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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," Winnipeg, Man.

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is published every Thursday.

It is impartial and independent of all cliques and parties, handsomely Hustrated 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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LONDON, CANADA.

Broadcast or Drill.

Spring seeding each year brings up a point as to whether largest yields generally come from broadcasting or from drilling. Experiments have shown that on the average, taking into consideration early, late and medium seeding, that drilling has a little the advantage one year with another. It is generally conceded that in a dry season drilled grain stands a better chance than broadcasted grain. Of course, there is a little extra cultivation given generally where drilling is done. Most people nowadays who broadcast sow with an ordinary cultivator, having a seed box attachment and cultivate the seed in, whereas where the drill is used an extra stroke is given with this after the cultivator has finished its work.

In cases where the land works particularly well, is in good tilth, with a fine, dust mulch prepared on top, where there is no clogging and the tillage implements go through fairly well, and where the seed may be put into the ground early in the season, broadcasting often gives as good results as drilling, but as the season advances and some of the fields are being sown rather on the late side, we would advise holding fast to the drilling system. It takes a little longer perhaps to drill in the grain but generally pays in the long run, although as before stated, where the seed is in the ground early and the land is in first-class condition there are some points in favor of broadcasting, and there may not be very much difference in yields per acre. The main thing is to get the land in a good state of cultivation. It is not necessary on good, clean soil to work it to a very great depth, but whether broadcasting or drilling be sure that a good seed bed is prepared before the seed goes on, and, as so often advised through these columns, don't forget to use the drag harrow as much as possible.

Nature's Diary.

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

Of all the Canadian Pines the White Pine, (Pinus strobus) is undoubtedly THE PINE. This has been the chief timber tree of Canada, mainly because the wood is light, soft, closegrained and easily worked—the carpenter's delight.

It is a stately tree, one hundred to a hundred and twenty feet in height, with spreading, horizontal branches, in whorls of five. It is the only Eastern Pine with leaves in bundles of five, and ranges from Newfoundland to Manitoba.



Fig. 1.—Pollen-grain of pine, showing wings.

Clustered behind the new shoots are the staminate cones and from them in June, the pollengrains descend like a shower of golden rain. The pistillate flowers show themselves in a cluster about the terminal bud, which keeps on growing, leaving them to ripen through two seasons, when at the end of the second summer they discharge their seeds. The Pines are adapted to wind pollination and wind dispersal. The pollen-grains have two wings (see Fig. 1) which help to maintain them in the air, and the seeds also are winged and are thus transported to considerable distances by the wind.

The buds on the crown of a baby Pine cluster at the top, a circle of five around the central bud. In spring the leader grows upward, and at its base five branches radiate. We can thus count the years of a sapling Pine by its whorls of branches. If anything happens to the terminal bud the trunk is maimed for life, as either one of the lateral buds will bend upwards and take the leader's place, or two will do so resulting in a forked trunk.

In the dense forest the lower branches die very early, thus giving a trunk which yields lumber free from big knots.

The great Pine forests of Canada seemed inex-

austible to the early settlers. But the avarice of lumber companies and the wilful blindness of politicians have squandered this vast, natural wealth.



Fig. 2.—Jack pines on rocky hill at Shawanaga River,
Parry Sound District.

The Red Pine (Pinus resinosa) is a large tree from seventy-five to a hundred and twenty feet in height, with reddish bark and two needles in a bundle. It prefers dry sandy soil or rocky ridges, and ranges from Nova Scotia to Manitoba. It is often called Norway Pine, because an early Spanish explorer erroneously described it as identical with the variety of the Scotch Pine which grows in Norway.

The Jack Pine (Pinus banksans) extends its range farther north than any other Pine, running, in the Mackenzie River region, almost up to the Arctic Circle. It also has a wide east and west range, extending from Nova Scotia to the Rockies. It grows only on barren ground, and along the north shore of Georgian Bay, it is found higher up the mountains than any other tree.

It is usually a rather low scraggly tree, but occasionally reaches a height of seventy feet.

The Pitch Pine (Pinus rigida) is a gnarled,

irregular, tree fifty to seventy-five feet in height with a short trunk and rough branches. Its range is from New Brunswick to Ontario. While its wood is of little value, the tree is useful in another way—in holding sand dunes in place. It has a habit which is unique among the Pinesthat of sending up suckers from its base,

The Silver Pine (Pinus monticola) is found in southern British Columbia, at elevations of from seven thousand to ten thousand feet, where it reaches a height of about ninet feet. The cones are twice the size of those of the White Pine

The Limber Pine (Pinus flexilis) is a broad stout-trunked tree, forty to seventy-five feet in height, which grows at altitudes of from seven to ten thousand feet in the Rocky mountains where it is an important timber tree. Unlike most of the Pines it matures its seeds in one year. The staminate clusters are tinged with rose-color.

The White-bark Pine (Pinus albicaulis) keeps near the timber-line in the mountains of British Columbia, and is a low, shrubby, flat-topped species. One of these trees, three feet high and six inches in diameter was found to be 426 years old.

The Yellow Pine (Pinus ponderosa) is a spirelike tree with stout, short, horizontal branches, 100 to 230 feet in height and from five to eight feet in diameter. It is found in British Columbia where it is one of the main timber trees. It grows in a variety of situations but prefers deep well—drained soil on mountain slopes.

The Scrub Pine (Pinus contorta) is a stunted tree of exposed situations on the Pacific Coast.

The Lodge-pole Pine (Pinus murrayana) is a species which clothes the slopes of the mountains of Alberta and British Columbia. It is tall and slim, averaging about 5 inches in diameter and 50 feet in height, and forming a stand as thick as wheat in a field. The name Lodge-pole Pine was given to it because of the use to which it was put by the Indians. They also make a cake of the pounded and baked inner bark.

Hiring the Man.

The Farmer's Advocate has recently received several letters discussing what some call the hiring system on the farm, but the main point at issue, is whether or not farm hands should be hired by the month or for a term of six to eight months or by the year. Many men operating a comparatively small farm, require hired help during the summer months, but can, by doing a little extra labor themselves, or perhaps in some cases it is not necessary to do very much of this, manage during the winter. This class of farmer sees no advantage in hiring his man or men, as the case may be, by the year, in fact he thinks he would be money out of pocket by having to pay wages during the winter months when he had very little work for his men to do.

The man on the larger farm, requiring labor the year round, prefers to hire at least a part of his help for the entire twelve months, but he too, usually requires extra labor during the summer months and must depend upon short-term hired men or day labor. It would require considerable change in the farming system on many farms to warrant the hiring of men wholesale by the year. This paper has advocated that in so far as possible, the farmer should do so, that he would be greatly benefitted by getting his help for as long terms as possible, preferably the year and to do this it is necessary in many cases to provide a cottage for the laborer, seeing that the steadisst man is usually the married man.

Many new contracts between hired men and farmers are being made at this season throughout the and hundreds of men throughout the start work the first or country will Some have already fifteenth of April. commenced, but just now there are thousands of farmers looking for help and many men between whom negotiations are being carried on with view to hiring. For the man who has not kept hired help by the year and who has done alone we believe it would pay in many cases if he would change his system of farming a little and endeavor, in so far as possible, to find work for his hired help in winter. The seventy-five or one hundred acre farmer is in this class and he could very well increase his live stock, plan some teaming which might be done at a profit for the farm and several other odd jobs to keep the man over winter and if satisfactory he would then have him ready for a new contract another spring which would obviate a lot of trouble in the securing of hired help. The man on this size of farm would be safe if he worked it rightly to try Once tried, we hethis for at least one year. Once tried, we be lieve he would stick to it. Of course, it is necessary essary to find work for the man in winter but as a general thing the hired help does not expect as high pay in winter as in summer and by contract ting for the year, a lower all-round wage would be possible and better satisfaction would result