

THE SEED INDUSTRY OF THE DOMINION

CANADA NOW EXPORTS SEED TO GR. BRITAIN.

Western Provinces Possess Soil and Climate Adapted to This Product.

Though unaccompanied by extensive or loud-voiced publicity, Canada has been making a pleasing progress in the production of seed both for a rapidly developing domestic consumption and an expanding export market. Whilst this industry may not feature yet in the public mind as distinctly Canadian and so be nationally important, it is a fact, perhaps not generally known, but supported by the most expert authorities and borne out by exhaustive research and experimentation, that Canadian seed is second to none and that grown on the fruitful soil of the Dominion assures greater propagation and larger and more sturdy crops than that brought to maturity on other parts of the American continent.

With Canadian farmers consistently carrying off the highest honors for the production of cereals on the continent it is but natural that the successful growers should receive a demand from a wide area for their prize-winning product, and so far their sales have been limited only by the amount of seed available for export. Seager Wheeler, the Saskatchewan "Wheat Wizard," for instance, has no trouble in disposing of his record-breaking wheat at \$30 and higher per bushel, whilst the grain of other Canadian winners of international honors has had the same demand and has gone all over the continent to raise the standard of those areas.

With Canadian agricultural progress and the greater publicity achieved and markets secured through the efforts of the government departments of Agriculture and Trade and Commerce, the export trade in pure seed has witnessed a steady and sturdy growth, and the figures of 1920, recently published, indicate that a considerable step in advance of the previous year have been taken. In the wide export field shipments have increased very largely to the United States, Great Britain, France and Newfoundland. Clover alone accounted for shipments aggregating about half a million bushels with a value of five and a half million dollars and to Ireland alone approximately 100,000 bus. of flax fibre seed worth \$1,000,000 were exported. In British Columbia field root and garden vegetable seeds amounting to 150,000 pounds were marketed through the United Seed Growers Ltd.

Encouraging the Home Agriculturist.
The work performed for the home agriculturist was even more important. For instance, 75,000 pounds of mangel, swede turnip and field carrot seeds grown by Experimental Farms were sold at current wholesale prices to farmers organizations and individual farmers, it being deemed advisable to confine the marketing of this seed to Canada so that Canadian farmers might have the exclusive advantage of using this high quality product. Demonstrations conducted with this seed on 117 farms in Ontario and Quebec resulted in showing the superiority of home grown seed over the foreign. Seed laboratories are now maintained by the Dominion Department of Agriculture at Ottawa, Winnipeg, and Calgary, and at these points some 28,000 tests were carried out and grain examined for vitality.

Whilst the industry in Eastern Canada has been on a firm and substantial basis for some years through the efforts of individual farmers and those of the Experimental Farms and much seed has been produced for distribution among farmers, Western Canada has of late years proved itself to possess the qualities of soil and climate peculiarly adapting it to this interesting side of agriculture, and this area bids fair to surpass all other parts of the continent in this regard and become its premier seed producing area. As merely an example of the supreme qualities of this region might be mentioned the hundred bushels of six-row barley which was imported into Alberta from Idaho in 1916, where the variety had been grown and improved on for a number of years and was known as the highest yielding barley in the state. Sown in Southern Alberta on a twenty acre patch it produced seventy-five bushels to the acre, and later sown on the Dominion Experimental farms at Lethbridge and Lacombe the phenomenal yields of 109 and 114 bushels respectively were obtained, surpassing by a great percentage the best ever achieved in its native state.

Alberta offers splendid opportunities for pure seed production on a large scale, according to the best experts. Wheat, oats, barley, peas, flax, rye, alfalfa, sweet clover, red clover,

timothy, brome grass, western rye, and seeds of many kinds of vegetables can be grown in different parts of the province in profitable quantities and of exceptional quality. Last spring seven seed centres for the multiplication and distribution of pure seed were established in the province, and it is estimated that this fall there will be between 75,000 and 100,000 bushels of pure seed in Alberta. In the irrigated district of "Southern Alberta" particularly, success has been achieved in the growing of seed, more especially alfalfa, yields of fourteen bushels to the acre having been received.

Thriving in British Columbia.
In British Columbia the production of pure seed is a thriving industry which is yearly becoming more profitable, and on the Pacific Coast flower seeds are grown extensively and exported to all parts of the world. In certain coast districts of the province, seed houses have established farms or arranged with local farmers to grow flower seed for the English and continental markets. The previously prevalent belief that English grown seed was superior in producing power to that grown in Canada has been exploded as a result of extensive experimentation, and now, in contrast to the importation which took place at one time into Canada, the Dominion is exporting heavily to the British market.

When Canada can produce crops which surpass other countries, as judged by international contests and exhibitions, it must naturally follow that the seed from which these crops spring be of superior quality. That they are recognized as such is evidenced by the wide demand for seed which exhausts the supply of prize-winning stock each year. With the extension of growth this industry must become of yet greater national importance to Canada.

Where Suns Are Bunched.

In the constellation Hercules is an object that looks like a hazy star. Not until very recent years was it supposed to be anything else. As revealed to the new high-power telescopes, however, it is a congeries of suns.

The distance of this cluster of suns is so great that a ray of light, traveling 186,000 miles a second, would require 360 centuries to reach us. In other words, as we may view it tonight, we behold it as it was 36,000 years ago—a date since which mankind has emerged from the cave-dwelling period, acquired the use of tools and developed all of his successive civilizations.

The cluster is not even a part of our universe, properly speaking—that is to say—of what we call the Milky Way. It is a distinct and isolated system. At least 36,000 of the suns contained in it are individually brighter than our own sun, and the most brilliant of them exceed in light-giving power 1,000 suns like ours.

The distance of the cluster from the earth is about 200,000,000,000,000 miles. It seems to be egg-shaped and may rotate about its shorter axis. Observations have proved that it is moving toward us at a speed of something like 200 miles a second.

His Best Contract.

A prominent business man says that the best contract he ever got was one he lost. It was the lost contract that set him to thinking, to investigating the cause of the loss, to investigating himself, to finding the weak places in himself and in his business methods. It was the lost contract that taught him the lesson of caution, of carefulness in his procedure, a lesson that he could have gained in no other way.

Frequently our successes, especially when they come easily make us careless, over-confident. It takes a loss, a failure, to force us back into carefulness and right methods. We often learn more from our mistakes than from our successes, from our failures than our triumphs. Experience is a severe, bitter school, but it teaches the needed lesson as nothing else can. —New Success.

Beds, tables, chairs and stools are shown in Egyptian carvings as far back as 4,000 B.C.

Good Feeling

A lovely old feeling to feel that you've done
Something each day to bring some one the sun.

A lovely old feeling to feel that your heart
Has striven all day to give laughter a start.

A lovely old feeling at last and at rest
To feel that through all you have stood to the test.

A lovely old feeling to have done what you could
For somebody's comfort and gladness and good.

A lovely old feeling to feel that you've borne
To somebody's darkness a glimpse of the morn.

A lovely old feeling to feel that you care
Enough to kneel down and thank God in a prayer.

Dail Eireann.

Dal Erin, or Dail Eireann, frequently seen in the newspaper reports, is the name of the present Republican Parliament in Ireland. In ancient times a common name for Ireland was Eire, nominative case; Eireann or Erin, possessive; Eirinn, objective. The Dal was an assemblage somewhat like the English Knights of the Shire, its duties being of a legislative character. Hence Dal Erin (pronounced Dhawl Airin) means the Parliament of Ireland.

Giant Tree Dedicated to Unknown Dead.

A living memorial, distinctive and majestic, and different from any other that has been dedicated since the World War, was unveiled recently in Yosemite National Park. It is a tablet of bronze set at the base of one of California's famous big trees. This giant of the forest, towering above the ordinary timber that surrounds it, stands henceforth as "a memorial to the unknown dead" who gave their lives in the great war. A peculiarly fitting ceremony marked the unveiling of this tablet. Water from the crystal-clear stream of the Merced that flows through the park was sprinkled upon the tree and the tablet, to symbolize the purity of the devotion of the men who died in the war and whose names remain unrecorded. The rock at the foot of the tree on which the tablet was placed was taken as a symbol of the permanence and strength of the principles for which the men fought, and the tree, which it is hoped will live through generations, was cited as emblematic of the living and growing gratitude of the nation for the supreme sacrifice made by its sons in the war.

No Balloon Trip Complete Without a Slide Rule.

Many of us have read stories of ballooning which proceeded on a conventional plan. At some stage of the journey the balloon descended to such a low level that ballast was thrown out with the result that the balloon shot up so high that it was necessary to let gas escape. The balloon would respond so faithfully to this that it was necessary again to throw out more ballast, and in this manner the balloon continued a wild and oscillatory career, until the basket was cut loose, and the adventurer was rescued by a remarkable series of events to become the hero of his tale.

This type of adventure has been rendered obsolete by a form of slide rule invented for balloonists by the U.S. Bureau of Standards. With this new device, the setting of a slide and the reading of a scale tells the pilot how much ballast to discharge to rise a definite amount, or how much gas should be released to drop to a certain level below. While the rule is simple in appearance there seems to be no practical problem in balloon navigation that cannot be readily and promptly solved with its aid.

No Longer Appropriate.

An Indian named Man-Afraid-of-Nothing married a white woman in Montana not long ago, and in one week after the wedding he applied to his tribe to have his name changed.

An Indian told us this: "Every swimmer ought to know how to keep cramps away. Our tribe knows it and has practiced it always. Before plunging in, vigorously rub the pit of the stomach with dry hands. Rub it hard for a full minute, and then dash cold water all over it and rub it hard for another minute. Now you are ready for your dive. To dive or go in without this preparation is dangerous. In our tribe we are taught this as little boys, and we never experience cramps." Also, it is important to remember that Indians never go into the water within two hours after eating.

Agricultural and Industrial Progress in Canada

Victoria, B.C.—Community life, with the conveniences and pleasures of greater human intercourse, are popular in the ranching and farming districts of British Columbia and some sixty new communities have come into existence in the past year, bringing the total number up to 2,209. The new settlements are largely created by the occupation of new lands by soldier settlers.

Edmonton, Alta. — Investigations conducted by experts at Alberta University have satisfactorily proved the possibility of making a building material out of straw. By a secret process chopped straw is mixed with other ingredients and the resulting composition is said to be a material capable of withstanding more severe tests than concrete. With the enormous quantities of straw available from the grain crops of the prairie provinces, little economic use of which is made at present, the success of the new material may revolutionize the building trade in the West.

Regina, Sask.—The largest crop in the history of the province and its second largest wheat crop is predicted for Saskatchewan in the latest official crop estimate issued by the Dominion Bureau of Statistics. According to this report crops will run as follows: wheat, 11,651,622 acres, average yield 14.9 bushels per acre, total production 174,424,781 bushels; oats, 4,884,000 acres, 37.2 average yield per acre, total production 181,723,496 bushels; barley, 427,798 acres, 26.7 bushels per acre, total production 11,455,691 bushels; flax, 366,858 acres, 8.2 bushels per acre, 3,030,638 bushels total production; rye, 1,038,507 acres, 13.6 average yield per acre, total production 14,140,227.

Winnipeg, Man. — Nearly 25,000 young persons on Manitoba farms are now members of the Boys' and Girls' Clubs, according to a statement of the Manitoba Department of Agriculture. The total, it was added, is considerably in excess of that of 1920. About 200 boys' and girls' club fairs were arranged at the beginning of the season this year. Of these about 130 have been held and approximately 75 will take place within the next two months.

Ottawa, Ont.—With the object of as-

sisting the entry of the best class of immigrants into Canada the British Immigration Aid Association has been incorporated. British born subjects of good health and character are to be assisted by loans of money or otherwise to migrate to Canada from any part of the world, but especially from the British Isles. It is the intention of the company to lease or purchase farms and have homes and equipment ready for settlers. It is proposed to acquire a revenue for the purpose of the Association from the gifts by will or donation and from the membership fees in addition to collecting moneys advanced to immigrants.

Montreal, Que.—Montreal, the first city of the Canadian Dominion, is making a strong bid for a million population, and at the present rate of progress is due to arrive there in a couple of years, having made the first three-quarters of that figure in good time. The latest directory population of Greater Montreal is 839,704, an addition of 38,488 in a single year. In 1914, when the war broke out, the city had a population of only 625,000. In 1891 it had less than a quarter of a million people. In fact, its rate of increase during the past twenty years has been no less than four hundred per cent. The Canadian metropolis is now the fifth city of the American continent, being surpassed in numbers only by New York, Philadelphia, Chicago and Detroit.

Fredericton, N.B.—Census returns for the Maritime Provinces show New Brunswick with an increase of 10.29 per cent; in population; Nova Scotia for the ten years had an increase of 6.55; while Prince Edward Island has gone back to the extent of 5.54 per cent. The population of Nova Scotia, New Brunswick and Prince Edward Island are 524,579, 388,092 and 88,536, respectively.

Halifax, N.S.—The lobster fishing season on the Nova Scotian coast, from Halifax to St. Mary's Bay inclusive, will be extended this year, according to word received here from Hon. C. C. Ballantyne, Minister of Marine and Fisheries. Lobster fishing will be legal in that section from November 1 to December 15, after which date there will be a recess until the regular season begins on March 1st.

Bullet's Big Push.

When an ordinary shot-gun is fired, a tremendous pressure is set up in the barrel by the explosion of the powder charge. As a rule the pressure is about two and a half tons, or 5,560 pounds to every square inch of the surface of the barrel.

A locomotive, drawing an express train weighing three hundred tons and carrying hundreds of passengers, requires a pressure of less than 200 pounds to the square foot to drive it; yet to kill a single rabbit or partridge we must use a force twenty-five times as great.

In the case of the rifle, the pressure driving the bullet is more than fifteen tons to each square inch. The actual push against the head of the bolt is about four tons. Naturally this immense driving force produces a terrific speed. The bullet is sent on its way from the rifle at no less than 2,700 feet a second.

When the 15-inch gun of a battleship is fired, the pressure in the breech is more than twenty tons to the square inch. The shell of such a gun weighs a ton, but the enormous force behind it sends it on its way at more than 3,000 feet a second.

The greatest velocity ever reached was that of the Big Berthas which bombarded Paris from a distance of seventy miles. Their shells travelled at the rate of 5,000 feet a second—or more than 3,400 miles an hour—and the pressure in the gun must have been over thirty tons to the square inch.

The Discovery of Borax.

It was in Yellowstone Park, Wyoming, that the wonderful preservative powers of borax were first discovered. A wandering prospector in that desolate though picturesque region came across the body of a horse which, although it must have died long before, was perfectly sweet.

Looking around for an explanation of the phenomenon, he found that the animal was covered with a layer of fine dust which proved to be borax. He realized the commercial value of his discovery, and sold the secret to a large packing firm in Chicago.

The Departing Guest.

Scorning my hospitality,
Was it youth that fled from me?
A blind moth smote the window sash;
The fire fell into sudden ash;
I heard a creaking down the floor.
I heard the shutting of a door.
I caught a tread of passing feet,
Ye saw no one go down the street.
Was it youth who stole away?
My happy guest but yesterday!
—Harry Kemp.

Droughts.

Meteorologists who warn two years ago that a period of dry years was beginning, are not without justification. Droughts in China, Russia, Central and Western Europe and in parts of the United States recall the predictions. That there is a cycle of rainfall alternating with the eleven-year period of sun spots is not yet proved, but that terrestrial weather in a general way is influenced by solar changes is quite possible.

Fire and the Forest.

Fire is a good servant but a bad master. Fire under the saw-mill boiler turns trees into commodities useful to man, but fire in the forest does no good to any one and injures every one. Fire not only destroys the living forest but it often so burns up the soil that it prevents another forest growing in its place. A camp-fire is a servant but a forest fire is a tyrant master. Let all citizens who go into the forest for business or pleasure be careful with fire.

Meaning of "Snob."

The word snob is not, as most persons suppose, mere slang, but is of respectable, even distinguished origin, for it is the abbreviation of sine nobilitate, once the designation of English university members who were not of the nobility. It was the pretensions of those men that brought the word into ill favor, for they aped the manners and clothes of the nobles. There are snobs and snobs in the schools to-day, not by accident of birth, but because some boys and some girls recognize the true standards of gentility and some do not.

What would we do without bells! They call us to meals, to the telephone, to the door, to church and to fires. When we marry the bells ring, and at our funeral the bells are tolled. We put them around our cow's neck. We would consider sleighing unsatisfactory unless the bells jingled. Our clocks ring out the time in bells, and events of all time are announced by bells. All well-behaved locomotives have them, and trolleys clang them to make us jump. If it were not for our morning alarm-clock, many of us would be late for work. Great are the bells! Ding-dong!