that it would render the water unwholesome for the stock. Instead, he recommended the installation of a proper septic tank, with three compartments, after the manner of the experimental tank at Innerkip. Such a plant will rid the whey of its solids and fat, the solids settling to the bottom of the three compartments, and the fat rising to the top. The bacterial activity which takes place in such a tank will also tend to disintegrate the substances contained, and burn itself out, as it were, lessening the capacity of the liquid that drains off to sustain and breed micro-organisms, although not entirely freeing it from bacteria. Mr. Hens suggested that this drainage water might be run into the county drain for a time, and if, next summer, when the current was low, an analysis proved that the septic-tank drainage was seriously contaminating the water for stock purposes, tile drains might be run under an adjoining field to distribute the liquid, so that it might seep away. The drains of a septic-tank system are the most expensive part of it, and if they may be safely dispensed with, the Bright factory will have a very economical manner of disposing of its wash water. The tank which it was decided to construct is to be 12 feet long, 6 feet wide, and 6 feet deep, with three compartments and a pipe in the form of an inverted U connecting the compartments through an opening within 6 inches of the top of each partition wall. The inlet end of the pipe will reach down to about half the depth of the tank, the other being only two or three inches long. The total cost is estimated at \$50 or \$60. The company is to be congratulated upon this decision of its makers, for undoubtedly the septic-tank system is one of the reforms that will now have to be pressed at factories generally.

The Dairy Industry in Perth.

The County of Perth lowers its colors as a cheese district to no section of Western Ontario, or, for that matter, to no county in Canada. Fertile, and well watered, with exceptionally good grazing, and capacity for the production of bounteous crops, it was settled by a particularly thrifty class of Anglo-Saxons, Celts and Germans, whose characters have been imprinted on the well-tilled and well-kept homesteads, equipped with large barns and palatial rural residences. In this region, thus worthily occupied, the late Thos. Ballantyne labored with rare enterprise and perseverance to establish a co-operative dairy business, and few pioneers have had their zeal rewarded by a more solid or enduring success.

Though the average patrons' milk yield may be smaller, and the aggregate output less, the factory conditions and management in Perth County are fully equal to the best sections of Oxford, and while they have not specialized on dairying to quite the same extent, the patrons in most sections have manifested a most commendable spirit of co-operation and enterprise. Many have made provision for cooling their milk, and though the excellent pasture and abundant crops of winter feed have rendered the need for modern fodders,

such as alfalfa and ensilage corn, less acute than in some other counties, nevertheless, both crops are making headway. Quite a number of farmers are trying alfalfa in a small way, while silos in the vicinity of Avonbank are very numerous, and a fair proportion may be seen all through the county, standing monuments to the enterprise of its husbandmen. The number is constantly increasing, and the present season will undoubtedly help to impress the need for them, although we believe the summer drouth was not so severe in its effects here as in some other sections of Western Ontario.



A Canvas-top Table for Box-packing Fruit.

The powerful influence of example may be observed wherever one travels. Each leading dairy district has some one or more features by which it is distinguished. The wonder is that these are so locally circumscribed in their adoption. It is the purpose of "The Farmer's Advocate" to acquaint each district with the best features of the practice in other areas. One excellent contrivance quite common in Perth is a wooden track, along which a four-wheeled hand-car carries the cans of milk from the dairy or cooling tank to the milk-stand at the road. Here a windlass or pole-lever, such as illustrated in a former number of "The Farmer's Advocate," may serve to lift the can from the car to the stand. Others, again, have an ingenious jointed milk-stand, which may be raised or lowered by a windlass. The platform is supported by two pairs of posts pivoted at the foot, and hinged at the top. At the back of the stand is a rigid frame, with a windlass, which, being loosened, allows the posts to recede, until they lie almost flat on the ground, keeping the platform itself level. A dog and cog-wheel



The late Hon. Thos. Ballantyne, Who did much to establish and foster the co-operative dairy business in Perth and other Counties of Ontario.

attached to the windlass enable the operator to hold the platform at any desired height. We believe this device was patented at one time, but we are not aware whether the patent is still effective.

The County of Perth has 26 cheese factories, four of which have cool-curing rooms. The total

make in 1908 was valued at \$531,632.31. A few of these factories manufactured \$30,163.84 worth of butter in winter, while three creameries made \$60,281.69 worth, totalling, in all, co-operatively manufactured dairy produce to the value of \$625,080.81. The make this year, judging by a few factories recently visited, is likely to compare favorably with 1908, having been considerably ahead until latterly, since bare pastures have been paring down the margin. This is true in a general way of Western Ontario as a whole.

GARDEN & ORCHARD

Table for Box-packing of Fruits.

The accompanying illustration represents a canvas-top table for the box-packing of apples or other fruits. It is especially adapted for use in the orchard, though it could be used in a packing-house. The pickers dump the fruit on the table, the packers sorting and packing as they work. A too-common practice in orcharding is to pick the fruit and pile it on the grass. This should never be done. Apples piled on the ground soon sweat and become pithy, appearance, flavor and keeping quality being injured. Apples should never lie on the ground.

The details of the packing table are few and simple. The box is placed on the slope so that fruit, as placed in position, will not roll. It is held from slipping downwards by one of the end cleats which hold on the thin box bottom. Fruit is poured on the canvas top, and four packers, one on each of four sides, have room to work. The board supporting lower end of slope is six feet in length, and extends to the same distance out on the farther side. Legs are 3 inches square, all the rest inch lumber. Table can be easily carried about.

Pickling in Essex Co., Ont.

As announced in "The Farmer's Advocate" some months ago, a new industry, the Heinz Pickling Factory, has been successfully launched at Leamington, Ont. The town provided the large building, and also assisted in certain improvements. The floor space occupies about 60,000 square feet. The storage capacity is enormous, there being over 50 pickling tanks capable of holding between 900 and 1,000 bushels each. Cucumbers, tomatoes and beans constitute the bulk of material used this year.

A few cauliflowers and onions are also used, but have not been grown extensively. Cucumbers are graded according to size, bringing the producer from 25 cents for larger to 75 cents for the smaller, i.e., those 3 inches in length and under. They are delivered at the factory in bushel crates, fresh from the vines, and are immediately consigned to the pickling tanks, to remain until fitted to pass through the bottling process. Tomatoes are likewise grown in considerable quantities, for which the company pays 27½ cents per bushel. These are manufactured into various relishes, e.g., sauces, catsups, etc. Beans are not purchased green, but allowed to ripen, and are then baked. Cauliflowers and onions are mixed with the cucumbers in pickling. About 500 acres of land were under contract this season to supply necessary material. The factory has had about 80 employees, being almost equally divided between male and female laborers. Wages differ widely, according to efficiency of employee. Girls doing piece work easily earn from \$1.00 to \$1.25 per day. Considerable difficulty is being experienced in procuring the required number of hands to keep the factory running to its full capacity. Although still in the initial stage of its existence, a clear demonstration of its right to live has been given. In the larger branches, and more especially the head of the industry at Pittsburg, they use nearly 50 varieties of fruits, and vegetables are utilized. Having its beginning in a very small way 40 years ago, it now controls 15 different places of industry.

The parent plant in Pittsburg, Pa., alone has 23 acres of floor space. The company owns or operates under contract 30,000 acres of fruit and vegetable producing land, and employs in the various factories 40,000 persons.

The managers consider both soil and climate at Leamington as being admirably adapted for the production of such goods as they require. Reports from various sections confirm statements made by promoters when seeking to enlist the co-operation of growers. Many farmers had realized up to September 18th, from one acre of vines, the nice sum of \$180 or \$200, which is claimed to be even better than either tobacco or tobacco, as in the case of the latter some time is consumed in curing, storing, pressing and shipping before returns are received. In producing cucumbers the money is forthcoming immediately. Prospects at present are that an increased number of farmers will enter the arena next season.

A. E.