

Conservation

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No. 11

Our Airplane Spruce May Win the War

Government Has Prohibited Further
Export Except to Great Britain
and Possessions

The survey of the forest resources of British Columbia, upon which the Commission of Conservation has been engaged for the past four years, has proved of striking immediate value in the prosecution of the war. The Imperial Munitions Board, which has definitely taken over the organization of airplane manufacture, found itself in immediate need of large quantities of airplane spruce, and the Commission was able, as a result of its survey, to furnish the Board with definite information as to the location and ownership of all the large bodies of spruce in British Columbia suitable for that purpose. The fact that this information had previously been collected by the Munitions Board to speed up without delay the matter of securing the necessary supplies of this vitally important material. Steps are being taken to increase the production of airplane spruce to all limits previously possible.

This is but another example of the vital importance of Canada's natural resources in winning the war. Many experts hold that the prospect for definitely and overwhelmingly maintaining the supremacy of the allies is in connection with the war in the air. This involves the manufacture of thousands of airplanes, and the most intense efforts of the allies are being directed

The most suitable species of wood for this purpose is Sitka or western spruce, of which great quantities are to be found on the Pacific coast of North America. Canada's share of this timber is very large, and it is considered so important in the prosecution of the war that its export, except under license, has recently been prohibited by the Government to all destinations except those other than the United Kingdom, British possessions and Protectorates.—C. L.

MEETING OF COMMISSION

The Ninth Annual Meeting of the Commission of Conservation will be held in Ottawa on November 27 and 28.

CANADA'S VICTORY LOAN

You will possibly never again have such an investment opportunity as is offered you in the Canadian Victory Loan. The security, interest return and the certainty of appreciation when peace comes, makes it an ideal investment. You owe it to your patriotism and your pocket-book to buy as much as you can, be it a hundred dollar bond or a million. Your bank will gladly supply you with full particulars and a subscription blank. The bonds will be on sale on November 12.

Duty of Government is to Classify Land

The Tragedy of the Deserted Farm
Should Happen No More

The Ontario Department of Agriculture is making a survey of the waste lands of old and new Ontario for the purpose of obtaining information regarding their possibilities for cattle and sheep ranching. This survey should reveal some interesting facts and be the means of obtaining valuable information.

A survey of this nature should be conducted in every province in Canada. In fact, all of our land should be carefully classified preceding settlement, to prevent settlers making the mistake of locating on land unsuitable for farming. In travelling over Canada, one

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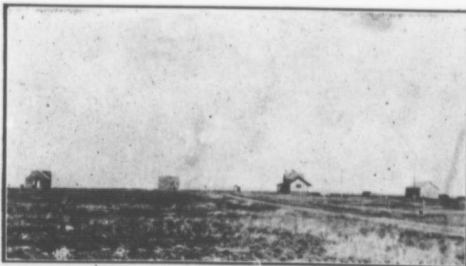
Wealth Hidden in Canada's City Dumps

Chicago's System of Reclamation Has
Shown There Are Thousands of
Dollars in Municipal Waste

Canada's vitality is weakened by waste. Democracy must fight waste to make war. Waste as well as war will bleed a nation, but America need not lose her vitality in both directions. There have been isolated projects for waste conservation both in Canada and the United States; the task of assembling these and developing a complete system now faces the Western world.

It is difficult to estimate the amount of waste in any given community, but it was found upon investigation by the industrial department of the Federated

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A TRAGEDY OF UNDIRECTED SETTLEMENT

An abandoned town in 'The Burnouts.' Only the station agent remains. The surrounding land proved unfit for farming and settlers and townsmen alike moved elsewhere, losing the fruit of years of toil.

CW 163

Keep St. Lawrence Power for People

Minister of Public Works Assures
Commission of Conservation Every-
one will be Given Hearing

The Commission of Conservation has made representations to the Minister of Public Works pointing out the inadvisability of granting to the Power Development Company, Limited, the right to develop power from the St. Lawrence river at the Coteau rapids, and the Hon. F. B. Carvell has assured the Commission that this matter is of such public importance that nothing will be done by his Department till every person in Canada has had an opportunity of being heard and pressing their views.

The water-power situation in Quebec and Ontario should be fully considered before any action is taken to grant rights of development to private interests similar in character to those being sought by this company. Such consideration would show that the power situation has developed very rapidly within the last few years, and so far from there being an excess of power capable of being developed at easily accessible points, it is certain that within the next twenty years, all the power that can be developed at points where it can be conveniently used will be required for use in Canada.

The company which has heretofore been granted the right to

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LOSS OF LIFE BY FIRE

In the four years, 1912-15, seven hundred and eighty-nine people were burned to death in Canada, and 78 per cent of those were women and children. Over 350 lives were lost in burning buildings, and it is significant that most of these deaths occurred in dwellings. As might be expected, the majority of the fires was caused by criminal carelessness. This is especially true in regard to the kindling of fires with kerosene and gasolene, and permitting children to play with matches. Such disregard of the safety of human life constitutes a forcible indictment of the entire Canadian attitude towards the danger of fire.

Fisheries Protection in British Columbia

Important Points in Evidence of J. P. Babcock Before Royal Commission

Mr. J. P. Babcock, Assistant Commissioner of Fisheries for British Columbia, and a member of the Commission of Conservation, gave the principal evidence before the commission appointed to investigate the fisheries problems of British Columbia. Of special importance was his reference to the need of protection for the fish on the spawning grounds. Mr. Babcock said:

"When, as in 1916, it is demonstrated that the beds of the Skeena, Rivers and Smith Inlet or other watersheds were inadequately seeded, the Department should take steps to afford the fish hatched in those years a greater measure of protection upon their return four or five years hence than was afforded their parents, because the Skeena and Rivers Inlet fish mature in the fourth and some in the fifth year. A greater measure of protection therefore should be given to the runs of 1929 and 1921, than was afforded the run of 1916.

"This should be done for every year's run when the spawning beds are shown not to have been abundantly seeded. Regulations to be effective must be made to fit the known requirements of each particular year's run. Blanket regulations for a series of years, that treat all years alike, are no longer adequate for waters that show evidence of depletion.

"The need and efficiency of just such measures as are here suggested are made manifest from the facts in the life history of the sockeye, which the Province has scientifically ascertained. It is a forcible illustration of the necessity for knowledge as to the life history of the species which it is desirable to conserve.

"With this object in view the British Columbia Fisheries Department retained the services of Dr. C. H. Gilbert, of Stanford University, for a study of the salmon, and William F. Thompson, of Stanford University, for a study of the halibut. Without the work of Dr. Gilbert and Mr. Thompson we could not intelligently legislate to conserve the supply of either salmon or halibut. We can now act on known, scientifically ascertained facts, and with some promise of accomplishing results."

Mr. Thompson contributed a very able paper to the annual report of the Commission of Conservation for 1916, on "The Problem of the Halibut."

"The use of motor boats for fishing purposes has been an exceedingly live topic on the Pacific coast. Mr. Babcock gives it as his opinion that:

"If it be provided that cannery or fishing concerns engaged in canning or freezing salmon shall

not furnish motor boats to fishermen engaged in fishing for salmon, I personally can see no objection to their use by independent white fishermen.

"Motor boats used by Japanese would, I am convinced, have a catching capacity in excess of the boats now used. The Japanese are persistent fishermen. If they had motor boats they would keep their nets in the water longer than at present is possible.

"A Japanese using a motor boat and having his net in the water would hesitate to take it up and replace it in other nearby waters where he saw evidence of moving fish. This is frequently done by Japanese on the Fraser.

"In considering the motor boat question, I submit that consideration should be given to the use that Japanese would make of them. The Japanese fishermen of the Fraser own their own boats and many own their own nets. The 'off' years on the Fraser are no longer profitable. In consequence, if they were permitted to use motor boats in District No. 2, cannery owners who desired to use them, in connection with their plants, would have no difficulty in getting them to take them into District No. 2. Once this is done other cannery owners must follow.

"View this question as one may, it must, I think, be conceded that a motor boat will enable the energetic fishermen to catch more fish. If, therefore, their use is to be permitted, the fish must be given a compensating measure of protection."

To Classify Land

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cannot but be impressed by the need of this. In Ontario, in the Trent watershed, there are to be found to-day pitiful cases of disappointment, the settlers having expended their energy for years on land that will never be anything more than patches of gravel and sand. In places in New Brunswick, settlers are merely existing on land which is not suitable for agriculture and should have been kept in forest. In one part of southern Saskatchewan, there is an area known locally as 'the burnouts' where settlers have been forced out because they could not make a living. Other provinces have similar difficulties.

Various excuses may be made as to why these errors have happened in the past, but none can be offered for their continuance. Whether the Crown land in a province be under provincial or Dominion control, it is the duty of the government having jurisdiction to see that it is properly classified, and that settlers are allowed only on land suitable for agriculture and where there is reasonable assurance that a decent living can be made.—F.C.N.

Make your money work for you and for the Allies by buying a Victory War Bond.

DANGER OF GASOLENE IN PRIVATE GARAGES

The increasing use of the automobile has caused many out-buildings to be converted into private garages. This conversion, in many cases, carries with it the storage of more or less gasoline. In almost all municipal regulations this storage is held to be objectionable. It is highly dangerous, and constitutes a risk, not only to the garage itself, but to adjoining property.

Gasoline will give off 130 times its bulk in vapour, and, when vaporized, will convert 1,560 times its volume of air into an explosive mixture, which will ignite from a blaze or spark. Five gallons of gasoline will generate 8,000 cubic feet of gas, or enough to fill a room 20 by 40 feet and 10 feet high. When ignited, it immediately expands to 4,000 times that space. In a built-up area, this would cause a most destructive explosion, with probable loss of life. The temptation to keep a rather large supply of gasoline on hand is great, and garages should, therefore, be inspected by local fire departments for dangerous conditions.

St. Lawrence Power

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make use of the Cedar rapids has developed a very large amount of power estimated to be about 100,000 h.p. Of this amount so developed purely from Canadian waters the company has sold and delivered to the Aluminum Company of America an amount varying from 50,000 to 74,000 h.p. Indeed, it has been authorized by a permit issued on April 1, 1916, to export up to 100,000 h.p. This enormous quantity of energy is being sent out of Canada and is of no benefit whatever to Canada except in so far as the profits thereon represent dividends to a few shareholders. Whatever the power situation is in Montreal, there can be no shortage which is legitimately due to lack of power development.

In Ontario, the question of fuel has become an increasingly serious one, and the time will come very soon when electric power will be largely used for the purpose of operating the railways in that province and for other purposes for which coal is at present employed.

It is, therefore, unwise and imprudent to allow large Canadian water-powers to be developed with the object of exporting the power to the United States. The time will undoubtedly come when the power will be required upon the Canadian side of the line and the creation of vested interests in the United States will give rise to serious embarrassment and international complications when it is withdrawn for use here. A situation similar to this has already arisen at Niagara Falls.

Buy your Victory War Bond early.

Part the Church Can Play in Country Life

Massachusetts Man Thinks It Should Lead in Social Welfare Work

What a wonderful opportunity organized agriculture presents to train and direct the push and energy of youth! If agriculture will keep at home in the country which can be done in the country but which as now organized at located in the city, these backward-the-farm, rural-life, crowded-city and depleted-race questions will be solved. In accomplishing this do not forget that a social department is a vital thing to a country business organization. Man is a social being craving the society of men and he prefers those of his own experience and ideals; he wants entertainment, but unknowingly will chose that best fitting into his life, and his amusement will naturally be from topics which his training and experience enable him the most easily to comprehend.

This branch of the organization should include schools, both trade and business, preparing him for his work instead of the university. This is the proper department for sanitation, nursing and clinics dealing especially with children's diseases. There should be physical training with gymnasiums, shows, baths, bowling and other games as well as military drill.

The proper agency to successfully undertake this part of the organization is the church, we know because its time is spent in prayer and praise, without criticism which it may be suggested the faith without works is void, and the demand now is for community service and public welfare. We should every one support the church, preferably from the highest religious motives, but, if necessary, because of business necessity. Its history, standing, motives and foundation principles, universally acknowledged, make it the only agency to successfully accomplish these social benefits.—M. L. Cross in Report of Mass. Board of Agriculture.

SCHOOL BOYS AND BIRDS

The little .22 rifle in the hands of the boy is a serious menace to his life. Give a young lad one of the miniature rifles, and he is at once ambitious to test it out on killing something. If school boys were taught their dependence upon the work the birds do to protect man's food supply from destructive insects, they would place a much greater value upon their feathered friends.

IS THIS THE CAUSE?

The United States military intelligence shows that the number of the physically defective is from 7 to 20 per cent higher in rural districts than in cities. The officials blame this on the lack of medical inspection in country schools.

**Commission of Conservation
CANADA**

SIR CLIFFORD SUTTON, K.C.M.G.
Chairman

JAMES WHITE
Assistant to Chairman and Deputy
Head

CONSERVATION is published the first of each month. Its object is the dissemination of information relative to the natural resources of Canada, their development and proper conservation, and the publication of timely articles on town-planning and public health.

The newspaper edition is printed on one side of the paper only, for convenience in clipping for reproduction.

OTTAWA, NOVEMBER, 1917

AN IMPORTANT CONTRIBUTION

CONSERVATION is indebted this month to Mr. H. L. Baldensperger of the United States National Committee on Prisons and Prison Labour for the valuable article on the utilization of municipal waste, which appears on the first page.

Canadian municipal authorities should investigate more fully the methods by which Chicago has been able to make such great savings from its garbage dumps. Those who wish to do so, can obtain detailed information from the War Bureau, National Committee on Prisons and Prison Labour, Union Trust Building, Washington, D.C.

Wealth in City Dumps

(Concluded from page 41.)

Jewish Charities of New York that in the average family of five there is a household waste of \$12.50, not including table waste. Under our present system of handling waste, this material is either carted to the dump by the street-cleaning department or destroyed at the reduction plant. The logical place to retrieve the waste of the community is at the dump.

One reason for the failure to adopt methods of conservation has been the increasing cost of labour. Sorting and preparing of material are practically all done by hand. It is cheaper for the average industry to buy new material than to resort to the old. The business methods of the western world of cutting labour costs by scrapping waste commodities have been a persistent drain on the resources of the country. The demand for men in the army will further increase the cost of labour and lead to a greater increase in the amount of material scrapped. Some new method of decreasing labour costs must be found in order to utilize the ever-increasing waste of the scrap pile. It is the incapacitated, those whose mentality makes necessary their maintenance and supervision in public institutions, who can be made the principal factor in solving this problem.

Our correctional institutions are the product of a society that maintains city dumps. We dump our waste man into the institution where he lies undeveloped. Most of our municipal and county work-houses are such in name only. Illness reigns supreme or, if the inmate is employed, he is usually exploited for the benefit of the few.

The Chicago House of Correction is an exception to this rule. This institution has found the value of the waste man and the waste material. The superintendent, Mr. John L. Whitman, by employing the outcasts of society on the conservation of the city waste, has revealed new sources of revenue. In one year's operation he made a return equal to 50 per cent of the maintenance cost of the institution. The amount received by the city was 900 per cent more than what it derived from the sale of the city waste under the old system.

The year before the establishment of the salvage work at the House of Correction the city received \$13,000 from the sale of unclassified waste. The following year the amount received amounted to \$136,000, which was utilized as follows: \$86,000 was credited to the city departments, \$10,000 was turned into the city treasury and over \$40,000 was set aside for the relief of the prisoner's families.

Reduction methods employed by commercial dealers destroy many valuable by-products. These materials are conserved at the institution by hand labour. The inmates cut the lead and rubber covering from pieces of conduit wire and, in a year's time, added \$11,000 worth of this material to the national supply. The burned-out electric light bulbs are sold by commercial dealers for the brass socket and the flint glass. One inmate of the Chicago House of Correction cut out the platinum used in the lamps, and conserved over \$9,000 worth of this material in one year. Over \$5,000 worth of waste paper was sorted out and sold in one year.

The Canadian campaign for conservation of such wastes has been limited largely to paper-stock. Canada destroys approximately 250 tons of paper weekly. In order to replace this paper, at least 2,000 trees must be cut. Every ton of paper wasted means that eight trees of mature growth must be cut. By inaugurating a system similar to the Chicago salvage system, the Canadian municipalities should conserve sufficient paper to offset this drain on the national resources.

Canada has dabbled in waste conservation. The waste campaign which has been carried on during the last year has rendered a vital service to the country, but its true service is solely to reveal the possibilities in this field. The present method of a voluntary movement without any government supervision will be partially successful in war time; its success as a peace time movement is problematical. The success of the

**VEGETABLES SHOULD
BE PROPERLY STORED**

This year, in response to appeals for increased food supplies, Canadians have produced a record crop of vegetables.

That the greatest use may be made of these products it is essential that care be exercised in their storage and preservation. A cool, dry cellar is the best place to store vegetables. Carrots, parsnips, beets, etc., if covered with sand, will not dry and shrivel up. Cabbage are best taken up and hung by the roots individually. Green tomatoes, when too late to ripen outside, should be wrapped individually in paper and kept in a dark place to ripen, and, while not taking on altogether the colour of those exposed to the sun, they are otherwise as satisfactory. Tomatoes thus ripened may be used till Christmas.

Potato supplies, for those who have not grown their own, should be secured this autumn. The farmers have grown large quantities, and in many cases losses will be heavy if they find it necessary to store them. In addition, during several of our winter months, it is not safe to market potatoes, which leaves the consumer dependent upon the middleman for supplies, usually at an enhanced price. By early distribution, the storage problem can be largely solved and much of the waste due to freezing avoided.

If the same patriotic effort is given to the preservation of the 1917 crop as was exhibited in its production, very little waste will occur.

present movement proves that waste conservation must be continued after the war, but its faults ought not to be incorporated in a well-rounded system of conservation.

It is unwise to permit the women of a country to take work which, thereby, diverts skilled workers to a line of work that is purely mechanical and requires little skill. It is unwise to use the trucks of commercial houses when the vehicles of the city departments can be used more effectively and economically. A logical system which will prove successful both in times of peace as well as war would avoid these weaknesses by making this type of work an integral part of government. This would solve the problem of storage and collection. By employing the mentally and physically unfit in the public institutions, this heretofore unemployable element of society can be afforded an opportunity to become self-supporting at work which does not require any special training.—H. L. Baldensperger.

For every passenger killed on steam or electric railways in Canada, more than four persons are burned to death by fire.

**British Columbia
Fire Losses Heavy**

Commission of Conservation's Survey Shows Need for Looking After Burnt-Over Areas

Few people realize the enormous damage which has been caused by forest fires in years past. This damage has taken place in every province of the Dominion. An illuminating example is afforded by the investigation of forest resources of British Columbia, upon which the Commission of Conservation has been engaged during the past four years. This investigation shows that on 95,000 square miles the timber has been useless by destroyed by fire, mostly many years ago. The amount of timber so destroyed is estimated to be not less than 650,000 million feet, or about twenty-two times as much as the total that has ever been cut by the lumbermen in that province. Putting the loss in another way, this timber is equivalent to almost twice the amount of saw timber now standing in the province, and to nearly as much saw timber as is now standing in the forests of all Canada.

Much of the area burned over contains young forest growth which, if protected from further destruction, will, in time, furnish the basis for enormous industrial development on our Pacific coast. If we assume that the 97,000 square miles of cut-over and burned-over lands should be made to produce an average of only 100 board feet per acre per annum, the total increment would amount to, 6,200 million feet per year, or about 5 times the present annual cut. That this estimate is by no means beyond the bounds of reason is shown by measurements of growth which have actually been made.—C. L.

HOME FROM OVERSEAS

Bombardier Allan Donnell, of the staff of the Commission of Conservation, who has been invalidated home, was given a welcome back in the form of a reception on October 17 by his fellow employees. Bombardier Donnell was wounded in the foot by a gas shell last April.

FIGHTING FORESTERS

Sixty-five men from the Faculty of Forestry of the University of Toronto are fighting overseas. Every graduate of the past three years who is physically fit is serving in the Empire in some capacity. Other forestry schools have had a similar experience, with the result that there is, and will be for many years, a great scarcity of technically-trained foresters.

Owing to the shortage of coal, Norway is greatly extending its use of peat for fuel. An output of 100,000 tons is expected this year.

One Cause of Power Shortage in Ontario

Chicago Diverting Nearly Twice Authorized Amount of Water from the St. Lawrence System

Closely allied with the power shortage at Niagara, as well as at all water-powers of the St. Lawrence, is the question of water diversion through the Chicago Sanitary canal. One feature, which has perhaps not been sufficiently emphasized in connection with this scheme, has been forcibly brought out in recently published figures respecting the power plant, which evidently is a very important feature of the project. The figures show that the disposal of sewage is only a secondary consideration when compared with the financial aspect of the hydro-electric power development. This is further accentuated by the fact that the estimated profits from the extensions now under construction would be about 100 per cent. Figures showing the growth of the power plant give the development as 15,278 h.p., with earnings of \$130,936 for the year 1908, while, in 1915, these figures had reached 55,640 h.p. and \$932,566, respectively. Although the authorized diversion is but 4,167 cubic feet per second, it is notorious that about 8,000 cubic feet per second is actually flowing through the Chicago river.—*Eighth Annual Report, Commission of Conservation.*

Rural School Fairs in Dundas County

Boys and Girls Strongly Influence the Older Folks to Farm Better

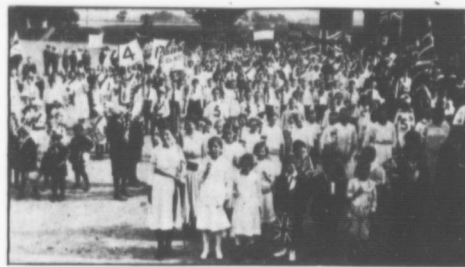
The school fairs held this year in Dundas county, Ont., where the Commission of Conservation is conducting an agricultural survey, were a decided success. The whole county is now organized for this work and a fair was held in each of the four townships. Splendid weather prevailed and large crowds were in attendance. The exhibits of vegetables, grains and fruits were, in each case, far ahead of that seen at many regular township fairs. It is a noticeable feature that the exhibits are improving from year to year in quality and in the manner in which they are displayed, which demonstrates that the children are profiting by their experience in past fairs. Selected seed of standard varieties is supplied to the pupils to awaken an interest on the home farm in seed selection, and, as this seed multiplies, the whole farm is sown with the improved varieties.

The fair affords a pleasant outing for parents as well as for the children, and many old acquaintances are renewed. The children are benefited in many ways. They learn to give and take among their fellows. A spirit of loyalty to their

school is aroused. They taste the joy of success and learn to accept defeat gracefully. The mere winning of a prize is only an incident; the fact that the child has tried hard to win is well worth the effort. It means better work has been done and the child's capabilities have been increased thereby.

How One Farmer Kept His Boy On The Farm

A drainage inspector in a Canadian province once visited a certain farmer and found him not only in possession of a good house, with modern sanitary equipment, but he and his family were enjoying the occupation of the best rooms in the house. On being asked why he did not live in the kitchen like his neighbours, and why he looked so much after the comforts of his home, he replied that he wanted to keep his boy on the farm, and that he could not expect to do so if he did not provide him with home comforts equal to those enjoyed by people of equal means and rank of life in the city. There is more sound philosophy in the method of that farmer than is met between the covers of many text books on rural depopulation.—*From Rural Planning and Development.*



SCHOOL FAIR AT SOUTH MOUNTAIN

Happy faces of children who are being trained to get the most out of rural life in pleasure and profit. Cut 164

FIGHTING VENERAL DISEASES

The Health Department of Baltimore, Md., is posting placards in hotels, bath houses, railway stations and other public places warning the public against quacks, advertising doctors and patent medicines in the treatment of venereal diseases, and pointing out that expert medical advice can be had free at several dispensaries throughout the city. Many factories, stores, barber shops and theatres are also displaying these placards.

The staff of the Commission of Conservation have formed a co-operative society through which they will purchase household supplies and foodstuffs.

Potash Now Being Made from Sea-weed

Plant for This Purpose Has Been Erected in British Columbia

When the war broke out, the fertilizer supply, especially that of potash, was badly disrupted. Until then, Germany had been the principal source of supply. Attention was immediately directed to several possible materials from which potash might be obtained. Among these was kelp, a water-plant growing in great profusion along the sea-coast. Especially is this the case on the British Columbia coast, where, owing to the many indentations, the kelp beds are of large area.

After careful investigation a plant for making potash from kelp has been installed at Pacific, on Moresby island, one of the Queen Charlotte group. It will have a capacity of 1,000 tons of wet kelp daily, and will get its supply from Cumshewa inlet. The kelp is reaped by knives suspended below scows, which cut the standing growth as they pass over the beds. The kelp then rises to the surface, where it is gathered up.

The company, in addition, proposes to extract oils from non-edible fish and to make fertilizer from the fish refuse.—*W.J.D.*

BUY WAR SAVINGS CERTIFICATES

For every \$21.50 you lend to the Government now, you will get a certificate entitling you to \$25.00 at the end of three years.

This certificate will be registered at Ottawa, in your own name, and, if lost or stolen, is valueless to anyone else. Further, if you should need your money, you may get it back at any time.

Certificates are issued in denominations of \$10, \$25, \$50, and \$100, selling at \$8.60, \$21.50, \$43 and \$86, respectively. Individual purchases limited to \$1,500.

Absolute security
Excellent interest return

ON SALE AT ANY
BANK OR MONEY-ORDER
POST OFFICE

Company, and the Rfordan Pulp and Paper Company were heavy purchasers of plant material from the provincial nursery, in addition to supplies secured from their own nurseries. The Perthshire signiory also has purchased a large number of small trees from Berthierville annually during the past seven years.

To date, the provincial nursery has shipped a total of more than 1,500,000 trees since its inception of these, more than half have been supplied during the past two years.

The demand for planting stock has become so insistent that the provincial forester announces the proposed extension of the capacity of the Berthierville nursery to 3,000,000 seedlings annually. Of these, the majority will be Norway spruce, which is believed to be the most suitable species for pulpwood production.—*C.L.*

RURAL DEVELOPMENT

The report on *Rural Planning and Development* just published by the Commission of Conservation is an epoch-marking work and should be in the hands of all public spirited citizens interested in the important problem of national policy.

Buy your Victory War Bond early

QUEBEC WILL EXTEND ITS FOREST NURSERY

During the past year, more than 500,000 forest tree seedlings have been shipped from the Quebec forest nursery at Berthierville, P.Q. The provincial forester, G. C. Piché, reports that of these, nearly 200,000 were white pine, 180,000 Norway spruce, 82,000 Scotch pine, 20,000 Douglas fir, 8,000 red pine, 7,000 white spruce, and 6,000 tamarack, the balance being made up of relatively small numbers of other species, mostly hardwoods, to supply the demands of farmers. The great bulk of the demand was, however, for the reforestation of burned-over non-agricultural lands. The Laurentide