

Conservation

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No. 9

Immature Potatoes Are Better for Seed

Experiments Prove They Yield Better
Hill Selection Advisable

Potatoes which have not fully matured give better yields than those of fully matured seed. This has been proved by experiments conducted by the Ontario Agricultural College at Guelph for the past five years. The practice of planting immature potatoes is quite common in Eng-

land. The farmers of this country should follow the same practice, and should combine it with hill selection. When the potato vines begin to ripen, the most vigorous hills can easily be noted. Vigorous tops above ground usually mark a good yield of potatoes underground. The vigorous hills should be dug at the time the selection is made, providing it is late enough in the autumn to insure potatoes keeping well until the following time next spring. Where potatoes in a hill have particularly strong tops, are of good size and yield well, they should be kept for seed. In hills which do not yield satisfactorily, however, the potatoes should be used for cooking and not saved for seed. An examination of the field at this time of year will demonstrate that some hills have resisted bugs, disease and drought better than others, that the yield of certain hills is better than others. The diseased and high-yielding hills produce a better crop than those taken from the common bin from the planting of small potatoes, as is often the case.—F.C.N.

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Never before has the Canadian farmer received such prices, although feed prices are high, are more than offset by those on live stock. What is more, high

High-Live Stock Prices Will Continue

Why is Short and Europe's Demands will be Tremendous

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SHE MIGHT HAVE BEEN YOUR DAUGHTER

She married in her early twenties. The dew of heaven was on her brow. The light of heaven was in her eyes. In her heart the love throbb'd big and glad, that makes for all the world the Eden of innocence and beauty and truth. As she walked down the aisle of the church, going out on that strange new journey of life, so quietly was she, so wise, so undefiled, had she been your daughter your heart would have smelt with holy pride, and hope for her in her new home would have been high and confident and strong.

But when the home door closed her good angels must have wept, for in the darkness an enskrouded pestilence walked, whose coming cast no shadow and whose footsteps made no sound upon the stairs.

Never again was she to know happiness, or purity, or health. Children came to the home, one, two, three, each with its own entail of sorrow, and bearing, seen or unseen, the brand more inescapable, more inevitable, more mysteriously persistent than any brand of Cain. And through years of torture, in every joint of agony, and along every nerve of pain, she herself in her own body and soul paid the wages of his sin that was not her sin. The innocent suffered for the guilty. The harvest of horror and unpeppable anguish was reaped long years after, by hands that did not sow the accursed seed.

Yes! she might have been your daughter.

Her name is Legion. You will find her in every hospital in Canada, in every Home for Incurables; and her ill-fated children, whom even her divinest love could not save from the penalty of their father's unspoken heedless sin against the incalculable Law of Nature, they jabber in the words of the feeble-minded, and are in that endless procession which, through all the centuries, has crowded the asylums for the insane.

Of course it is the Old Story. It is old as human sin. It is majestic and merciless as the organic law of human society. No man liveth to himself, or dies to himself alone. The law of transgression runs "unto the third or fourth generation of them that hate"; but the law of chastity and purity and obedience works redemptively "unto thousands of them that love."

She might have been your daughter—that innocent victim of our enskrouded social sin. The sin is still here in a thousand forms and guises. The pestilence walks every night in the social world where he lives who may one day be the partner of your daughter's home. Is it nothing to you that he be warned and that she be saved?—The Toronto Globe.

Available statistics tend to the conclusion that approximately one-eighth of all patients admitted to public wards in Canadian hospitals are syphilitic. Of these, two-thirds do not know they are suffering from the disease.

SASKATCHEWAN IS NOW SUPPLYING FREE VACCINES

The free distribution of diphtheria anti-toxin and typhoid and smallpox vaccine, beginning Sept. 1, has been announced by Dr. M. M. Seymour, Commissioner of Public Health for Saskatchewan.

RECORD WOOL PRICES

A Nova Scotia wool dealer recently sold a consignment of 14,606 lbs. of washed wool in the United States at 95¢ a pound. The bleat of the sheep should again be heard in the land.

Seventy Per Cent of Buildings Are Frame

This Makes Reduction of Fire Waste
a Difficult Problem

Of approximately 2,000,000 buildings in Canada, less than one-tenth of one per cent have been built with proper consideration of safety from fire. In the cities and towns from which statistics are available, almost 70 per cent of the construction is frame. The vast majority of brick buildings are structurally defective and inadequately protected, and only one in every 1,200 is even nominally fire-proof.

With such conditions prevailing, the enforcement of measures regulating future construction cannot immediately effect any substantial reduction in the volume of fire waste. There are sufficient combustible buildings in Canada to supply the present rate of loss indefinitely.

Upon the average, fire occurs every year in one out of every 80 buildings in cities and towns. Fire prevention is concerned, therefore, not only with the erection of new buildings, but with what is of equal or even greater importance—correction of the worst faults in existing buildings so that they may be less liable to destruction.—J.G.S.

Ontario Forestry Proving Efficient

Reorganized Service Employs Over a
Thousand Competent Rangers

Excellent progress has been made by the Ontario Forestry Branch in the reorganization of the forest fire protection work, for which provision was made last winter by the Legislative Assembly. This work has been vigorously carried forward under the direction of E. J. Zavitz, Provincial Forester; J. H. White, Assistant Provincial Forester, and L. E. Bliss, General Superintendent of fire protection.

The province is divided into three districts, with headquarters at Cochrane, North Bay and Port Arthur, respectively. Under the three district chiefs are 34 chief

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High Priced Coal Scraps Old Plants

Modern Steam Power Plants Are Three Times More Efficient Than Older Types

We are possibly just as wasteful of coal as is the United States, where, according to V. H. Manning, Director of the United States Bureau of Mines, fully \$500,000,000 were wasted last year through inefficiency in use. Notwithstanding the higher efficiency rendered possible by the constant improvement of modern power equipment, the waste is increasing and the higher price of the commodity is subjecting the country to a still heavier penalty. Every pound wasted is that much less available to put into energy to win the war.

In the modern, efficient power plants, 20 per cent of the heat in the coal consumed is converted into power, whereas in small power stations the efficiency frequently drops below 10 per cent. It is quite probable that, on the average, only about 5 or 6 per cent of the energy of the coal is transformed into useful energy ready for distribution. Were it possible to increase the average efficiency to something near the maximum now attainable, about three times as much energy would be available for the productive industries of the country. The increasing price of coal is causing many old, inefficient steam power plants to be replaced by modern ones that convert a higher percentage of the fuel consumed into power.—L.G.D.

Ontario Forestry

(Continued from page 1)

rangers, assisted by 31 sub-chiefs rangers. These men provide the immediate field supervision over the 986 rangers who do the actual patrolling and fire-fighting.

For the most part, the rangers work in pairs, travelling by canoe, and carrying their camp equipment and supplies with them. The general shortage of men, due to the war, has rendered it difficult in many cases to secure rangers. Much care has, however, been exercised to secure only competent men, and to weed out those who prove to be unfit for the arduous duties. The chief rangers and the sub-chiefs are in constant personal touch with their men, and the staff is rapidly improving in efficiency and teamwork.

Communication and transportation, both of prime importance, have been greatly improved. Some 915 miles of old trails and portages have been cleared out, and 60 miles of new trails and portages constructed. Thirty-one lookout towers, from 24 feet to 80 feet high, have been built, and 22 more are under construction. Thirteen rangers' headquarters' cabins have

been built, in addition to the repair of old ones. About 45 miles of telephone line have been erected. Five automobile trucks with fire-fighting equipment have been provided for districts where settlement is under way and passable roads exist.

The permit system of regulating settlers' clearing fires has been put into effect in the Clay Belt and is working very well. Over 1,200 permits have been issued to date. Its enforcement will no doubt greatly reduce the amount of fire loss in Ontario as it has already done in Quebec, British Columbia, Nova Scotia and New Brunswick.

A change of policy of prime importance has been made effective this year, in that the work of fire prevention and control is no longer restricted to lands under license to cut timber, or to forest reserves and parks. On the whole, all these are being given better protection than ever before, but, in addition, protection is being furnished over large areas of unreserved and unlicensed lands, containing enormous amounts of young forest growth, which will now have an opportunity to reach merchantable size while timber of merchantable size elsewhere is being exploited.

Last year the area of land under license to cut timber was 15,712 square miles. A fire tax of one cent per acre per year has been levied by the Government and should yield a revenue of upwards of \$110,000. To this the province adds a sufficient sum to bring the total forestry appropriation up to about \$375,000. The province can well afford this expenditure for the conservation of its forest resources, for last year the forest revenue amounted to \$1,335,320. This is a decrease of nearly \$200,000 from the previous year and is directly attributable to the war. Under normal conditions, the annual forest revenue will average from \$1,500,000 to \$2,000,000.—C.L.

THE FUTURE OF THE HORSE

As far as the light-legged horse is concerned, he is practically doomed. The motor car has taken his place. Although still of some use in courtship, he will go out of business as soon as the self-guiding car comes on the market.

For a number of years the heavy horse will be in demand. He is keenly in demand at the present time. Prices were never so high. After the war is over, there will be a great demand for them in the countries now ravaged by war.

I have in my possession an official publication from the Belgian Government giving many harrowing details as to what happened to the Belgian horses. The brood mares and foals running in the fields were slaughtered, being often used as targets by the German soldiers. One pure-bred stallion, valued at \$10,000, was burned up

in his box while the groom and his wife and children were forced on their knees to watch the agonizing death of the noble animal. Then, the Germans realized that they were making a mistake in destroying these valuable horses and began to ship them to Germany. They sent their experts to select the best individuals, giving to the Belgians for payment orders on the Republic of France, payable at Paris. These orders were in German and were often for the most trifling sums.

I have had interviews with representatives of all the large cartage companies in our cities and they say that, so far as they have gone in trying out the motor trucks, they have found the horse much more satisfactory and economical. Whether the development of the motor truck, which, until comparatively recent years, did not receive as much attention as that of the passenger car, will be taken up with energy enough to make it sufficiently economical to supersede the horse, I cannot say. The heavy farm tractor is a thing of the past. The light farm tractor has come in to stay. So far as the horse business is concerned, a man can continue to breed heavy horses without any risk of market failure for at least ten or fifteen years to come.—Dr. J. G. Rutherford, before the Western Canada Irrigation Association.

NOW IS THE TIME TO SELECT SEED CORN

Now is the time to prepare for the selection of the seed corn. The world is crying for increased grain production. One of the least expensive and easiest ways to help increase production is by the planting or sowing of the very best quality of seed. Before cutting commences is the best time to select the ears of corn for seed.

Go into the field with a bag, and from the strong sturdy hills with large perfect ears, choose the best. Select more than you will require to plant your crop next year. Before planting time a second selection can be made of the very choicest of the ears already gathered. After being gathered, they should be carefully and thoroughly dried and stored in a dry place. Plan now to select in this manner and to have a proper place in which to store the seed.—F.C.N.

The Spanish River News and Safety Bulletin, published by the employees of the Spanish River Pulp and Paper Mills, Ltd., announces the award of prizes, ranging from \$5 to \$25, by the company for the best gardens and also for the best lawns of employees at the various mill centres. This, like the publication of the bright little house organ, is a mark of progress to be emulated.

Big Shortage of Trained Foresters

Forestry Work is Suffering from Lack of Experts

The most striking feature of the forestry situation in Canada today is the extreme shortage of trained men available for the technical work of forest administration and research. The forestry profession no less than others, has answered the call for overseas service, and a high percentage of the graduate foresters of the Dominion are engaged in Europe in the defence of the Empire.

This profession was only beginning to get on its feet in Canada and had, thus far, developed only a very small personnel in proportion to the actual needs of the country. The result of the heavy enlistment has been that the various forestry organizations have, as to supervisory staff, been reduced practically to a skeleton basis, leaving to the utmost the efforts of a few remaining technical men to hold the ground already gained.

Similarly, as in other departments of university work, the forest schools have been largely drained of under-graduates so that for years to come the normal number of graduates available to be built up forestry organizations will be sufficient to fill only a fraction of the real need.

All this indicates that, for some years, we must anticipate that, taking the country as a whole, material progress in forestry will be made with difficulty and only as a result of strong and well-planned effort. This is especially true as to research work, since when an organization charged with routine administration becomes short-handed, the routine must receive attention, and there is little opportunity for development along research lines, unless a special organization exists for this purpose alone.

Obviously, if continued progress in forestry is to take place in proportion to the need, a very special and well-supported effort, supported strongly by appropriate governmental and private aid, must be made. This applies to research as well as to additional facilities for the training of men.

The Japanese are a nation of fishermen, and their diet is principally fish. A hardier, healthier race does not exist.

Dr. C. MacLean Fraser, director of the biological station at Nanaimo, B.C., has been elected vice-president of the Pacific Fisheries Society.

The Japanese government issues insurance policies up to \$124,000 which no medical examination is required.

Commission of Conservation

CANADA
 Sir CLIFFORD SIFTON, 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 the proper conservation of the same, together with timely articles covering town-planning and public health.

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

OTTAWA, SEPTEMBER, 1917

RECENT COAST FIRES HAVE DESTROYED YOUNG GROWTH

The severe fires in southern British Columbia late in July destroyed large quantities of young forest growth which had established itself on lands previously burned over, in addition to considerable areas of merchantable timber. A portion of the young forest so destroyed was upon the area included in the great Fernie fire of 1908. Investigations made by the Commission of Conservation show that the damage done by repeated forest fires on a specific area is much greater than is generally realized. Such fires not only destroy the young growth, but the seed trees as well, thus preventing or greatly retarding the establishment of a stand of commercial species. On this account, in many sections, reproduction of valuable species is wholly inadequate, or is entirely lacking; each successive fire diminishes the earning capacity of the area, from the point of view of timber production.

During the past 50 years, forest fires in British Columbia have destroyed an amount of timber approximately twice as great as that now standing in the province, or approximately equivalent to the total stand of saw timber in the entire Dominion.—C.L.

LIGHTNING RODS

Fires resulting from lightning are of frequent occurrence, especially in the rural districts, and many homes and barns are destroyed. Many farmers are realizing the protection which lightning rods afford, and are installing them. A properly installed lightning rod system rarely fails to protect the property, and so fully has this come to be recognized that nearly all insurance companies give a preferential rate to risks thus secured.

In a survey of 400 farms carried out by the Commission of Conservation in 1916, it was found that 43 per cent, or 172, of the farmers had their barns protected by lightning rods, while but 4.7 per cent, or 19, had their homes thus protected.

The value and construction of lightning rods are fully described in Ontario Department of Agriculture, Bulletin No. 229, "Lightning Rods," by Prof. W. H. Day, Ontario Agricultural College.

Need for Scientific Forestry Recognised

New York is Awake to Dwindling Forest Reserves

The recent appointment of A. B. Reeknagel as forester for the Empire State Forest Products Association is a striking acknowledgment of the urgent necessity for scientific methods in forest exploitation. This Association includes in its membership the largest timber

owners in the state of New York. Mr. Reeknagel's new duties will include a thorough investigation of forest conditions in New York, with especial reference to the Adirondacks, and specifically advising the Association respecting measures necessary for the perpetuation of the productiveness of the forest lands in the state. It is now recognized that the pulpwood and other forest resources of the North-eastern States are becoming sadly depleted, and that radical recuperative measures are essential if the many local forest industries are to avoid the necessity of migrating to Canada or the western states, a movement which has already become very noticeable.

And yet the pulpwood resources of eastern Canada are by no means inexhaustible; the rapidly increasing demands upon them are fast depleting the most accessible supplies. The adoption of more stringent restrictions upon cutting is as necessary here as in the Adirondacks, if the productive capacity of our pulpwood lands is to be retained. To make these restrictions fully ef-

Sky-High Live Stock

(Continued from page 1)

fective will require the employment of many more foresters. Both Quebec and New Brunswick have made greater progress in this direction than has Ontario.—C.L.

prices are likely to continue for years after the war. "The hog supply of the United States is 3,000,000 less than five years ago," recently said Dr. J. G. Rutherford, the leading authority on live stock subjects. "In Canada we have such a shortage of hogs that it is quite impossible to supply our own demands from our own hogs, and large quantities of American pork, hams and bacon are being shipped into our country. I feel satisfied that hogs, provided fair play is exercised on the market, will maintain a high figure for many years to come."

As for beef cattle, he stated: "There is a tremendous shortage of cattle all over the world. There

OUR NEWSPAPER EDITION

The Commission of Conservation has been criticised for printing its "newspaper" edition of "Conservation" on one side of the paper only.

(1) Only the "newspaper" edition, 1,200 copies, is thus printed.

(2) This action was taken at the express request of editors all over Canada as they found that clipping an article on one page often prevented clipping an article on the reverse side.

(3) The total extra cost of thus printing the "newspaper" edition is \$3.18 per issue or one-quarter cent per copy.

(4) The Commission of Conservation welcomes an expression of opinion by the editors of Canadian newspapers respecting the foregoing. If this indicates that printing on one side only is not considered of material value, the Commission will print the "newspaper" edition on both sides.

is an extraordinary demand. The number of cattle in the United States has decreased by some 7,000,000 in the last nine years, and that with many more people to feed. We have, in Canada, the same diminution going on, although we lack the corresponding increase of meat-eating population. There has been a tremendous waste in the slaughter of calves.

After the war, not only Germany, Austria, Italy and Belgium, but every other country in Europe will have been drained of its supply of cattle and there will be a tremendous demand and the prices will soar far beyond any figure that any of us has ever seen."

Mr. P. B. Tustin, manager of the Bureau of Child Hygiene of the Winnipeg Health Department, is the author of a recently published leaflet dealing with child welfare work, entitled "Conservation of Human Life."

Make your money work for yourself and for your country by buying a war bond.

Losses from Smut Greater than Appear

Formalin Treatment So Cheap and Effective No Farmer Can Afford to Neglect It

Some fields of oats recently examined in Dundas county by the Commission of Conservation were found to be badly smutted. On one man's farm diligent search was made and not one smutted head was found. He has thoroughly treated his seed oats for the last three years. On another farm where untreated oats were sown, smut was very prevalent. This farmer estimated that he had from 5 to 10 per cent of loss from smut, but actual and careful count of certain areas demonstrated that 37 per cent of his grain crop was lost from smut. This may seem startling, but the loss from this cause is generally greater than it seems. The straw which bears smutted heads is stunted and they are low down in the crop and not easily seen, so that there is a loss both in grain and in straw.

The formalin treatment is cheap, easily applied and entirely effective, if properly done. This year, in thousands of fields, the losses from smut will actually exceed the amount of seed sown. The cost of treating the seed amounts to only a few cents a bushel and no one can afford to lose even two or three bushels per acre when the cost of treatment is so small.—F.C.N.

The Shooting Season

An Appeal to Hunters to be Careful With Fire in the Woods

September ushers in the shooting season with the accompanying dangers from the presence of hunters in the woods. The sportsman is usually a smoker, careless with matches and sparks from his pipe.

This year, owing to the long dry spell, the wooded areas are especially inflammable. The least spark may be the cause of a conflagration, the result of which cannot be estimated.

An appeal is made to sportsmen to be careful with fire, to refrain from smoking while in the woods or, if this is impossible, to make sure that all matches are thoroughly extinguished and that live sparks do not fall on the dry leaves or grass.

If camp-fires are necessary, guard them, and, when no longer required, extinguish them. Tramping out a fire is not positive; fires frequently follow dry roots into accumulations of dry material, only to break out again when fanned by a high wind.

The destruction of the forest means also the destruction of the game and wild life therein, and it is therefore in the interests of the sportsmen, if for selfish reasons only, to be careful with fire.

Canada and U.S. Will Protect Birds

Farmers and Sportsmen Benefit
Greatly by New International
Measures

The international Convention for the protection of migratory birds in Canada and the United States, ratified in December last, constitutes the most important and far-reaching measure ever taken in the history of bird protection. It affords the best means of ensuring not only a cessation of the decrease in the numbers of our migratory birds such as the insectivorous birds, the wild-fowl, waders and sea birds, but, in many cases, it assures an increase in their numbers, which have been ruthlessly depleted. It affects over 1,000 species of our chief insect-eating and game birds. It guarantees to the farmer the continued existence of the insect-eating birds, the most powerful and active allies he has in the fight against the destroyers of his crops; and it guarantees to the sportsman a never-failing supply of ducks, geese, and other game birds.

In fulfillment of its obligations under the Convention, the Canadian Government introduced the Migratory Birds Convention Bill to carry out the provisions of the Convention, and this measure has recently passed both Houses of Parliament. As soon as assent is given to the bill, regulations will be promulgated fixing close seasons.

In the case of insectivorous birds, it will be unlawful to kill them or to take their eggs at any time of the year. The close seasons on ducks and geese will not exceed three and one-half months, and the dates of opening and closing will be fixed in accordance with local conditions and after consultation with the proper authorities in the different provinces. On a number of birds, such as the cranes, swans, curlew and most of the shore-birds, with the exception of woodcock, snipe, certain plover and yellowlegs, which are becoming greatly reduced in numbers, a close season of ten years will be provided. The wood duck and eider duck will also be given special protection. Where they are injurious to agricultural or other interests, provision will be made for the killing of protected birds under special permit. Regulations will also be made to prohibit the shipment of migratory birds or their eggs during the close seasons and generally to govern the traffic in them and their eggs.

While the numbers of the migratory birds in Canada and the United States have been most seriously depleted by various causes, confidence is felt that, with international co-operation, and, particularly, the prohibition of spring shooting, a gradual increase in the abundance of our wild bird life will take place.—C.G.H.

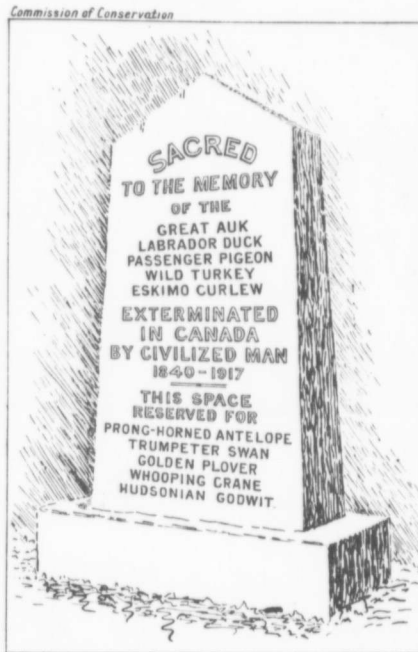
LET THERE BE LIGHT

In the summer of 1916, the Commission of Conservation conducted a detailed survey of 400 representative farms in Dundas county. Of these, less than one per cent practised systematic selection of their seed grain, similar to that followed by the Canadian Seed Growers' Association. Three per cent treated their seed grain for smut. Only nine per cent grew wheat, but practically all grew oats. Of the latter, slightly more than half knew the name of the variety grown. Forty-three per cent did not know the varieties of any of the grain sown on their farms.

breed in that region, which is in the heart of the great duck-breeding grounds of this continent, and to bring back young ducklings to form a nucleus for the propagating work.

About thirteen different species, including a considerable number of canvas-backs, were thus procured, pictures were taken showing their nests, and the situations and conditions surrounding the breeding places have been reproduced on the Connecticut farm. A certain number of them are pinioned, so as to supply a breeding stock, but a large majority so raised are allowed to migrate with the wild fowl which come to the refuge on their

Adapted from "Our Vanishing Wild Life," by W. T. Hornaday.



What has posterity done for us?

AND WHY SHOULD WE DO ANYTHING FOR POSTERITY? IT IS THIS SHORT-SIGHTED ATTITUDE WHICH IS EXTINGUISHING MANY VALUABLE SPECIES OF CANADIAN WILD LIFE.

A WILD DUCK FARM

About two years ago, two public spirited citizens, interested in wild life conservation, acquired about 4,000 acres of waste land in the state of Connecticut, with a view to establishing a sanctuary for wild fowl, and of increasing the supply of game by scientific propagation. They sent an expert to lake Winnipegosis in Manitoba to study the habits of the ducks that nest and

migrations. The birds born and bred in the refuge return to it on their flights north, knowing that they will find protection in their old home. The experiment has been most successful, and is encouraging those who feel that propagation is one of the very important measures which must be undertaken to restore wild bird life.—William S. Haskell, in *Fifth Annual Report of the Commission of Conservation*.

Make Your Money Work for You

Better buy one of the Government's war savings certificates. They yield over 5 per cent interest and have the whole Dominion of Canada as security. You can get your money back any time you wish or leave it out for three years.

A new certificate that is just the thing to teach your boy or girl proper investment habits has just been issued. It costs \$8.60 and pays back \$10.00 at the end of three years. For \$21.50 you can get a certificate redeemable at \$25 in three years, or for \$86 you can get one worth \$100 in three years. That is better than letting your money lie unproductive.

The certificates can be had from any bank, money-order post office, or direct from the Department of Finance, Ottawa. Delay costs you money.—M.J.P.

FIRE-PROOF SHINGLES?

A field for investigation of tremendous importance to the industries affected lies in an attempt to discover a satisfactory treatment for wood shingles that will render them measurably fire-retardant. No process can ever make wood "fire-proof," for no class of material will resist fire under all conditions. Innumerable experiments have been made to demonstrate the efficacy of various compounds, but conclusions of practical value have never been reached. While tests have proved certain treatments to be suitable for one particular condition, such as retarding fire, the substances used have failed to embody equally valuable qualities of permanence and weather resistance. A good shingle fire-retardant must also have endurance, insolubility, attractiveness and cheapness.

With the discovery of a satisfactory method of treatment, there does not appear to be any sufficient reason why shingles should not become a most desirable roof covering for dwellings and other buildings outside congested areas. They have adaptability and beauty superior to most roofings, and entail the least first cost. Since the temporary nature of many of our buildings, the migratory tendencies of our people and the rapid development of our cities and towns are factors making the use of wooden construction advisable, to attempt to legislate the shingle or the frame dwelling out of existence is both uneconomical and impracticable in Canada at the present time.—J.G.S.

The Minneapolis and St. Paul railway is planting trees by machinery to replace snow fences.