

The Farmer's Advocate AND HOME MAGAZINE.

THE LEADING AGRICULTURAL JOURNAL IN
THE DOMINION.

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JOHN WELD, MANAGER.

Agents for "The Farmer's Advocate and Home Journal,"
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1. THE FARMER'S ADVOCATE AND HOME MAGAZINE is published every Thursday. It is impartial and independent of all cliques and parties, handsomely illustrated with original engravings, and furnishes the most practical, reliable and profitable information for farmers, dairymen, gardeners, stockmen and home-makers, of any publication in Canada.
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which he is particularly engaged and which may be of value to him in future.

As an instance of the importance of the individual farm experiment, we can think of nothing better than fertilizers. No man can tell what his soil requires without at first testing it out, and we would urgently advise many of our readers who have an idea that their farm needs commercial fertilizer or is deficient in some one or two of the ingredients necessary to plant growth to make tests on their own soil. These need not be very exhaustive, nor need not require much time or experience in carrying out. If carefully done, the owner knows just what his farm requires and has not to take the advice or counsel of others. While not necessarily exhaustive, all experimental work must be accurately carried out or it is of little or no value. Accuracy and thoroughness are the keys to success.

There are certain varieties of farm crops which have been exhaustively tested out at the large experimental stations and have proven superior for general farm practice to other varieties. It adds interest to the work of farming to try one of these leading varieties of one of the staple crops against another leading variety and find out which does the best on your own type of soil. Experimental work will tend towards thoroughness in everything that is done on the farm and thoroughness should be cultivated on every farm in this country. There is too much haphazard work on most farms and guessing too often takes the place of actual facts. No farmer should attempt to carry on extensive experimental work, but all should do a little to improve their own conditions and aid the experimental stations in reaching conclusions. Soils vary, seasons vary and methods of cultivation vary. Study these on your own land.

Nature's Diary.

By A. B. Klugh, M.A.
THE PINES.

Where the cold gray granite gleams
We stood in our serried ranks,
But now we're mostly timbers,
Or a pile of one-inch planks.

And this is the song of the Pines
As the wind sways them backwards and forth,
The kings of the forest primeval,
The giant Pines of the north.

In the winds of many winters
Have our hardy branches swayed,
In and out among our needles
Summer's gentle zephyrs played.

And this is the song of the Pines
As the wind sways them backwards and forth,
The kings of the forest primeval,
The giant Pines of the north.

In springtime in the northland,
In the shadows that we cast,
We held the snows of winter
Till the river's flood was passed.

And this is the song of the Pines
As the wind sways them backwards and forth,
The kings of the forest primeval,
The giant Pines of the north.

Thus the flight of time unheeding
We stood through ages past,
Now before the axe and fire
Our race is falling fast.

And this is the song of the Pines
As the wind sways them backwards and forth,
The kings of the forest primeval,
The giant Pines of the north.

The Pines are an ancient race. When the seed-plants were evolved from their fern-like ancestors the Coniferae were the first types to ap-

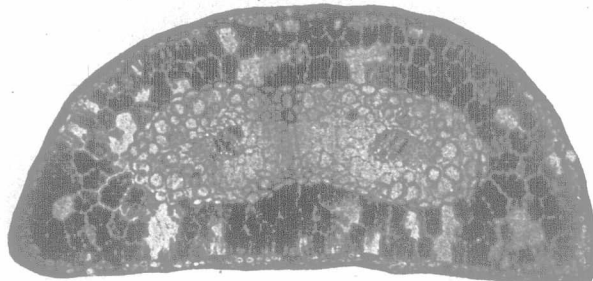


Fig. 1—Photomicrograph of cross-section of the leaf of jack pine, showing heavy cuticle and sunken stomata.

pear, and the Pines are a branch of this family. They have persisted to the present day in many diverse climates because of their fitness to withstand adverse conditions. Their needle-like leaves are adapted to withstand strong winds, and they are also provided with a heavy cuticle (outer covering of the leaf) and sunken stomata (see Fig. 1), which renders them immune to the effects of dryness. Their branches being placed nearly at right angles with the trunk allows them to bend, and not break, under a load of snow.

To the lover of the woods there is something particularly attractive about a Pine forest, the open aisles, free from underbrush, the resinous odor, the gentle sighing of the wind through the branches.

The way in which our Pine forests have been devastated is one of the crying shames of civilization. Where the forest was cleared off to make room for prosperous farms this destruction was, of course, perfectly legitimate, though even in this case the clearing was often too wholesale, and many farmers to-day would find a piece of land with a good stand of Pine a better paying crop than any other. But where arid, rocky land was stripped of its best timber, burnt over and converted into a dreary waste, this destruction was nothing short of criminal. "Willful waste brings woeful want," and we see the want of good Pine lumber to-day. Only the pinch of high prices has forced upon us the idea of conservation, and conservation has not arrived one moment too soon. Lumbering has hitherto been a destructive industry, henceforth it must be a constructive one as well. Our forests have been treated as mines; they must now be treated as farms.

We have in Canada a good many species of Pines, and the following "key" will enable anyone to readily identify the different species:

KEY TO CANADIAN PINES.

- Eastern Species.
A. Leaves 5 in a bundle—White Pine (*Pinus strobus*).
AA. Leaves 2 to 3 in a bundle.

- B. Cone scales unarmed.
C. Leaves 2½ to 6½ inches long—Red Pine (*P. resinosa*).
CC. Leaves ½ to 1½ inches long—Jack Pine (*P. banksiana*).
BB. Cone scales armed with a spine.
C. Leaves in 2's—Jack Pine (*P. banksiana*).
CC. Leaves in 3's—Pitch Pine (*P. rigida*).

Western Species.

- A. Leaves 5 in a bundle.
B. Cones long-stemmed—Silver Pine (*P. Monticola*).
BB. Cones short-stemmed.
C. Leaf bundles scattered—Lamber Pine (*P. flexilis*).
CC. Leaf bundles in crowded clusters—White-bark Pine (*P. albicaulis*).
AA. Leaves 2 or 3 in a bundle.
B. Leaves over 6 inches long—Yellow Pine (*P. ponderosa*).
BB. Leaves 1 to 3 inches long.
C. Leaves dark green, slender, tree 5 to 25 feet in height—Scrub Pine (*P. contorta*).
CC. Leaves yellow-green, broader, tree 80 to 120 feet in height—Lodge-pole Pine (*P. murrayana*).
CCC. Leaves gray-green, stout—Jack Pine (*P. banksiana*).

Good Rural Homes Keep Boys on the Farm.

Editor "The Farmer's Advocate":

Having good rural homes is the mainstay of our existence as a people. In the home begins the lives that make or destroy our social, moral, political and even physical perfection. Wrecks do not often come from well-ordered homes. A boy or girl who is well nourished, clothed and made comfortable at home by the happy, cheerful and sane philosophy that comes from a mother's love and a father's healthy protection, will rarely prove a burden on society or become an undesirable citizen.

The earth was created by a Power from on High. Nature has done her part, and to man has been given the duty, the right, the privilege of developing it. Tap the maple tree and by a process of evaporation we have maple syrup; plant an apple tree and by cultivation, in place of native fruit, we have the "Wealthy," the "Snow," and the "McIntosh"; sow the grain, and we reap the harvest tenfold. Development means, men to labor and men to think. We read of streets paved with gold, but few there be that find them. Trees do not grow into houses, cattle do not feed themselves, and it is useless to sow seed on barren fields.

Poetical language, silver-toned orators with beautiful landscape portraits and all kinds of theories, may seem very nice, but it is work that keeps the wheels moving. In banquet halls and from schoolhouse platforms, especially at Institute meetings, we listen to men with much experience, and more ancestral kid-glove theory, lecture on "How to keep the boys on the farm." An Irishman would answer in as many words, "Why, keep the girls there." Lectures and lecturers may be all very good, but the lecturer is often as a man, his father's son, putting the roof on his grandfather's building, and the lecture, however good, is only the finishing touch to the picture. The parents are the brush and paint, and the canvas is the boy and girl themselves.

To keep anyone anywhere there must be something to appreciate, and to make something on the farm worthy of appreciation is the secret of making farmers. The country favors high aims and lofty endeavors. Under the sunrise purity of her ozone-laden atmosphere and with the inspiration from the lives of neighbor-folk, the country is a heritage fit for kings.

But what do we find? Too many of our rural homes are nothing but pens. Houses that have no excuse for their erection, save that of a roof to protect from the elements. The need of heat, light and ventilation are subsidiary questions, and are often forgotten in the house planning. Many farm houses are uninviting to boys and girls. They have no rooms they can call their own—no place where they can design, scheme, plan and study—a defect indeed when we consider that our Shorthorns, our Yorkshires, our Plymouth Rocks, and our Berkshires, are attended to in every detail that will further their improvement. Surely boys and girls are of more value than cows and sheep.

To keep their children on the farm different parents have different ways. Some provide fine carriages, and the children soon graduate as city swells on a few dollars a week. Then there is the farm house across the road. Framed in red letters and hung on the wall is the proverb "Early to bed and early to rise, makes a man healthy, wealthy, and wise," and every morning, the whole household is up at break of day and working. And what is the reality? Homes which might be bright with music have none.