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A Furnace which embodies all the qualities of your ideal furnace. Which keeps your whole house comfortable in the severest weather. A Furnace that supplies an abundance of healthy heat and is a great saver of coal.

Nothing has been forgotten in making the Hecla Furnace. There is no good idea in the ordinary construction of any furnace that you will not find on a Hecla. Besides Hecla Furnaces have special features to be found in no other.

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There is absolutely no dust or gas comes through the registers from a Hecla Furnace. The Fused Joints of the Hecla radiator make it entirely free from leakage.

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The Hecla Steel Ribbed Firepot is one of the great innovations in furnace history. It has three times the radiating surface of ordinary furnaces. This means that far less coal is required to give the same amount of heat as other furnaces. Hecla Furnaces are built to burn coal, wood, or natural gas.

Circular Waterpan

On a Hecla Furnace the water pan runs completely

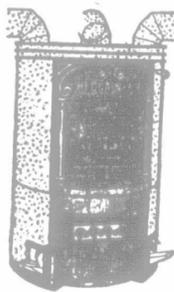
HECLA a Clare Bros. FURNACE

around the furnace. This assures abundance of the moisture so necessary to good health. It gives even distribution—every room gets the same proportion of moisture. It also helps make a saving in coal. Moist air at 65° is as comfortably warm as dry air at 70°; you thereby save the coal necessary to make up the other 5°.

If you intend installing a furnace it will cost you less and your home will be warmer, healthier, happier every winter if it is a Hecla.

Go to your nearest Hecla Dealer and see this furnace. Or beautifully illustrated literature will be sent by us free upon request.

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NORTHERN ONTARIO

Millions of acres of virgin soil, obtainable at 50c. an acre in some districts—in others free—are calling for cultivation.

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When writing advertisers will you kindly mention The Farmer's Advocate.

Our School Department.

Our School Garden.

About the first of March we began our garden. First we got ready, obtained our seeds, and next we built a hot-bed, as it is necessary in our climate to plant tomatoes, cabbage, celery and cauliflower in a hot-bed, later transplanting them into flats and then into the garden. The soil was clay-loam, well manured, and the plot contained one-sixteenth of an acre.

In preparing it we spaded, then hoed, cultivated and raked it, making the plot smooth and even. Then it was marked out in beds for celery, corn, cauliflower, cabbages, tomatoes, peas, beans, carrots, onions, turnips and potatoes, two kinds of oats, one of wheat and one of barley. A trench was made (kept straight by a board) and the seed sowed thinly and covered lightly, afterwards firming.

In transplanting, the flats were taken to the plot. With the corner of a hoe

solved. The suggestion set forth in the article is a good one.—EDITOR.]

Conservation of Soil Moisture.

BY J. G. ADAMS.

In the spring when cultivation is beginning, a study of some of its effects will be profitable and opportune. One of these, the conservation of soil moisture, may be demonstrated by class room experiment and should be demonstrated practically in the school plot.

Conservation of soil moisture is necessary because the supply from precipitation during the growing season is usually insufficient to supply the needs of the growing crops. During the autumn, winter and spring the moisture precipitated as rain and snow will be stored in the soil to the full capacity of the latter. But during the warm days of summer large quantities of this are lost by evaporation. The amount of rainfall usually decreases and the demand of the crops on the water supply increases. Hence it is essential that the farmer should endeavor to prevent the loss of soil moisture which occurs chiefly through evaporation.

This loss of moisture from the surface may be prevented by mulching or by keeping a layer of loose soil on the surface. This may be demonstrated by weighing out into two soil tins or shallow cans of the same diameter equal quantities of thoroughly dried clay or clay loam. Samples of soils may be obtained from the Physics Department of Ontario Agricultural College if they are not obtainable locally. Add to each sufficient water to thoroughly moisten but not to puddle them. Keep records of the weights and set aside in a warm place. Do not disturb the one, but two or three times each day thoroughly stir up the surface of the soil in the other can to a depth of about one-half inch until it is well pulverized, being careful to lose no material from the cans. Make weighings of each once a day for a week. Which can loses weight the more rapidly? To what is this loss of weight due and what causes the difference?

This loss is prevented in practise by getting on the land early in the spring, just as soon as may be permissible without puddling the soil, and loosening the surface layer to a depth of two or three inches with the cultivator or harrow. This should be continued at frequent intervals until a good soil mulch is produced and repeated after heavy rains which will tend to pack the soil and destroy the effect looked for. This should be a good topic for experiment in the garden where the effect of early and frequent cultivation on plants may be contrasted with that produced when the surface is allowed to remain packed and undisturbed.

Would it not be a good plan to plant a few potatoes of the standard types described in the issue of May 22 and get acquainted with them? A splendid lesson could be taught on potatoes if these types were produced in the school garden.

Small hand-sprayers can be purchased for \$1 to \$1.50 and used to advantage in controlling insects in the garden.

The teacher and pupils should devise some means of keeping the garden clean during the summer holidays.



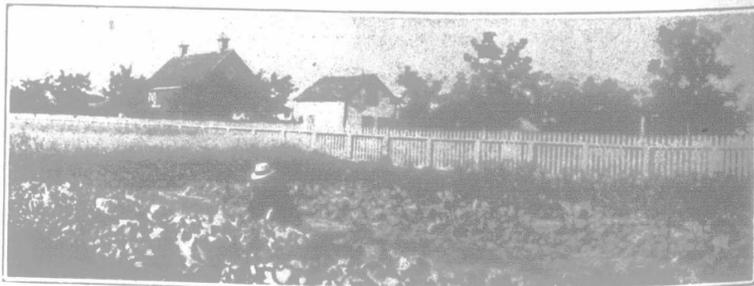
The Pupil-Farmers of S. S. No. 2, Devlin.

some holes were made, the plants carefully lifted out and placed in these holes, and the earth carefully packed around them. If the sun was not shining they were watered, otherwise they were left. Through the school days pupils hoed and weeded the garden twice a week.

Holidays came near the last of June and we had to find some way of tending the garden. A scholar who was good at weeding and hoeing a garden was chosen to be captain of the school children; then there were four assistants appointed who went with four other smaller children to work in the garden. When the captain thought the garden needed to be hoed she would telephone to one of the assistants and he or she got the bunch out to help. When school opened in the fall there still remained the carrots, potatoes, red beets and grain to be harvested. The carrots and beets were pulled, potatoes dug, grain cut and threshed, by rubbing between the hands and blowing the chaff away. The roots were stored and sold in the spring and the grain was kept for seed. The total amount realized for the sale of produce was fifteen dollars.

And for the land, the stalks and roots were cleared away and the land left ship-shape for the following spring. This is how we managed our garden and we hope it will help others with their gardens.

[NOTE.—The foregoing article was contributed to the School Department by Beth Smith, Lottie Cook and Grace Dustin of S. S. No. 2, Devlin, Rainy River, Ontario. The method whereby the garden was kept clean during the summer holidays is worthy of consideration. The holiday season constitutes a problem in school gardening which, in the majority of cases, has not yet been



A Part of the School Garden of S. S. No. 2 Devlin.