

to one hundred and fifty miles north of its natural limit by reasonable precautions, such as the following:

1. Plant on land sloping south or south-east and furnish good wind breaks to the north.

2. Secure thorough atmospheric drainage by choosing moderately high and sloping land.

3. Secure thorough atmospheric drainage. If the subsoil is not porous enough to carry off all extra water it must be underdrained.

4. Buy trees on hardy stocks. In most grafted or budded trees the character of the stock is wholly unknown, but to grow a given variety at its northernmost limit a perfectly hardy stock is required.

5. Graft the chosen variety in the tops of very hardy trees.

Varieties recommended for planting where hardness is a principal consideration are Yellow Transparent, Red Astrachan, Longfield, Oldenburg, Fameuse, McIntosh, Wealthy, Scott Winter, Pewaukee, Arctic. — *Montana Fruit Grower*.

### BEES IN THE ORCHARD.

Many fruit-growers do not thoroughly appreciate the value of bees in an orchard or there would be more orchards with bees in them. Their value in an orchard was demonstrated in a most practical way at the Oregon Experimental Station some years ago. A few peach trees were forced into bloom in November, and a colony of bees was placed in the house when the trees began to bloom. For some days, however, a heavy fog prevented the bees from working; although the flowers were open not a bee was seen upon them. The first bright day the bees set to work at once and remained at work so long as there was anything for them. The result was that not a peach dropped at the stoning season, the time all unfertile fruit falls. The crop was so heavy that it had to be thinned out. As a check test one tree was protected so that not a bee could get to it. On this tree all the fruit dropped at the stoning period. Bees and other insects have a duty to perform in the orchard, for which there is no substitute provided. This is the distribution of the pollen from flower to flower and from tree to tree. They insure success in the orchard, and every fruit-grower should encourage the bees in their work by not spraying, or doing anything that would be injurious to the bees while the trees are in full bloom. — *Massachusetts Ploughman*.

### A NEW FARM STEAM HEATING DEVICE.

We had the privilege recently of examining a new device for generating steam, which we think will be especially adapted for stock farms and small dairies. The contrivance is simple, and, if it will do what its inventor claims, will be invaluable for cooking foods and providing hot water on the average farm. The inventor is Mr. R. Bigley, Toronto, who hopes to have his invention in running order shortly. It is a simple hot-water tank, so connected with a small heating apparatus by passing through which the water is quickly heated and escapes in the form of steam at the top of the tank. The heat may be

generated by coal, gas, or coal oil. A very small amount of these materials is sufficient to heat the tank of water and to generate a large force of steam. This steam can be utilized for cleaning and sterilizing dairy utensils, for heating water for washing milk-cans, etc., for cooking and heating food for stock, and in various ways in which hot water can be used on every farm. The heating apparatus can be placed in a farm house and utilized for heating purposes as well as generating steam, and, if necessary, the steam can be carried forty or fifty feet away in pipes. In this way the hot water could be retained in the house and the steam utilized in the stable or dairy.

### Publishers' Desk.

**The Daisy Barrel Churn.**—A good churn is an absolute necessity, and there is, perhaps, none better than that made by The Wortman & Ward Mfg. Co., of London, Ont. It may be obtained from dealers everywhere.

**People We Rely On.**—Canadians are sometimes cautious about dealing with firms doing business in the United States, but in the case of the Lawrence-Williams Co., of Cleveland, Ohio, and E. R. Ulrich & Sons, of Springfield, Illinois, they need have no fear. Both of these firms have been doing business with Canadians for years and have been found to be thoroughly reliable. Ulrich's ensilage seed corn is too well and too favorably known to need any vindication. Gombault's Caustic Balsam is also an article which has been highly beneficial to horsemen the world over.

**Stumps on a Farm.**—The aesthetic sense or appreciation of what is beautiful and in good taste does not require abnormal development in a farmer to enable him to see the desirability of getting rid of the unsightly stump. He desires its elimination for economic reasons as well as for the sake of appearance. When appliances for removing large stumps and stones were unknown the clearing of his land was a process which often exhausted both patience and strength, and was only accomplished in many cases by the hand of time. Modern invention has changed all this. Machines are now obtainable which will accomplish the desired result in a few hours. One of these machines is made by A. Lemire, of Wotton, Que., who has made a specialty of this class of implement, and has spent many years in perfecting the one which he now advertises.

**To Our Advertisers.**—As in every other department of business enterprise, advertising should be instinctive with life and thought and individuality. It is not sufficient to insert an announcement of your business in a newspaper, and leave it to work out its own destiny. It is to be made effective, it must be changed frequently, and have new vitality infused into every change. It costs us something every time a change is made, and entails an expenditure of time and labor as well; but dead advertising is an eyesore,

BUY

**Coleman's Salt**

THE BEST

**For Dairy or Table Use**

IT IS UNEQUALLED.

**Salt on the Farm**

for wire worm, joint worm, army worm and all insects that destroy crops. Salt is the best insecticide. It is also a fertilizer.

TRY IT.

**R. & J. Ransford**  
OLINTON, ONT

## Vegetables

can be raised at a profit, and the yield enlarged, if properly fertilized. Most fertilizers do not contain enough

## Potash.

Vegetables need plenty of potash—at least 10%—besides the phosphoric acid and nitrogen.

Write for our books which tell all about fertilizers. They are free.

GERMAN KALI WORKS,  
93 Nassau St., New York

and we prefer to incur the expense and trouble necessary for its vitality. Advertisers will, therefore, always find us willing to do our part if they will do theirs. They cannot send in changes too frequently to suit us, and they will find it profitable to keep their announcements fresh and interesting. Let us hear from you to-day for fear you may forget.

**He Knows How to Get Premiums.**—Montrose, May 3rd, 1898. Dear Sir,—After reading your premium list I thought I would try for a bushel of Prussian blue peas, and had very little trouble in securing a new subscriber. I enclose \$1 for subscription and 15c. for the bag. The new subscriber is Mr. Henry Hixon, Port Robinson, Ont., a well-to-do farmer who was telling me a few days ago he was tired of the Yankee papers. I lent him some of mine to look at. The result was he came with the dollar and asked me to send for FARMING at once. I have taken your paper for four months, and am very well pleased with it. It should be in the hands of every Canadian farmer, in the place of many American publications which find their way into this country. Hoping your circulation may increase, yours respectfully, RICHARD HARTLEY.

## ROOFS FOR THE KLONDIKE



Roofs must be chosen with care and judgment in any country, and especially so in Canada.

All our products are constructed for use in Canada, and ample provision is allowed for contraction and expansion, and we guarantee them to be water, wind, and storm proof.

Up-to-date information and fully illustrated catalogues of Steel Roofings, Sidings and Ceilings sent free for the asking.

The Pedlar Metal Roofing Co.  
OSHAWA, ONT.

### Stock Notes.

Mr. N. Dymont, of Hickory Hill Farm, Clapperton's Corners, seems to have brought his fine stock through the winter with more than usual success. He says Dandy (2223), winner of milk test at Guelph in 1897, has given 1/2 lb. of milk per day, and Briery Blank Susie (2447) 65 lbs. per day. Belle Flower of Hickory Hill is now fresh and doing fine; has not been in long enough to feed her much, yet she can put up 40 lbs. per day, which, with feed, will no doubt increase to 45 lbs., although she is only a heifer. The others have not come in, but will be heard from later on. Drummond (2036) is in great shape, and his stock are all coming right. There have been good offers made for him, but as it would be difficult to replace him I have preferred to keep him for my own herd. It would be hard to find his equal.

### HELDERLEIGH FRUIT FARMS AND NURSERIES —400 ACRES—

Situated at the base of the Mountain in a warm and sheltered valley where trees arrive at full maturity. Having over 125 acres planted in fruit, I have unusual facilities for knowing the value of the different varieties and establishing their purity. Everything is GUARANTEED TRUE TO NAME or purchase price refunded. I have for the fall of 1897, and the Spring of 1898, a complete line of Trees, Shrubs, Vines, etc., both fruit and ornamental.

Write for a Catalogue which is furnished FREE, and which contains over ten pages of closely written matter about the various PESTS that trouble fruit growers and means of preventing their ravages.

Buy CANADIAN GROWN STOCK only, and thus escape the dreaded San Jose Scale so prevalent in the States. There is no more reliable, healthier, or more complete assortment than mine.

Good reliable salesmen wanted in a number of fine townships, to start work at once. Complete outfit free.

Address E. D. Smith, WILSONA, Ont.

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