## HORTICULTURE IN PRAIRIE PROVINCES

By NORMAN ROSS, SUPERINTENDENT OF FORESTRY, INDIAN HEAD

The ideal tree for the western prainting is undoubtedly an evergreen, rie is undoubtedly an evergreen, hence every endeavor should be made to learn more about the varieties suitable to our climatic conditions, and able to our climatic conditions, and the best methods of handling, propa
The ideal tree for the western prainting is undoubtedly an evergreen, how expensive to make. The varieties, and so soon as new land taken off. These are all cut in lengths of eight to nine inches died in bundles and labelled with the name of ite varieties suitable to our climatic conditions, and able to our climatic conditions, and the prepared and the necessary expensive to make. The varieties, and so soon as new land taken off. These are all cut in lengths of eight to nine inches died in bundles and labelled with the name of ite varieties, and so soon as new land taken off. These are all cut in lengths of eight to nine inches died in bundles and labelled with the name of ite varieties, and so soon as new land taken off. These are all cut in lengths of eight to nine inches died in bundles and labelled with the name of ite varieties, and so soon as new land taken off. These are all cut in lengths of eight to nine inches died in bundles and labelled with the name of ite varieties, to not very expensive to make. The varieties, and so soon as new land taken off. These are all cut in lengths of eight to nine inches died in bundles and labelled with the name of ite varieties, and so soon as new land taken off. These are all cut in lengths of eight to nine inches died in bundles and labelled with the name of ite varieties, and so soon as new land taken off. These are all cut in lengths of eight to nine inches died in bundles and labelled with the name of ite varieties, and so soon as new land taken off. These are all cut in lengths of eight to nine inches died in bundles and labelled with the name of ite varieties, and so soon as new land taken off. These are all cut in lengths of eight to nine inches died in bundles and labelled wit hence every relevery dealeyed bounded to be learn more elevent the strategies and she for or climated condition, and unable to our climated condition, and unable be given for any college, and the strategies and the condition of the college of the gling. As a windbreak, however, and for plantations these pines should prove most satisfactory, especially in certain regions where young plants can be obtained very easily in larger from natural sources. These kinds can be recommended for the kinds are packed in boxes in a vinces up till a few years ago.

Previously to this, however, we had mixture of slightly moist earth with em be obtained very easily in large numbers from natural sources. These kinds can be recommended for planting anywhere in the west, and if failures result, the planter may be sure that the fault lies in his methods of handling and are not due to a lack of hardiness in the varietye about which we are less eason in as to their general adaptability. All sprouts that may be planted with more of less confidence are the Scotch Pine. The land where they are to be set should be finely pulverized and the surice levelled. As soon, as there is no danger of severe from the roots should be finely pulverized and the surice levelled. As soon, as there is no danger of severe from at the surice levelled. As soon, as there is no danger of severe from any be planted with the first seal and very usable to find any bearing a crop of that it is best not to mix the confidence in the third is should be finely pulverized and the surice levelled. As soon, as there is no danger of severe from any thanks there is no danger of severe from any thanks there is no danger of severe from any thanks there is no danger of severe from a true to be set should be very valuable to us. The should be very valuable to us. When they had a population of 25,000,000 they thought their forests were and the surice levelled. As soon, as there is no danger of severe from any thanks there is no danger of severe from any thanks there is no danger of severe from any thanks there is no danger of severe from a true to fine the roots incompleted of any the true to find any bearing a crop of the state should be very valuable to us. When they had a population of 25,000,000 they thought their forests were soon, and the cultium their forests were soon, as there is no danger of severe from any the planted wery usuable stores; proposed if during the first sea. When they had a population of 25,000,000 they thought their forests were from the roots and the surice levelled. As soon, as there is no danger of severe from a true to first seal and the time the state of any the ti

they may be planted with more or less confidence are the Scotch Pine, the Colorado Spruce (Picea pungens) and the Baisam Fir (Abies balsamea). Owing to the fact that it is easily propagated, the Scotch Pine will in all propagated, the Scotch Pine will in all propagated, the Scotch Pine will in all propagated, the results of isolated trials in different parts of the west. Probably the oldest trees of this variety were planted by Mr. A. P. Stevenson, on his nursery near Morden in Manitoba, in the neighborhood of the colorado Spruce (Picea pungens) and the Baisam Fir (Abies balsamea). Owning to the other varieties are evershadowed and crowded and crowded and crowded to a standstill.

PROPAGATION OF THE APPLE. (By A. P. Stevenson, Nelson, Manitoba.)

I would not recommend the average are must be planted under this protection, but the oldest trees of this variety were planted by Mr. A. P. Stevenson, on his nursery near Morden in Manitoba, in the neighborhood of the first two or three ing. During the first two or three planting the seed of the fruit, but as in Manitobe, in the neighborhood of twenty-live pears ago. They have here grown well and are still in a healthy condition, having produced seed for a number of years from which seed fings have been raised. These should be afforded so that the hardy than the parent stock. At Brain doubtedly form trees still more hardy than the parent stock. At Brain doubtedly form trees still more hardy than the parent stock. At Brain doubtedly form trees still more hardy than the parent stock. At Brain don and Indian Head this variety has also proved successful; at the latter place there are convinced in the temperature is often.

In the vear 1906 about three and the soil, Our experiture is that country is that cultivation should be kept up at last until the each of the first two or three soil in a healthy is that cultivation should be kept up at last until the each of the first two or three soil in the legislature when Hon, Adam Beek got after 0. N. which Here consumed for that purpose, and about three fourths of a million of that was taken from our Capadian to results are too uncertain to recommend to planters generally. Now we will come back into our canadian forests and see what we have and how long the supply is like on the first two or three soil. In the vear 1906 about three and method of propagation is by is that cultivation schooled be kept up at last until the each of the first two or three fourths million cords of were consumed for that purpose, and about three fourths of a million of that was taken from our Capadian to results are too uncertain to recommend to planters generally. Now we will come back into our canadian forests and see what we have and how long the supply is like on the first two or three fourths million cords of were consumed for that purpose, and about three fourths of a million of that was taken from our Capadian to results are too uncertain to results are too uncertain to recommend to planters of the two mouths and the first two or three fourths of the parent of the first two or three fourths of place there are growing on the exno reason to suppose they could not be successfully cultivated west of this point. As an ornamental tree, the during the succeeding season. point. As an ornamental tree, the Scotch pine is very satisfactory if given plenty of room, so that the lower branches may be developed; if crowded in any way these will scondie off. For a windbreak, one or die off. For a windbreak, one or die off.

The chief reason is the difficulty of To be successful in transplanting Seedlings of the Wild Siberian Crab obtaining suitable young stock in sufficient quantities and at price which the average settler could afford to pay. Until the western nursery men undertake the propagation of these varieties from seed in comparatively large numbers, we cannot hope and express the propagation of the propagation propagation of the propagation of the propagation propagation of the propagation propagatio obtaining suitable young stock in any evergreens, more care is required (Pyrus Baccala) Transcendent and these varieties from seed in comparation of the present there should be no trouble in the prices. The cost of raising coniers, we cannot hope to such reduction in the present than in other parts of Canada or three Eastern States as in transplanting, a great deal of hard labor is necessary and we all know that at current wages each transplanting means a large expense to the nursery man. The expense of raising the seedlings up to the transplanting the seedlings up to the roots cound which sacking or burlap is tied during the moving much to the cost of raising the seedlings, at least trees, it is usually the custom in the present which we want the seed to hang on the trees until latter the first heavy the trees that would be on trouble in the five that the seed is then easily top-work these limbs with some choice varieties, that would be on trouble in the seed to hang on the trees until latter the first heavy the send to the neatly to the trees that would be on trouble in the spart than in other parts of Canada or the plants drying afterwards. I am there should be not rouble in the plants of course, to young plants drying afterwards. I am there should be not rouble in the seed to hang on the trees until latter the first heavy the send to the easily top-work these limbs with some choice varieties, that would be on trouble in the spart than in other parts the seed is then easily to withstand our severe climate as to withstand our severe climate as too traiting the seed to within an average of two seeds to an inch at the plants of the seed in the plants of the seed to within an average of two seeds to an inch of soil. A light much of partially rothen easily to without the same thin fers. Coniferous seedlings, at least of the varieties above mentioned, can be raised with as much success in the wtst as elsewhere. For the past five years at the nursery station at Indian Head we have secured excellent stands in the seed beds. In climates where the air is moster than with us great damage is done in the nurseries by what is known as damping off. In the west we, at least Indian Head, have suffered nothing from this. In growing any conifers, special seed beds are necessary, as it is essential than an inch above the old crown to shade the young plants during the mark; after a few heavy rains it will sentence of the custom to bread leaf trees it is usually the custom to bread leaf trees it is usually the custom to bread leaf trees it is usually the custom to set them somewhat deeper than they originally stood in the nursery, and with most varieties there is not much danger of planting them too deeply. In the case of evergreens, especially small ones, it is not advisable to plant much deeper than they originally stood in the nursery, and with most varieties there is not much danger of planting them too deeply. In the case of evergreens, especially small ones, it is not advisable to plant much deeper than they originally stood before moving. If the season, so as to encourage as strong a growth as possible, that in the fall they may average a nice even stand of trees from twelve to fourteen inches to shade the young plants during the to shade the young plants during the mark; after a few heavy rains it will In the late iall all the strongest top was cut off and top-worked in one the downward grade and a few year to shade the young plants during the mark; after a few heavy rains it will first and often the second season, soon settle down to the right level.

For convenience the beds are usually There is an enormous field in the cut off, the roots packed firmly in box-box for the roots packed firmly made four feet wide. The shades may be interbed constructed in the cheapest manhardy varieties of conifers. So far
hardy varieties of conifers. So far
dry, cool cellar, where they remain
mer possible. In places where they we know almost nothing as to their
we know almost nothing as to their
until wanted for grafting. can be obtained, small branches of growth under cultivation, the trees or shrubs laid across poles and value of wood produced in cultivated. As much of the success in grafting swer the purpose splendidly. Perbaps the most frequently used screen
is one made of common lath nailed to
pieces of 2 x 2, with the lath about
an inch apart. These screens will

As nucle of the success in grating depends on the condition and quality
of the scions, great care should be work in connection with forestry, I
would like to say a few words taking
the question as a whole and speaking
an inch apart. These screens will

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the question as a whole and speaking
the question as a whole and speaking
the question as a great proportion is
from a practical standpoint. Up to

two rows with the trees set close together should give good results, divaricata and natice larch or tamarthough the growth would.

The varieties to be used are "stock" is the portion of the young seedling the scion is to be united with.

Here in Western Canada it has getner should give good results. Giverneat and natice laren of that the growth would not be acc. Unfortunately at present there come to be a pretty generally accept come to be a pretty generally accept some roots of their own , and they are ed fact that in an apple tree a hardy white spruce.

There in western Canada it has been already noticed, develop come to be a pretty generally accept some roots of their own , and they are ed fact that in an apple tree a hardy white spruce.

We propose, an acceptance of their own and they are root is quite as important as an early would be to withstand our rigorous. however, to get over this difficulty ripening tendency of wood. An orch

tremely strong growth and will evidently stand considerable exposure. The Balsam fir is probably not quite so hardy as the other varieties men. so hardy as the other varieties men-tioned, but it has not been planted extioned, but it has not been planted ex-tensively enough on the prairies to allow of any definite assertions regard-There are several reasons why extensive plantings of evergreens are not likely to be made in the west for several years.

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The chief reasons why extensive planting and was perfectly bare.

spring, when the temperature is often. Once having obtained a valuable very low, the wind extremely strong variety, and wishing to multiply and perimental farm trees about 20 ft. high which were planted somewhere about which were planted somewhere about being the sun very bright. If the perpetuate it, one of several methods son they are cut back to one or two and the sun very bright. If the perpetuate it, one of several methods son they are cut back to one or two and the sun very bright. If the perpetuate it, one of several methods and a strong, straight shoot is plants are unprotected at this time plants are unprotected at this time plants are unprotected at this time plants are unprotected at the sun very bright. If the perpetuate it, one of several methods son they are cut back to one or two plants are unprotected at this time protected at this time plants are unprotected at thi When badiv practiced in growing the young make it head properly,
seems to reapple tree for orchard planting, are
The third season what Although the writer has not seen any lose most of the needles. When the seen so respectively burned in this way it seems to respect the and but little growth can be expected methods for propagation, but here in tree in proper shape. The growth the the North grafting is the only saie tree makes depends a good deal

The Colorado spruce makes an ex-however, to get over this dimensional repeating tendency of wood. An orch-termely strong growth and will evi-tyred though the plantation. In above ground, but that is grafted on a

work the large apple.

after the ground has settled.

done is merely enough to keep

These trees after the first year,

Top Working.

One purpose of top-working the ap

ple is to secure earlier fruiting than

we could get from root grafting, which

top-working is to secure fruit of some

the more desirable varieties that

growth, and that thirty-three years vie as to the value of forestry to our list of casualties in the gfiht with Siwill see the standing timber almost country, always remembering that it mon Copper's followers, which was This deep planting encourages the

growing of roots from the scion immediately above the union, and when the transfer of the union, and when the transfer of the future. the tree is dug up it will then be on States in 1867, has developed into Gultivation should be frequent in will result in a tremendous demand

order to kill the weeds, and to keep a upon our forests.

Our experiIn the year 1906 about three and this afternous content of the soil.

Early in the spring the second sea- 000 acres of forest lands, stretching the 000,000 acres of good forest lands. If we value these lands at the sma

rice of \$4 per acre, that would give us \$1,600,000,000, a splendid asse enough to pay the debt of the Domin

in our forest wealth, but we must not run away with the idea that our for has been already noticed, develop ests are inexhaustible, for in three four more generations they will surefit d that we have made a terrible

Our population to-day is a little over seven millions. It has been entity that by the end of this century we will have seventy-five milions. The population of the Unite s so desirable with seeding apples and States to-day is eighty-five ther new varieties. But with us in In another hundred years they will be

this climate the principal purpose of are too tender to grow as root grafted by we have the privileges of looking Of our half hardy trees, the trunks We can see the demand increasing by

(Pyrus Baccata) but the results have ability of men who are likely to been very unsatisfactory in most at the head of such concerns as the cases. The Transcendent Crab, and I American paper trust, and, all large might also mention the Whitney, are lumbering interests. It is no door more congenial trees on which to top- their duty to look well after the Iterests of the firms for whom they ar If young trees from three to four working.

years planted out are to be top-work- I predict that inside of one hundre ed, two yars should be taken to the years Canada will be facing a timbe work, one half the top being cut off lamine. Just as soon as the annu each season. This plan will give bet- consumption over-reaches the annu ter results than if the whole of the growth of our forest, then we are o

FORESTRY. By John Caldwell, Virden, Man.

Hon. Nelson Monteith and the prem cut this in two and say we have 400,ier added denials Mr. Smith pleaded that the public accounts credited th

payment to Mr. Beck.

We are indeed extremely fortunat

two hundred millions or more. If this little world we live in is to last some thousands of years yet, sure- and Charles Anderson, H. V. Jones, shrub give the curative properties to Dr. eventy-five or a hundred years ahead. to the commercial west. The com-branes and heals the sensitive bronchial mem-branes. No opium, no chloroform, nothand large limbs are the first to suffer damage, especially from sun-scalding, of owning four hundred million acres Later it expects to open its Wali Demand Dr. Shoop's. Take no other.

The supply of pulp wood in the New England States is becoming very lin ited, while the balance is in the Nort west and Western States and will n last long. The United States have

Scions are cut in the latter part of October. We have tried cutting them off in spring, but with very poor success. The wood should be of the current scason's growth, and no water sprouts should be used. These are long suckers that grow up from the limbs and trunks of the trees. The wood should be well ripened and the buds well developed on the scions taken off. These are all cut in lengths of eight to nine inches died in bundles and labelled with the name of ite and labelled with the name of ite variety, packed in dightly moist soil in boxes and stored in a cool cellar.

Scions are cut in the latter part of ten or twelve years ago forestry has been sadly neglected, and we can hardly have too much agitation on the subject which is of the first importance to the people of the Dominion.

A great many of our men who are interested in forest products, more or less, look no deeper into the question than the present price of building material, not giving any consideration to what has happened in the past and what is likely to happen in the future.

The Pontiff's FESTAL DAY.

The Pontiff's F

is not so muchea question of the pres- dramatically read out in the Reich-

stag by Secretary Dernburg, was painful surprise to the German pub lie, military officials reasoning that Toronto, March 21.—A lively exchange took place in the Legislature this afternoon when Hon, Adam Beck got after C. N. Smith, member for the

secretary last year. Hon, Mr. Beck with pride. At the time I feel deepalso denied Smith's charge that he had est sorrow for the losses of officers and men, who sealed the victory by their eceived \$1,171 from the government as the cost of sending horses to the |death.

### Fire in Montreal School.

Montreal, March 20 .- A fire threatning the lives of a large number . o school this afternoon, but firemen he children knew the fire occurred or's report for the year 1907 has been sued. The assets for the year

Goderich, March 20,-George Durnan, a young laborer, swallowed caro \$114,460.05 in 1907, the electric colic acid in a boarding house last eight receipts from \$19,365.35 to \$35.

Took Carbolic Acid.

983.87, and the water receipts from could reach him. Tickling or dry Coughs will quickly loosen when using Dr. Shoop's Cure. And it is so thoroughly harmless Minneapolis, March 20.-The Wat- that Dr. Shoop tells mothers to use on & Co., brakerage firm, resumed nothing else, even for very young babies. business today. The members of the firm are H. P. Watson, L. T. Watson stems of a lung healing mountainous the former member devoting his time to the commercial west. The com-

GOLD

SHARE IN THE PROSPERITY OF THE WEST BY USING

SEED

Beck Denies Smith's Charge.

MooseJaw Annual Report

Moose Jaw, March 19 .- The audi-

ounted to \$857,443.32, and the lia

ive increased from \$48,886,66 in 1906

lities \$590,802.20. The tax receipt

Watson & Co. Resume.

REMEMBER. We devote all our time and cater to the West only. We supply Seeds best suited to Western conditions. We are located right in the heart of the agricultural district. Experience, study and research have taught us the best varieties for best results. We are the largest Seed House in Western Canada, Let your motto be Western Seeds for Western people

Write for our Catalog of VECETABLE SEEDS, FLOWER SEEDS, CREENHOUSE STOCK, NURSERY STOCK, FIELD GRAINS, GRASSES, CLOVERS, PLANET JR. IMPLEMENTS, POUL-

TRY SUPPLIES. A. E. McKENZIE CO.

CALCARY, ALBERTA

SEEDSMEN TO WESTERN CANADA !

LIMITED

# CITY IS TO EXPEN NEARLY A MILLI

Large Program of Public Work This Year--- Many of Last Ye Projects to be Completed

Edmonton's ambitions along line of municipal work during year 1908 mark this city as the progressive for its population Dominion of Canada. If the agreed upon by the city counc the construction of street car paving of streets, extension of works and sewerage and other enterprises during the coming mer are all carried to completio there is little doubt but 'hat the Edmonton will have made strides by next fall to reach the tus she is attaining to, as the described by Lord Strathcona ago, "by reason of her strategic tion destined to be the greates

Western Canada." While the announced policy of present civic administration retrenchment, the programm public works this year is gig Few new works are projected, the to the clearing off the slate undertaking commenced and contemplation fast year, for whi money has been now provided.

Few of the present inhabitar Edmonton are there, except thouclose touch with the tremen growth that is continually goin who realize what the demands the municipal authorities are. Hardly a day passes but there a system that is now taxed to

sidewalks which cannot be cons ed fast enough to meet the ins demands; for police protection in by residents of outlying parts of city which embraces in its bound most 10,000 acres of city lots. To one who does not make mon and in some sections almost w tours of the suburbs, a visit to wood, Delton, the Groat Estate other subdivisions will bring a surprise. New houses are daily on what was a year or two barren prairie, and in districts two years ago there was practi

houses now stand, while dozens smaller buildings are scattered ar in profusion A day or two ago the Chief lice made a tour of the limits is only about a month since out before," he remarked on l district New houses have been others are going up and founda have been dug. The rapid grow

not a single residence, the

marvellous. And this is the surprise of al everyone but those who are livin the ground. It is little wonder then that the

mands at the city offices for mo improvements pour in much from property-holders in east, north and south, than they ca met. The authorities are doing best, but the demand is still

Last year much of the contempl work was stopped owing to the ancial stringency. In addition t plans for 1908 those operation over from 1907 have also to be pleted, thus making the year's gramme and the resulting exp ture much greater than it would

### erwise be. The Gas Producer Plant.

Last year the contract was awa for \$140,000 producer plant, but ment was afterwards stopped till season. It has now been decid have the installation -proceeded at once at the present power and it will be ready for operation next September. The plant was chased from the Allis-Chalmers of Milwaukee, and including building is made up as follows Machinery and Erecting.

1 700 k.w. gas engine and producer, f.o.b. Edmonton, ship-ment to be made from mill, June 1st, 1908, duty and freight estimated on order ... \$9 1 Exeter Unit, f.o.b. Edmonton, shipment June 1st, 1908. Switchboard and wiring piping, oiling system, erecting machinery, including cost of

foundation ..... Building. Building, 75 by 112 feet, of brick and concrete, with coal bum-per capacity of 125 tons; sufficient to run the unit one 

\$2,371.) Incidentals City Engineer Keely is authorit the statement that while in stear

gines 35 per cent, of the steam can theoretically be converted power, but 10 per cent, can be in actual practice. In a gas pro engine 35 per cent, of the coal been converted into power tual practice. Lignite coal ca used as well as anthracite, an company have guaranteed that coal used here will be satisfacte But this plant will only mee immediate demands, and the building will be made large ene for a second unit made up of er and producer at a cost of which it may be necessary to in in 1909.

Street Car Line. The street car line, the comp of which was contemplated last ; will be finished this year acco to the present plans. The do

track line along Jasper, now finis