

The JOURNAL of AGRICULTURE AND HORTICULTURE

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Number 1



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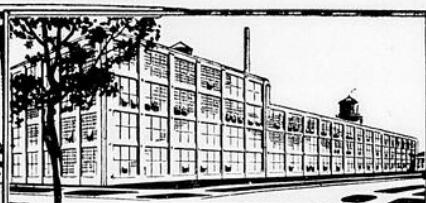
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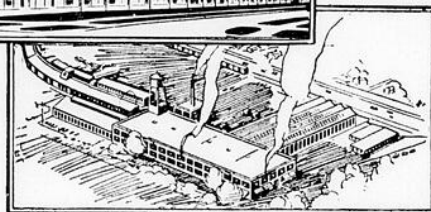
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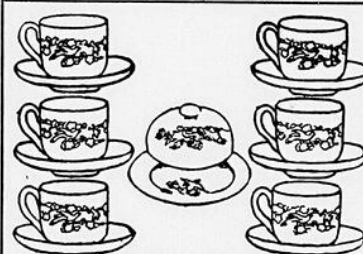
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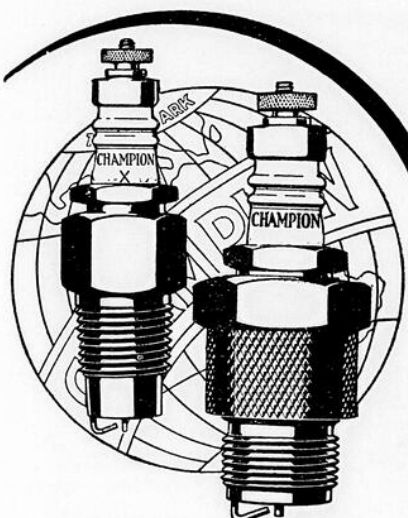
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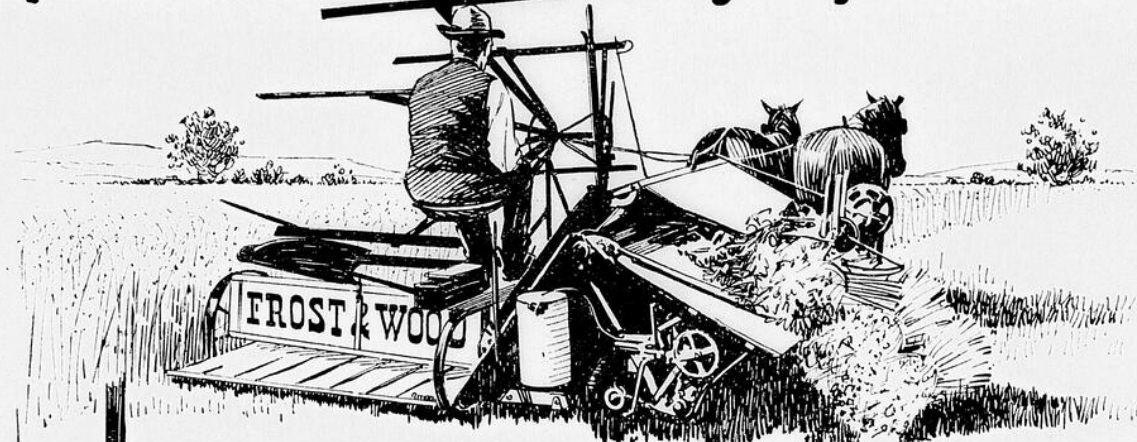


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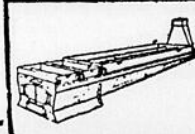
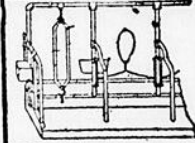
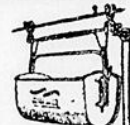
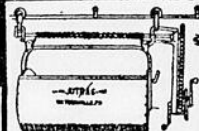
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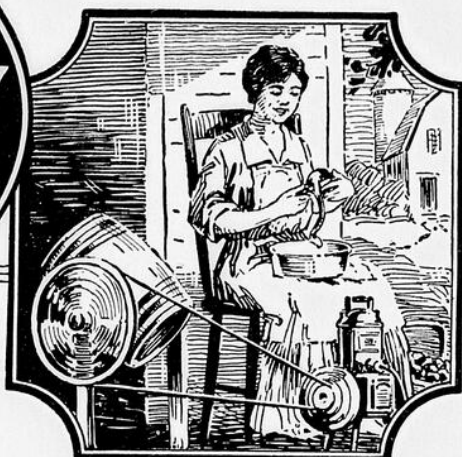
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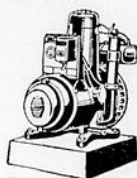


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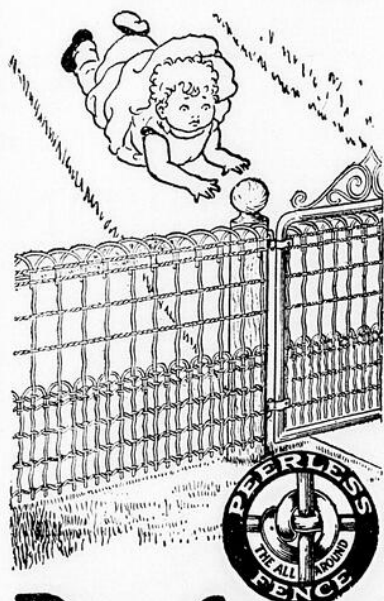
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EDITORIAL COMMENT

CANADA'S DIAMOND JUBILEE

On this first day of July, Canada as an united nation is celebrating her sixtieth birthday. "From sea to sea", as our national motto reads in translation, this Diamond Jubilee of the Dominion will be ushered in with pageants, picnics and other forms of rejoicing, while at Ottawa, the Capital City, the world's greatest carillon will ring out for the first time from the great Victory Tower of our federal parliament buildings its message of our pride in our nationhood.

These birthdays offer a splendid chance for stock-taking. Serving as they do as milestones, they bring to us an opportunity for measuring our progress as a nation. And the record of this young and growing country is one of which we need not be ashamed. Agriculturally, industrially, commercially, nationally, our advancement in the sixty years that have elapsed since the Fathers of Confederation first brought into being the Dominion of Canada is something that should be inspiring to every true Canadian. Our contributions to the world's wheat market, to the world's paper market, to the world's supply of metals, to name only three of the fields in which we have made ourselves internationally famous, are out of all proportion to our population. And in each of these fields the growth of production has come mainly in the years that have seen us an united people.

But it is in the fields of morals and of citizenship that we have our greatest potentialities. Canada's record in the Great War did for Canada's people what her wheat exports have done for her trade. It has made for us a niche in the world's hall of fame. But it was not a record that was the result of chance. It was the natural outcome of a love for a country that has been good to us, and that has handed on to us a heritage that stretches back far beyond the confines of the sixty years of Confederation. For Canadian ideals of service and of citizenship have their roots, not in the years of our great industrial and commercial growth only, but as well in the years of toil and hardship that saw the opening up of a vast wilderness, that saw the transformation of this wilderness into the state of cultivation where it rejoices and blossoms as the rose.

It has been our privilege recently to spend some time reading in our Canadian history of the days that lie before Confederation, of the advent of our pioneering forefathers to the districts that are now looked upon as Old Canada. We wish that all Canadians might have the opportunity of reading for themselves this story of our own country. It would give them a greater love for their native land, we suspect. It would perhaps make them more tolerant. And it would undoubtedly be a great inspiration. For, in the light of what has taken place in Canada in the past sixty years, let us say, in education, in the building of roads and the improvement of systems of transportation generally, in industry, in farming, in the art of living, it is difficult to be pessimistic concerning the future of this great country.

And at this time we feel like calling to the attention of our readers a paragraph from a resolution passed at the close of the last session of our federal parliament:

"It is the earnest wish of Parliament that the Diamond Jubilee Celebration shall commemorate appropriately and enthusiastically the accomplishment of Confederation and the subsequent progress of the Dominion. We trust that this commemoration will lend added inspiration to the patriotic fervour of our people, and afford

a clearer vision of our aspirations and ideals, to the end that from sea to sea there may be developed a robust Canadian spirit, and in all things Canadian profounder national unity."

QUEBEC'S POTATO CROP

There is a prevailing impression that the Maritime Provinces are Canada's great producers of potatoes. The fact is that, year after year, Quebec leads all provinces of Canada in the production of this commodity, more than equalling the total potato production of the three Maritime Provinces put together. Last year, for example, out of a total Dominion potato crop of some 48 million hundredweight, Quebec came first with 14,682,000 cwt., while the combined production of the Maritimes was 13,808,000 cwt. Yet we venture to say that it is easier to find New Brunswick potatoes on the Montreal market than to find Quebec potatoes that are sold as such.

What is the matter? Are Quebec potatoes inferior? We think not. The bulk of Quebec's potato crop is produced in the Lower St. Lawrence district, the climate and soil of which are as well suited to potato growing as any in Canada. The varieties grown are those in greatest demand by buyers. The trouble, in our estimation, is that Quebec's producers of potatoes are not yet fully alive to the advantages of a co-operative system of grading, advertising and selling their product.

It is in this that the Maritime growers excel. When they send out their potatoes to market they make certain that their stock is sold as Maritime stock—having first taking precautions through grading to see that the product offered is of such quality and uniformity that it will make for repeat orders. In short, they have through a period of years hammered away at the task of educating the buying public to ask for their potatoes by name.

It seems to us that the time is ripe for the introduction in a large way of more orderly marketing of the Quebec potato crop. Something is already being done by the Federated Co-operative, but this is a thing that cannot be built from the top down. The process is too slow. What is needed is a realization on the part of our potato growers themselves of the need of a better system of marketing their crop. When the growers of each district are sufficiently interested to build a warehouse to which their products may be brought for grading and shipping in quantity, the Federated Co-operative or other marketing agency will be in a better position to help them.

This is a day of standardization, of marketing in quantity on grade. The merchant in need of potatoes, of cheese, of oranges, will buy from the source that can guarantee uniformity of grade. It makes the matter of purchasing so much easier for him! And the producer or group of producers who realize this fact and act upon it are the men who will secure the cream of the market—and who will make the greatest net profits from their projects.

Two things are mainly essential in his profitable handling of Quebec's potato crop. The first is the production of good, disease-free stock—and this our growers can easily effect if they follow persistently the most approved spraying practices. And the second is the selling of their product in quantity and on grade. When these two things are taken up as they should be in this province, Quebec's potatoes will really be heard from—and Quebec's potato growers will find greater profits in their business than they do today.

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On My Way

PASTURE time again and a land rich in the teeming verdure of fresh green, filled with the unfolded scent of leaf and blade, sweet with the song of singing birds. Long I have watched its coming upon the hillside, for there I could see the swollen buds soften the harsh bareness of the woods and cushion the naked frame work of the limbs. Like a great oriental carpet of precious price dropped down by lavish hand the mottled plush of coming leaves grew each day to a deeper and a fuller wealth upon the multiplying hills. If there was something of weariness in the creeping pace, a trying most too strong for patience to endure, it could not altogether break, for hope was there each day upon the mountain side.

To the farmer man has come once more the almost strange relief of free and empty cattle stalls. Instead is seen the pleasant sight of feeding beasts upon the country side, caring for themselves. Even to him, and such as he, who knows the work behind the scene that takes the charm somewhat away, there is a pleasure that is good and a freedom that is appreciated in these days. Relaxation, though never entire, is greater now than at any other time of year. For it is the rare and romantic month of June, of apple-blossoms, brides and roses. The beginning of tourists, and for the husbandman the simple wish and ardent hope that needed summer is at hand. Amid the forging meadow lands and pasture fields lie swarthy acres that only the cheer and warmth of high unclouded sun can raise to life.

And when I drive along the road to town, I am quite aware of two things at least. One is that my old buggy waggon rattles badly, and I wonder how long it will be before I am compelled to put it in the hands of the village blacksmith. The other thing that draws my attention is the honk and hoot of motor horns. They come and go continually, and although it is a wide highway I yield it to them almost completely, and jog along close to the ditch. Even then it would seem as if some of them begrudged me this much, they come to unpleasantly near, but of course business is very urgent and the hurry is great so that the farmer's outfit was scarcely noticed.

I am not educated either as to makes of cars or the identification discs they carry. I know the plates for my own province and that is about all. I do wonder where all these people manage to get so much money as car after car rolls by whose purchase price would be as much or more than all the acres, including stock and barns, of many of our farms, yet they seem to be numberless. Sometimes I feel I would like to be a tourist for a couple of weeks anyway, and trade my old horse-drawn

vehicle for one of these cushioned machines. Just to be amongst those for whom so much of the cleaning up, arranging, and putting the house in order is done. Henry Knox says that when he reads the paper and all about the attention that seem to be given to those picnics he has a feeling a bit like the son had who was in the field when the prodigal came home; although he lives here every day of his life there never seems to be anything special done for him. Gus Pond doesn't see it that way at all. The Sunday cake may be made especially for the visitors, but when the time comes to cut it we all get a taste of it. But Henry only grunts at that reckoning and says that some people's taste of it belongs to that unknown quantity that can only be found by algebra, provided you are good at figures.

Whoever was right or wrong in this little argument, I found myself taking sides as we do in all matters of differences. I was with Henry in his feeling that whatever the benefits either to individual or community, there were many such as himself and me that would never be the poorer did the sightseers not come. Yet if they find pleasure in the hospitality of our stopping places, or are impressed with the grandeur of the unlimited expanse of our beautiful country, or are refreshed and made glad with the beverages for which our province is famous, then hearty welcome to them.

I cannot help but feel the truth of this evident fact though, that of all the occupations that men follow none afford so little in actual money returns as farming. I wish some honest, unbiased economist would discuss this same subject and tell us why. There has been astonishing progress in even the past quarter of a century in nearly every line of industry, but farming, though improved somewhat in methods, fails yet to reach the profitable plane that other lines of business have. Is it our fault, as many are ready to say it is? Have we failed to lay our hands upon new and advancing things? or is it that the theoretical perfection that has been arrived at in our profession is quite an impossibility in actual practice? There are other things besides money—that essence of wealth. That I know well, as most men do. Perhaps my economist will reckon as best he can the priceless things that belong to me and my work, the things whose value lies within the man, not in gold or silver. My great freedom, my independence, abounding nature and my love for Nature's things.

H. H.

The Study of French

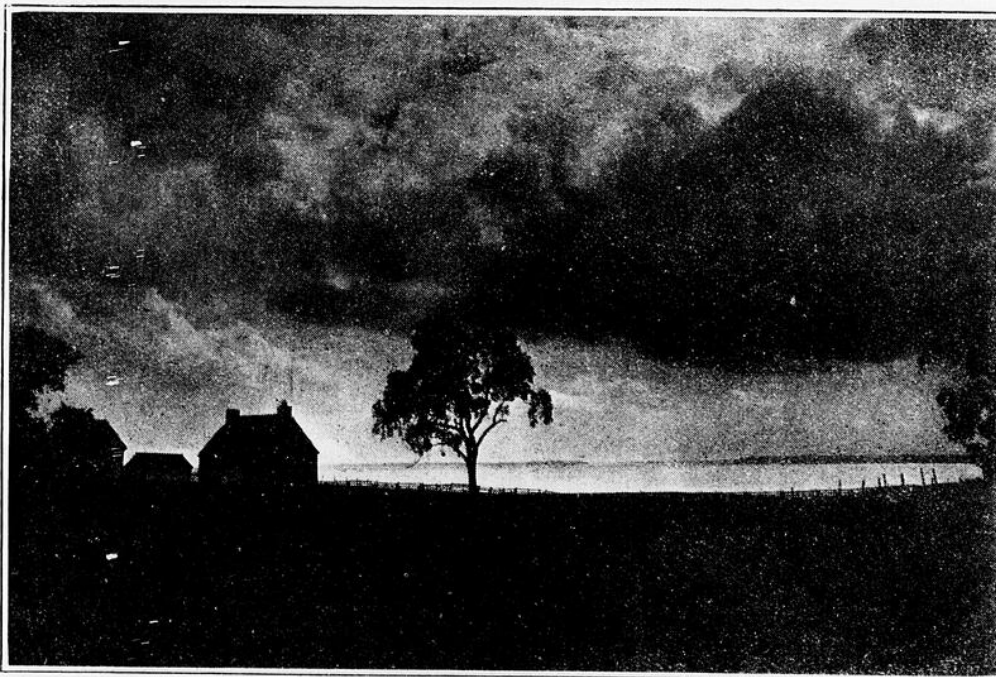
THERE is virtue in reiteration, and in spite of the fact that results have not been as encouraging as they might be, it is well that Dr. G. W. Parmelee, director of Protestant Education in the province of Quebec, has reiterated the importance of a study of French. More attention should be paid to oral French than ever before, he told the members of the graduating classes of the School of Teachers at Macdonald College, when he delivered an address at the closing exercises of the school. At the same time, Dr. Parmelee emphasized the necessity of teachers impressing upon their pupils the importance of learning French outside

of school, along with the training given at school. The alertness of the French-speaking boy and girl in acquiring English, and their determination to speak it everywhere and at all times, is as old a story as the English-speaking pupils' disregard for French, and their reluctance to air what knowledge they may have of the language. One of two pupils who were returning together from the closing exercises of some school on Thursday evening, observing from the train at St. Henri station a printed warning against walking on the grass, asked her companion how to pronounce "g-a-z-o-n." "Oh," was the reply. "I have left my French behind me at school, and, believe me, it is going to be a closed book until I go back in September." This reflects a state of mind common amongst English-speaking pupils, to whom the study of French is irksome and irritating—a drudgery to be dropped directly school is closed. On the other hand, French-speaking pupils are constantly and in all places "picking up" a knowledge of English and ever putting it to practical use, until practice makes them as fluent in English as they are in their mother tongue.

If the doctrine that Dr. Parmelee and others like him are preaching bears fruit, the habit of French-Canadian children in this respect will spread amongst English-speaking pupils. As a means to the same end the Ontario educational authorities, at the inspiration of Premier Ferguson, Minister of Education, will, during the summer vacation, send a number of English-speaking teachers of the French language in Ontario schools to the city of Quebec for a course of practical study which will perfect their knowledge of oral French. The outcome is bound to be beneficial to students in the sister province. French is rightly coming to be considered one of the most important subjects of study in the school curriculum. Apart from its intellectual value, the practical advantage of a knowledge of French is patent to everybody, and it should be a matter of pride with all English-speaking pupils not to be outstripped by their French-speaking school companions in bilingualism. French was the language of Canada's pioneers; it was the language of those who, in 1775 and again in 1812, helped to preserve Canada to Great Britain. French is the language of diplomacy the world over, and what gives it highest importance here is its recognition as one of the official languages. The educational authorities, in the province of Quebec particularly, are doing everything in their power to promote the study of French, and the counsel that Dr. Parmelee addressed to the teachers may be taken to heart and followed by parents to the extent of impressing upon the minds of the children the importance of learning French "outside of school" as a practical addition to their class studies.

Montreal Gazette.

For one word a man is often deemed to be wise, and for one word he is often deemed to be foolish. We ought to be careful indeed what we say.—*Confucius.*



A storm scene near Laprairie

Canadian Farming Since Confederation

By Dr. J. E. Lattimer, Dept. of Farm Economics, Macdonald College.

THE development of agriculture in this Dominion is a remarkable confirmation of the old adage that truth is stranger than fiction. The record of this development, though not without its shadows, has been on the whole fairly bright, and in some phases sufficiently brilliant as to be almost incredible.

Fifty or sixty years is not a long time even in the evolution of a youthful country, yet things change with such rapidity during recent years that some conditions prevailing half a century ago appear now very strange and remote.

There were some conditions prevailing sixty years ago, however, which resemble closely those of today. In the late sixties of the past century those engaged in the farming business were looking back on more prosperous times. The Civil War in the United States and the following period of inflation had furnished a market for the products of Canadian farms at what Adam Shortt has termed "Crimean prices". Prices which had been ruling high for a decade were declining—not unlike recent experiences. The treaty of reciprocity, which had allowed free entry of natural products to the market of the United States from 1854, was abrogated by the United States in 1866, and farm products were to a certain degree excluded from that market. Present conditions in this regard are very similar. The imposition of protective duties on farm products necessitated the development of other markets. This hastened the bringing together of the scattered provinces. Sixty years ago the crying need for the farming industry was markets. It still is. Only today this need is much more urgent, as we shall later see.

Again, when Canada extended only to the Great Lakes, as it did in 1871, one-quarter of the people born in this country were living in the Republic. The drift of Canadians to the United States was at that time a necessity. The way to expand on this continent was to go west, and for a Canadian to go west sixty years ago it was almost essential for him to go to Michigan, Wisconsin or the Dakotas.

Sixty years ago declining prices, the loss of an attractive market for farm products in the United States, the loss of a substantial proportion of the Canadian born to that country and the imperative need of developing more distant markets, were problems which were very similar to those confronting us today. Though these problems sound familiar, how marked the difference in other ways in that comparatively short space of time!

It is today interesting to note some of the data tabulated in 1871 in the first census of the Dominion. For instance, it is recorded there that the production of home-made linen in the previous year (1870) was 1,771,140 yds., of which Quebec is credited with 1,559,410 yards. Home-made cloth totaled 7,641,917 yards, the provincial figures being—

Quebec	3,339,766 yards
Ontario	1,775,320 "
N. S.	1,476,003 "
N. B.	1,050,828 "

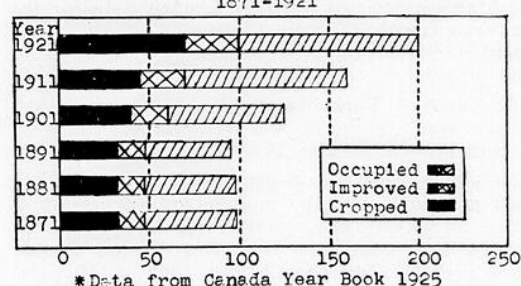
The figures are quite sufficient to show that the country was at that time still to a large degree in the pioneer stage where there was little specialization or division of labor in comparison with that now existing. Much of the work that is now carried on in large centres of population was at that time done on the farm, at the small "mills" near at hand and in local villages. In 1871 there was only one city in the Dominion with over 100,000 people, and one could count all the cities of over 30,000 on the digits of one hand and then have the little finger unemployed. The populations of the larger cities in 1871 were—

Montreal	115,000
Quebec	59,699
Toronto	59,000
St. John	41,325
Halifax	29,582
Hamilton	26,880
Ottawa	24,141

The home market was negligible when compared with that of the present day. The total production of wheat in 1870 was only some 16 million bushels in round numbers, yet upwards of two millions of that amount was exported. Dairy products, the estimated value of which was some 15 million dollars in 1870, contributed over four million dollars to the export trade.

The population of three and a half million did not provide a home market which could consume the surplus products of the 367,862 farms which the four provinces then contained, even though the aggregate production was not large. It is not difficult to understand why aggregate production was not large at that date. Farms were very small considering the improved and cultivated area, the grain binder not yet invented and farm tools and machinery generally lacking in capacity in the light of present conditions. It is rather more difficult to understand why when production was as low in the aggregate such a proportion was available for export. The solution of this question is that at that date many lived on the farm but not from the farm revenue. Many of those who followed other vocations than farming provided themselves with more or less of their food requirements. For this reason a greater proportion of the food products consumed at home escaped tabulation than at the present time. It is only by a realization of the difference in farm organization that an understanding of the development of the past sixty years is possible.

OCCUPIED, IMPROVED AND CROPPED LAND PER FARM* 1871-1921



*Data from Canada Year Book 1925

The organization of the farm was on more of a self-sufficing basis than at present. Farms produced much of the food, fuel, clothing and shelter necessary for the farm family sixty years ago. Great diversity of products characterized the era. Most farms had herds and flocks and grew a wide variety of crops whether the soil was adapted to the growth of them or not. Varieties were numerous even in the farm orchard.

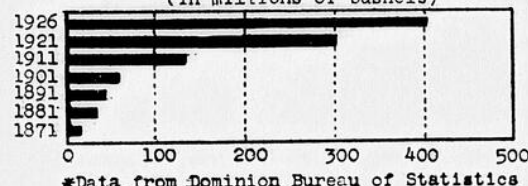
Recently research is making it ever more clear that soils and environment favor particularly some line of endeavor. Transportation development makes it more and more possible to depend on other localities for certain lines. Today few farms supply much of the fuel, shelter, clothing or food required. These requirements come through the market to the farmer very much the same as they do to any other class of people. Under such circumstances farms turn more and more to the production of what can be sold and less and less attention is given to what little can be used at home. The change in the past sixty years in this country has been great in this respect. It is only when we consider the great change in that time that the figures of production during the life of the Dominion become intelligible.

To consider some of the developments which lend themselves to statistical computation we may compare the census reports of 1871 and 1921, which cover the greater part of the period.

	1871	1921
Population	3,689,257	8,788,483
Acres of land occupied	36,046,401	140,887,903
Acres improved	17,335,818	70,769,548
Acres cropped	11,821,216	59,635,346
No. of farms	367,862	711,090

These figures show that while the number of farms scarcely doubled, the total area occupied was

WHEAT PRODUCTION CANADA 1871-1926* (In millions of bushels)



*Data from Dominion Bureau of Statistics

multiplied approximately four times, the improved area became four times as great and there was five times the area cropped.

This was made possible by a considerable increase in the size of the farms as the following figures show:

	1871	1921
Average acres per farm	98	198
Average acres improved per farm	47	99
Average acres cropped per farm	32	70

The charts show how this development has taken place by decades.

What has been the production resulting from this development? The following figures and chart, dealing with the wheat crop, are of interest in this connection:

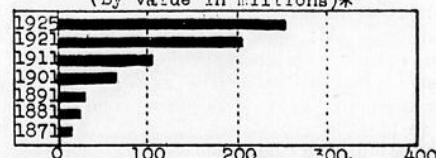
Year	Production	Total Value	Value per bu.
1871	16,723,872 bu.	\$16,993,265	\$1.02 per bu.
1881	32,350,269 bu.	38,820,323	1.20 "
1891	42,223,372 bu.	31,667,529	.78 "
1901	55,572,368 bu.	36,122,030	.65 "
1911	132,077,547 bu.	104,816,825	.79 "
1921	300,853,100 bu.	242,936,000	.81 "
1922	399,786,400 bu.	339,419,000	.85 "
1923	474,199,000 bu.	316,994,700	.67 "
1924	262,097,000 bu.	320,362,000	1.22 "
1925	411,375,700 bu.	459,149,200	1.12 "
1926	405,938,000 bu.	442,673,000	1.09 "

#—Data from Canadian Year Book 1925.

The export of wheat shows also a striking development during this interval. In 1871 the exports of wheat and flour amounted to some three and a half million dollars. In 1923 the value of these articles exported was \$322 million, or some 90 times as much. During the five years from 1921 to 1925 inclusive—sometimes referred to as a period of depression—the exports of wheat and flour from Canada averaged annually in value \$315 million. Exports of these articles for the five years averaged over a million dollars for every working day.

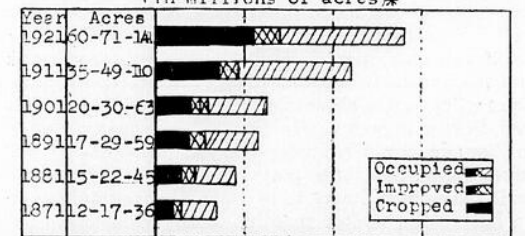
Progress in this line of farming has been most rapid during the present century. Extension of transportation facilities made this possible. Another factor of importance has been the price received. During the decades from 1881 to 1901 little progress was registered. This was not entirely due to lack of transportation. It was a period of declining prices. Of the 50 years between 1871 and 1921 the first 25 years was a period of declining prices, while the last 25 was a period of rising prices. The low point was reached in 1896. In that year the exports of wheat from Canada amounted to 9,919,542 bushels valued at \$5,771,521, an export value of 58 cents per bushel. During that same year the exports of butter amounted to 5,889,241 pounds valued at \$1,052,089—an export value of almost but not quite 18 cents per pound. There was not much expansion in farming during the decade between 1891 and 1901. The area occupied increased by only four and a half million acres, less than two and a half million was added to the improved area while the number of farms of 10 acres and over increased by 24,628 during the decade. If the farms below 10 acres are included, there was an actual decrease in the total number during this decade. There was a decline in the value of farm land in the province of Ontario from \$655 million in 1883 to \$554 million in 1896, or a decrease in 13 years of over \$100

DAIRY PRODUCTION CANADA 1871-1925 (By value in millions)*



*Data from Canada Year Book 1925

OCCUPIED, IMPROVED AND CROPPED LAND 1871-1921 (in millions of acres)*



*Data from Census Reports and Canada Year Book

million or over 15 per cent. In England the annual value of land fell from 48 and a half million pounds sterling in 1879 to 37 million in 1893 or a decrease of almost 24 per cent.

The opening up of newer areas can scarcely help bringing tragedy to some. The transition period is always more or less painful. Such things as growing pains are not unheard of. It appears that something of this nature has influenced the farming industry. The opening up of the western wheat region reduced the acreage devoted to this crop in the older provinces. At the same time it enabled the farms in the older provinces to develop other lines of farming while depending on the newer areas for growing the wheat. The farmers of the older provinces turned their attention to other lines in which the comparative advantage was more certain.

The dairy industry runs wheat growing a close second nationally. In 1871 the dairy industry in the Dominion was rather a humble industry. Still in the four provinces then included there were 1,251,209 cows reported. In 1925 there were 3,830,175, or almost exactly three times the number. Yet the value of dairy products was estimated at \$15 million in 1871 and \$233 million in 1925. This works out to a value of \$13.60 per cow in 1871 and \$66.13 in 1925. This would be very gratifying indeed if it were true. And with certain important qualifications it is true. Great as has been the advance in the dairy industry during the past half century, these figures can hardly be taken without some explanation unless one is willing to have his audience walk out on him. The explanation is largely in the fact that the dairy products of the earlier date were practically all home-made, a great proportion consumed at home, and hence escaped entirely statistical computation. Further, a great deal of the product which now helps to swell the total of the annual value was consumed on the farm and no small amounts of it was wasted. Again the price of butter has advanced much more than has the price of wheat in the interval. In 1871 exports of butter amounted to some 15 million pounds valued at slightly over 3 million dollars or 20 cents per pound. In 1925 exports of butter amounted to 24 million pounds valued at almost 9 million dollars or over 35 cents per pound. The quantity of all dairy products is, for reasons which we have already noted, not available. The value of all dairy products has been estimated and the following chart gives this progress by decades since 1871.

With all the necessary qualifications there still remains a very striking record in the increase in value of dairy products. While the number of dairy cows was trebled, the value of dairy products increased by some fifteen times. This, with all necessary qualifications, is something well worth consideration and record. The development of fluid milk markets and increased avenues for disposing of the product since half a century ago have contributed to this advance. Yet an important point is that cows are better and are each producing more. This is progress which is sound. It is similar in other lines of farming though lack of space prevents detailed discussion. We might draw attention to the fact that today more apples are being produced from fewer trees and fewer acres than some time ago, as commercial orcharding develops. Each unit producing more is apparent in practically every line. Even the hens are taking it up, and in the more salubrious climate west of the Rockies one hen has demonstrated possibilities by laying 351 eggs in 365 days, requiring only two weeks holidays in the year. Though there remain great possibilities of improvement along this line, we question if the hen referred to has not reached the utmost limit, as at least two weeks holidays per year is a recent plank in the labor platform.

The remarkable fact in connection with the increase in production since Confederation is the comparatively slight increase in the number of farms during the interval. While the number of farms has approximately doubled, the amount produced has increased many times. Obviously improved varieties, better methods of culture, superior equipment and improvements in the technique of the industry have contributed to this development. The point which we wish to stress here, however, is the change in the aim of production from what was desired for consumption to that which meets the demands of the market. This is the change which has come from specialization in all industry. The increase in production from this specialization is admitted. This change entails the increased importance of the problem of marketing, as the modern farmer purchases most of his consumption goods the same as those in other vocations. This change has been pronounced during the past century. And the end is not yet. For this reason the farm revenue must of necessity be greater than a few decades ago.

Comparable figures of farm revenue are not available prior to 1901, and at that date, as already noted, farm prices were very low. Since that time the total value of field crops is available. These figures together with the number of farm are as follows:

Year	Number of farms	Value of field crops
1901	511,073	\$194,953,420
1911	682,329	384,513,795
1921	711,090	931,863,670
1925	—	1,153,394,900

These figures will bear some study. From 1901 to 1911 the value of field crops doubled. During that decade, however, 171 thousand farms in round numbers were added to the total number. During the next decade the value of field products more than doubled while less than 29 thousand new farms were added. Most remarkable of all is a comparison of the 1911 figure with that of 1925. During this interval few new farms were added. The year 1925 is quite far removed from the abnormal period of inflation. And in 1925 the value of the field crops of the country was almost exactly three times the amount of 1911.

These figures speak rather eloquently in themselves. The record of the development of agriculture in this country since Confederation is interesting and illuminating. Perhaps the most interesting and encouraging feature in even a brief survey is the favorable showing of the past five years. This shows that production and prosperity by no means ceased with the year 1921, and this fact is important in any consideration of future progress.

Hearings on Lenroot Bill

HEARINGS on the tentative regulations of the enforcement of the Taber-Lenroot Bills known as the Federal Import Milk Act passed by the Last Congress of the United States were held at Boston, Mass., on June 1st. and at New York, on June 3rd.

Those in charge of the hearings at Boston were—Dr. P. D. Dunbar, chief of the chemistry branch at Washington, assisted by L. D. Cronen, solicitor for the department of agriculture, and George H. Adams, chief of the Boston station of the federal food branch.

At the New York hearing Dr. Dunbar and Mr. Cronen were assisted by Mr. Worton and Mr. Briseley, both Federal officers.

Naturally there was much interest manifested in the regulations, and the milk industry was represented by 30 or more representing exporters from Canada and importers from the United States. Those present from Canada were—Dr. J. H. Grisdale, deputy minister of agriculture, Dr. George E. Hilton, veterinary director general, Ottawa; George G. Publow, superintendent of the dairy school at Kingston, Ont.; J. E. Bourbeau, director of dairying of the province of Quebec; S. E. Chagnon, live stock branch, Quebec. The National Dairy Council was represented by W. F. Stephen, secretary; F. E. M. Robinson, member of the executive, representatives of the C. P. R. were:—Messrs. Dougall, Branscombe and Coleman.

This act largely governs the importation of milk and cream from the Provinces of Ontario and Quebec, at the present time. One of the most difficult points to settle was that of the taking of temperatures and also taking of samples for bacterial content. The tentative rules stated port of entry, but it was shown this would not work satisfactorily in all cases. It was pointed out that there were three distinct classes of shipments—that of cream and milk going over by trucks to be processed by plants on the other side of the border; milk and cream going over in baggage cars, and car loads of milk and cream iced. In the case of truck shipments it was considered that this could be done at a plant on the other side; with milk and cream in baggage cars, samples could be taken in transit; but in the case of car loads of milk or cream iced the samples could be taken at destination.

Dr. Dunbar suggested that samples could be taken at such points either above or below the international border as would make them representative of the milk at the time of its entry into the United States. This would give sufficient leeway for differing conditions. This places the burden of showing that the milk and cream does not fulfill the requirements at the time of crossing the border on the department in cases of criminal prosecution.

In the cases of physical examination of herds, as many of the United States cities require this to be done by Veterinaries it was agreed that this should

be required. As to inspection of dairies, this would be done by men accustomed to such work, but all those persons making such inspections must be duly accredited by Federal, State or Provincial authorities, but they need not necessarily be public officials.

The question of pasteurization received much consideration. The tentative rule required a temperature of 145 degrees Fahrenheit, but it was shown that Boston and New York required also 142 degrees, as a minimum temperature of 145 degrees was apt to injure the cream line and to destroy certain qualities in the milk especially beneficial to babies.

The bacterial content allowed by act is as follows: Raw milk, 300,000 per cubic centimetre; raw cream, 750,000; pasteurized milk, 100,000, and pasteurized cream 500,000. An exception to this is that milk or cream with a bacterial count of 1,200,000 is permitted if the farm producing it is within a radius of 15 miles of the condensery in which it is to be processed. The milk or cream must be at a temperature of 50 degrees at time of importation.

Violations of the act are punishable by a fine of not less than \$50 or more than \$2,000 or imprisonment for not more than one year, or both. Appropriation for the enforcement of the act is \$50,000 a year.

Canadians who attended the hearing are quite agreed that there is nothing in the regulations to prevent Canadian dairymen shipping to the United States.

The proponents of the Bill were represented by Judge Millar of the Dairymen's League, and Mr. Bransen, of the New England Milk Producers' Association.

Confers on Lenroot Bill Inspection

TO discuss ways and means to meet the regulations required by the Lenroot Bill, on milk and cream exported from Canada to the United States, Dr. J. H. Grisdale, Deputy Minister of Agriculture, met a number of interested representative men in his office at Ottawa on June 14th. There were present Dr. George Hilton, Veterinary Director General, Dr. J. A. Ruddick, Dairy Commissioner, Mr. E. S. Archibald, Director of Experimental Farms, Mr. Geo. B. Rothwell, Dominion Animal Husbandman, Dr. J. A. Grenier, Deputy Minister of Agriculture, and Mr. S. E. Chagnon, Department of Agriculture, Quebec, George H. Barr, Dairy Commissioner, Toronto, Harry C. Taylor of New York, Alp. Trudel, Quebec Dairies of Montreal, R. Smith, Exporter, and J. W. Duval, Newington, Ont., F. E. M. Robinson of Richmond, Que., and W. F. Stephen, Secretary, representatives of the National Dairy Council. It was agreed that the Canadian authorities would be required to make the necessary inspection of pasteurization plants, of which there were several hundred, dairies, stables and herds. Representatives of Ontario and Quebec thought the Federal Department could use their creamery inspectors for this work at little extra cost. As regards inspection of dairy cows, several of the States regulations now in effect require that this be done by accredited veterinarians and the same would apply in this case. It was thought there should be a small charge to be paid by the dairymen.

In regard to this inspection of dairies and stables, this could be done by well qualified dairymen, or by the inspectors of large plants accustomed to such work, but in all cases these inspectors would be responsible to the Federal Department of Agriculture. It was the opinion of those present that the cost of this inspection should be paid by the owners of plants. Application must be made by the dairymen for such inspection and forms will be provided for that purpose. It is estimated that there are from 15,000 to 17,000 farmers in Quebec and Ontario besides several thousand in Western Canada, that now produce milk and cream for the United States market.

It is expected that the regulations on this Bill will be issued shortly which will enable this inspection to be made before late fall months. The early issuing of these regulations will allow Canadian dairymen to fix over stables, erect milk and ice houses to meet the regulations. The regulations will require all cattle to be healthy, and stables and dairies to score fifty points. Very many dairies in Canada can now meet the requirements of the regulations, but there may be some that cannot do and these will have time to renovate and clean up before the winter months. The regulations, it is expected, will not be more severe than those now imposed by our Canadian cities.

Send by the National Dairy Council of Canada.

Ormstown Show 1927

THE Ormstown Show this year was the largest in the history of the organization, there being a total of over thirty-eight hundred individuals entered. Probably the most notable increases in numbers of stock were in the Ayrshire, Jersey and Horse classes. Here we find increases of approximately one hundred head in each of these three groups. So many animals were present that the housing capacity was taxed to the utmost, every nook and corner which offered any shelter being made use of. With prospects for a show as large as experienced this year, there will in all probability be increased accommodation provided for coming years.

The weather was typical of that usually experienced at this show, but in spite of rain on the opening night and the morning of the second day, the arena was packed to overflowing on Wednesday night and an exceptionally large attendance was found all day Thursday.

The comparative entry figures for stock other than Poultry for the years 1926-'27 may be of interest and are as follows:

	1926	1927
Horses	381	486
Holsteins	178	181
Ayrshires	249	330
Jerseys	46	149
Herefords	12	25
French Canadians	83	94
Sheep	172	225
Swine	141	156

THE JUDGING BY BREEDS

Ayrshires.

The Ayrshire show was probably the outstanding feature of the cattle exhibits this year, there being over three hundred head entered, resulting in large classes all the way through. The stock on the whole were of excellent quality and the competition keen in most of the groups. Probably the outstanding classes were the aged bulls and aged cows. Though representing several types, all were high class animals, and to place them to the satisfaction of all was no easy task.

The first prize winnings in each class are as follows:

FIRST PRIZE AYRSHIRES

Bulls.

Aged Bull—E. C. Budge on Penhurst Mischief Star.
2 yr. old Bull—R. R. Ness & Sons on Beauty's Master.
Sr. Yearling Bull—W. W. Skinner on Bois de la Roche Marquis.
Jr. Yearling Bull—Peter Dickson & Son on Blossom Lodge Lucky Sir John.
Sr. Bull Calves—R. R. Ness & Sons on Burnside Masterstroke.
Jr. Bull Calves—E. C. Budge on Star Boy.
Sr. & Grand Champion—E. C. Budge on Penhurst Mischief Star.
Jr. Champion—W. W. Skinner on Bois de la Roche Marquis.

Dry Cows

Aged Cow—W. W. Skinner on Ridgehaugh Sprightly 2nd.
2 yr. old Heifer—R. R. Ness on Honeyholm Lady Jean.
Sr. Yearling Heifer—Gilbert McMillan on Alderwood Betty.
Jr. Yearling Heifers—E. C. Budge on Mable 3rd.
Sr. Heifer Calf—W. W. Skinner on Bois de la Roche Sprightly.
Jr. Heifer Calf—W. W. Skinner.

Cows in Milk

Cows 5 yrs. and over—W. W. Skinner on Jessie of Ellersie.
4 yr. old Cows—McMillan, G. on Springburn Lady Cherry.
3 yr. old Cows—Budge, E. C. on Thorncroft Trinket.
2 yr. old Heifer—W. W. Skinner on Bois de la Roche Colombe 5th.
Junior R. O. P.—R. R. Ness on Bar Flourish.
Senior R. O. P.—R. R. Ness on Burnside Blossom Andrietta.
Sr. and Grand Champion—R. R. Ness on Burnside Blossom Andrietta.
Jr. Champion—E. C. Budge on Thorncroft Mabel.

Holsteins.

The Holstein Show was a very strong one with keen competition between the herds of J. W. Innes, D. A. McPhee and Raymondale Farms. The outstanding class of this breed was probably the aged bulls in which the entries of McPhee and Innes met for the first time. The ringside opinion was about equally divided between these two animals, the latter a winner at the National Dairy Show 1926, the other a well known Canadian show bull. Judge Rettle, after a good deal of deliberation, decided on the Innes entry. This bull had in his favor an exceptionally well proportioned and strong quarter while his rival was perhaps showing a bit stronger in the back.

The top animals in all of the classes were outstanding individuals in perfect bloom and well shown. The bulk of the winnings went to the Innes herd with Raymondale Farms in close second.

The first prize winners and their exhibitors are as follows:

FIRST PRIZE HOLSTEINS

Bulls

Aged Bull—J. W. Innes on Sir Abbekerk Sylvian Lad.
2 yr. old Bull—Raymondale Farms on Oaklea perfection Pontiac.
Sr. Yearling Bull—J. W. Innes on Major Mercena Sylvius.
Jr. Yearling Bull—J. W. Innes on Sir Posch Jermina.
Sr. Bull Calf—Raymondale Farms on Brookholm Inka 13th.
Jr. Bull Calf—Salley, P. J. on Brookholm Banostine Jewel.
Sr. & Grand Champion—J. W. Innes on Sir Abbekerk Sylvian Lad.
Jr. Champion—J. W. Innes on Major Mercena Sylvius.

Dry Cows

Aged Cow—D. A. McPhee on Dora Walker.
2 yr. old Heifer—J. W. Innes on Aaggie Sylvia 3rd.
Sr. Yearling Heifer—Raymondale Farms on Raymondale Fobes Inka.
Jr. Yearling Heifer—J. W. Innes on Winona Lenox DeKol.
Sr. Heifer Calves—J. W. Innes on City View Aaggie Korndyke.
Jr. Heifer Calves—J. W. Innes on Dixie Meg Posch.

Cows in Milk

Cow 5 yrs. old & over—J. W. Innes on Hilda Alcartra DeKol.
4 yr. old Cow—Raymondale Farms on Patsie Keyes Colantha.
3 yr. old Cow—Raymondale Farms on Sally Francy.
2 yr. old Heifer—Raymondale Farms on Pietje Echo Jewel.
Sr. and Grand Champion—McPhee, D. A. on Dora Walker.

SUMMARY OF 1st, 2nd, 3rd, PLACING AND CHAMPIONSHIP AWARDS, DAIRY CATTLE ORMSTOWN SHOW — 1927.

EXHIBITOR.	1st.		2nd.		3rd.		Cham-pions	
	Male	Female	Male	Female	Male	Female	Male	Female
AYRSHIRES.								
Skinner, W. W.	1	5	1	1	1	1	1	1
Budge, E. C.	2	2	2	1	3	1	1	1
Ness, R. R.	2	1	3					
Logan, J. W.			4		2			
Dickson, P.	1		1	1				
McMillan, G.		1						
Moe, Chas.			1					
Montgomery, G. H.			1		1			
Braeburn Farm					1			
Stewart,			1					
Clark, Wm.				1				
Henderson,					1			
Ness, D. T.					1			
Brownlee, R. T.					1			
HOLSTEINS.								
Innes, J. W.	3	5	2	2	1	3	2	1
Raymondale Farm	2	3	4	1	2			
McPhee, D. A.		1	2	3	1	2		1
Salley, P. J.	1							
Helm Bros.			1			1		
Sangster,					1	1		
Graham, H.			1					
Elder, A.					1			
JERSEYS.								
Ruiter, Chas.	4	2		5		1	1	1
Pringle, J.	1	5	1	1	2	2	1	1
Maxwell Estate		1	3	1		2		
Kerr, K.	1					1		
Snaden, H. J.			1		1		2	

Jr. Champion—J. W. Innes on Winona Lenox DeKol.

Jerseys.

With an increase of some one hundred head over the 1926 entries, the Jersey show was a strong one. The Ruiter herd took most of the top prizes in the male classes while Pringle won the majority of the female firsts. Maxwell Estate put up a good showing and are particularly proud of their winnings since practically all of the stock shown by them represent their own breeding.

The detail of the first prize winnings are as follows:

FIRST PRIZE JERSEYS

Bulls

Aged Bull—Pringle on Rower's Golden Maids Prince.
2 yr. old Bull—Ruiter on Brampton's Foreward Volunteer.
Sr. Yearling Bull—Ruiter on Bontillieres Sweep.
Jr. Yearling Bull—Kerr on Brampton Spotted Boy.
Sr. Bull Calf—Ruiter on Pinehurst Winston Noble.
Jr. Bull Calf—Ruiter on Pinehurst Dainty Volunteer.
Sr. and Grand Champion—Pringle on Rower's Golden Maids Prince.
Jr. Champion—Ruiter on Pinehurst Winston Noble.

Dry Cows

Cows 3 yrs. and over—Maxwellton Farms—on Three Fern's Beauty.
2 yr. old cow—Pringle on Starlight's Fluffy.
Sr. Yearling Heifer—Ruiter on King's Pinehurst Mandy.
Jr. Yearling Heifer—Maxwellton Farms on Max Sultan's Helen.
Sr. Heifer Calf—Pringle on Bowlina's Oxford Fern.
Jr. Heifer Calf—Pringle.

Cows in Milk

4 yr. old Cow—Pringle on Rower's Golden Lass.
3 yr. old Cow—Ruiter on King's Pinehurst Elf.
2 yr. old Heifer—Pringle on Brampton Fern Marie.
Sr. and Grand Champion—Pringle on Starlight's Fluffy.
Junior Champion—Ruiter.

A summary of the winnings in the dairy cattle classes is given in the accompanying table which shows the number of first, second, third prize and championship ribbons awarded to the various breeders in their respective breeds.

Horses, Sheep and Swine.

As previously noted there were marked increases in the number of horses entered this year. The draft horses on the whole were in better fit than in 1926, due probably to the more favorable conditions on the farms. Last year's show came at a time when most of the draft stock had been in harness right up to the show time.

The bulk of the winnings in the Clydesdale classes went to R. R. Ness and Sons and D. A. McCormick.

The sheep show, in the opinion of Mr. Gardhouse, the judge, was about on a par with that of previous years. June at best is not an ideal time to show sheep, and this, combined with the wet weather of this spring, no doubt had some influence on the condition of the stock in the pens. However, there were some increases in total entry numbers and on the whole they made a very satisfactory showing.

In the swine show there was perhaps not the same improvement noted that was seen in some of the other classes of stock. While there were some very fine individuals present, there were also a number which were hardly in bloom. In fact, quite a number of the animals seemed to be rather gaunt, in which condition of course they could not appear to advantage. The winnings were pretty evenly distributed amongst the breeders entered.

A summary of the first, second and third prize ribbons awarded in the Clydesdale classes and in three breeds of swine are given in the table following:

(Continued on page VI)

STALLIONS INSPECTED AND RECOMMENDED BY THE QUEBEC DEPARTMENT OF AGRICULTURE FOR THE YEARS 1927

L'Islet.				Montmorency.				Québec.						
A. Anctil,	St-Pamphile.	King.	Percheron.	1	O. Vézina,	St-Pierre.	Foch,	Percheron.	1	J. Couture,	Loretteville.	Elégant,	Canadian.	1
T. Caron,	Village-des-Aulnaies.	Gregory,	Belgian.	1	U. Laberge,	L'Ange-Gardien.	Julien du C. R.,	Canadian.	1	J. Couture,	Loretteville.	Elégant II,	Canadian.	2
L. J. Bois,	St-Jean-Port-Joli.	Favori,	Percheron.	1	R. Côté,	L'Ange-Gardien.	Maxime,	Percheron.	2	C. E. Parent,	Charlesbourg-ouest.	Elm Vale Pride,	Clyde.	1
L. J. Bois,	St-Jean-Port-Joli.	Hasard de P. J.,	Percheron.	1	C. Tallon,	Château-Richer.	Pit,	Crossbred.	3	A. Bastien,	Québec.	Ensign Tige,	Standardbred.	1
					W. Côté,	Rivière-aux-Chiens.	Latin,	Percheron.	2	Ferme Expérimentale,	Cap Rouge.	Albert du C. R.,	Canadian.	1
										Ferme Expérimentale,	Cap Rouge.	Laurent,	Canadian.	1
										Ferme Expérimentale,	Cap Rouge.	Luc,	Canadian.	1
										Ferme Expérimentale,	Cap Rouge.	Léo,	Canadian.	1
										Ferme Expérimentale,	Cap Rouge.	Jeff,	Canadian.	2
										Ferme Expérimentale,	Cap Rouge.	Keller,	Crossbred.	3
Lotbinière.				Montréal.				Richelieu.						
A. St-Onge,	Deschailons.	Jean Bertini,	Crossbred.	3	A. Trottier,	1091 Dorchester-Est.	Young Man,	Standardbred.	2	J. Parent,	St-Aimé.	Tom,	Crossbred.	3
F. Bernier,	Lotbinière.	Paul Bazola,	Canadian.	1						P. Daigle,	St-Louis-de-Bonne-	Brillant,	Percheron.	1
H. Bergeron,	Lotbinière.	Harry,	Crossbred.	3	Napierville.					F. Lemoine,	Ste-Victoire.	L'Oiseau d'Or,	Crossbred.	3
S. Desrochers,	Ste-Croix.	Prince Mégantic,	Canadian.	1	E. Grégoire,	Napierville.	Colbert,	Percheron.	2	P. Ethier,	Ste-Victoire.	Pierre,	Crossbred.	3
A. Bergeron,	St-Agapit.	Brow Jolap,	Percheron.	1	C. Guay,	Napierville.	Bob,	Crossbred.	3	L. Ethier,	Ste-Victoire.	Belgian,	Standardbred.	2
M. A. Powers,	St-Sylvestre.	Indigo,	Percheron.	1	Nicolet.					C. H. Tucker,	St-Robert.	Woodrow.	Percheron.	1
G. Nadeau,	St-Sylvestre.	Prince,	Crossbred.	3	M. Bernier,	Gentilly.	Frank Attila,	Canadian.	1	I. O. Duhamel,	Sorel.	Direct Pointer,	Crossbred.	3
J. A. Morin,	Parkhurst.	Champlain,	Crossbred.	3	J. W. Beauchêne,	St-Pierre-les-Becquets.	Bronze Frisco,	Standardbred.	1	A. Duhamel,	St-Roch.	Coq,	Crossbred.	3
O. Laflamme,	Ste-Agathe.	Brompton Boy,	Belgian.	1	P. McDonald,	Ste-Eulalie.	Savard,	Crossbred.	3	Richmond.				
F. Robitaille,	Ste-Agathe.	Prince,	Crossbred.	3	U. Arsenault,	St-Wenceslas.	Gris,	Crossbred.	3	C. H. Cleveland,	Danville.	Peter Graves,	Standardbred.	2
J. Richard,	Ste-Emélie.	Ismaël du C. R.	Canadian.	1	J. O'Grady,	Ste-Brigitte.	Tom,	Crossbred.	3	O. M. J. Ingall,	Danville.	Royal Purple,	Standardbred.	1
					E. Roy,	Ste-Perpétue.	Galopin II,	Percheron.	1	L. C. Morrill,	Asbestos.	Perfection 2nd,	Percheron.	1
Maskinongé.					A. Lemire,	St-Léonard.	Rasta jr,	Percheron.	2	J. Haslett,	Richmond.	Abo,	Percheron.	1
E. Pratte,	Louiseville.	Louis Tell,	Crossbred.	3	J. A. Belisle,	Grand St-Esprit.	Bercini,	Standardbred.	1	J. Haslett,	Richmond.	Mar Cule,	Percheron.	1
G. Desrosiers,	Ste-Ursule.	Raban,	Crossbred.	3	O. Labarre,	Grand St-Esprit.	Prosper Day,	Percheron.	1	J. Haslett,	Richmond.	Cairnbrogie Stemp,	Clyde.	1
A. Lemire,	Maskinongé.	Frank,	Crossbred.	3	G. Pellerin,	St-Grégoire.	Horatio,	Percheron.	1	J. Haslett,	Richmond.	Prince Charmant,	Canadian.	1
Z. Mailloux,	St-Ignace-du-Lac.	Phillip,	Percheron.	1	A. Forest,	St-Grégoire.	Bob Weakly,	Standardbred.	1	Willy Couture,	Bromptonville.	Philippe,	Percheron.	1
J. Rinfret,	Maskinongé.	Mercure,	Percheron.	1	J. E. Proulx,	Nicolet.	Banker,	Crossbred.	3	Rimouski.				
Mégantic.					O. Provencher,	St-Sylvestre.	Willie,	Crossbred.	3	P. J. Desrosiers,	Pte-au-Père.	Bold,	Crossbred.	3
C. Robertson,	Leeds Village.	Silvercrest,	Percheron.	1	Papineau.					F. Desjardins,	St-Anaclet.	Poney,	Crossbred.	3
J. Dumas,	Ste-Julie.	Daniel,	Crossbred.	3	G. Laniel,	St-André-Avellin.	Grégoire,	Crossbred.	3	A. Coulombe,	St-Fabien.	Tom,	Crossbred.	3
A. Bégin,	Richardville.	Arn. Monogram,	Percheron.	1	A. Bisson,	St-Emile-Suffolk.	Punch,	Crossbred.	3	J. Chénard,	Ste-Cécile-du-Bic.	Brillant,	Percheron.	1
E. Fortier,	St-Ferdinand.	King,	Percheron.	1	A. Gatién,	St-André-Avellin.	Junot,	Percheron.	1	J. Michaud,	Sacré-Coeur.	Billy Bone,	Belgian.	2
E. Tourigny,	Plessisville.	Maximar,	Belgian.	1	S. Arthurs,	Thurso.	Commodore,	Belgian.	2	Rouville.				
A. Poirier,	St-P.-Baptiste.	Compton Boy,	Canadian.	2	F. H. Berndt,	Thurso.	Relic,	Standardbred.	2	A. Halde,	Mont St-Hilaire.	Espoir,	Belgian.	2
E. Brunelle,	Ste-Sophie.	Brompton Kraft,	Belgian.	1	F. Nadon,	Buckingham.	Lambert,	Crossbred.	3	O. Giroux,	St-Césaire.	Pruno,	Percheron.	1
E. Brunelle,	Ste-Sophie.	Louis du C. R.,	Canadian.	1	F. Nadon,	Buckingham.	Koutactie,	Percheron.	1	O. Giroux,	St-Césaire.	Harpin,	Percheron.	2
Missisquoi					J. Conroy,	Blanche.	Gaston Gabrine,	Belgian.	1	H. Tétrault,	St-Mathias.	Raboiné,	Percheron.	1
S. Gauthier,	Farnham.	Farnham Swing,	Crossbred.	3	Pontiac.					D. Tétrault,	Mariville.	Pit,	Crossbred.	3
A. Hébert,	N.-Stanbridge.	Mackinley,	Belgian.	1	J. S. Dowe,	Beechgrove.	On Guard,	Clyde.	1	New Ayrshire Secretary				
T. Ouellet,	Frelighsburg.	Héros du C. R.	Canadian.	2	J. S. Dowe,	Beechgrove.	Destiny,	Clyde.	1	A T a recent meeting of the Executive Committee of the Ayrshire Breeders' Association the position of Secretary-Treasurer rendered vacant by the resignation of Mr. W. F. Stephen was offered to Mr. Frank Napier, now on the staff of the Breeders' Gazette in Chicago. Mr. Napier has accepted the offer and will assume his new duties about July 1st. Mr. Napier is no stranger to Canadian live stock men, as he was formerly live stock representative for the Canadian Countryman. He will be warmly welcomed back to Canada by his former wide circle of acquaintances and we look for the Ayrshire Association making rapid gains under his guidance.				
R. Boomhower,	Stanbridge-Est.	John Dewey,	Crossbred.	3	G. Fraser,	Beechgrove.	Galena Boy,	Percheron.	1					
D. Corriveau,	Pike River.	Jacques du C. R.,	Canadian.	1	G. Fraser,	Beechgrove.	Despot's Bride,	Clyde.	1					
A. Lafrance,	Pike River.	Lord Richelieu II,	Belgian.	1	J. H. Brown,	Shawville, r. r. 2.	Lousseau,	Canadian.	1					
E. Fontaine,	Dunham.	Burgess,	Standardbred.	1	J. A. Pennick,	Shawville.	Billy Bergen,	Standardbred.	1					
					P. Richardson,	Shawville.	Royal Range,	Clyde.	2					
					P. Cassidy,	Campbell's Bay.	Gentry de Forest,	Standardbred.	2					
					R. Labine,	Fort Coulonge.	Sir Marque,	Standardbred.	2					
					M. Belland,	Barry River.	Corbeau,	Crossbred.	3					
Montcalm.				Portneuf.										
A. Lapointe,	St-Liguori.	John,	Crossbred.	3	T. Robert,	Deschambault.	Isidore du C. R.,	Canadian.	1					
N. Allard,	St-Alexis.	Marquis,	Canadian.	1	F. Gauvin,	St-Raymond.	Tom,	Crossbred.	3					
P. Villemaire,	Ste-Julienne.	Javelot,	Canadian.	1	M. Boutet,	Lac Sergeant.	King du C. R.,	Canadian.	1					
N. Jean,	Ste-Julienne.	Crack,	Belgian.	1	L. Matto,	Neuville.	Marquis,	Percheron.	1					
					L. Matto,	Neuville.	Woodow,	Percheron.	1					
Montmagny.														
E. Vohl,	St-Pierre.	Pierrot,	Canadian.	1										
U. Fournier,	Cap St-Ignace.	Tom,	Crossbred.	3										
N. Fournier,	Cap St-Ignace.	Pronto,	Percheron.	1										

The Grading, Preparation and Sale of Vegetables

By W. J. Tawse, Horticultural Dept., Macdonald College.

SUCCESS or failure in vegetable gardening depends on the gardener's ability to give consumers what they want, when they want it and the way they want it. Briefly let us consider the eight rules of success:

1. Find out what the market wants in the way of varieties, grades and packages.
2. Produce quality vegetables.
3. Produce as cheaply as possible.
4. Use every care in maintaining quality during the marketing process.
5. Market efficiently—more efficiently than competitors.
6. Prepare produce attractively for market.
7. Build up a reputation for good quality and dependable pack.
8. Watch the Southern plantings and Canadian markets.

The consumers want certain varieties, and it is important that we grow what they want. Growers cannot afford to run experimental, testing and introducing stations. Why pay the government to do this and then run another on your farm? Quebec wants pink tomatoes and red onions. Do you grow the best variety and smoothest strain? Then, too, buyers are looking for smaller sizes in squash, cabbage and other vegetables, as their customers live mostly in apartments where there are no storage facilities like the old-fashioned earth-floored cellar, and everything has to be used as it is bought. No one wants to eat cabbage every day, and smaller varieties like Golden Acre and Copenhagen cabbage are wanted for this apartment trade. Kitchenette hubbards are preferred to the old large-sized warted types; and medium white potatoes command a premium over the pink varieties or large rough samples.

It pays to purchase the right varieties and the best strains. Erie cauliflower growers in New York State test samples of seed the year before they purchase their association requirements. Several seed houses now sell tested strains, and nearly every seedsman stamps the germination test on his seed. Watch the newest strains. Golden Plume (Wonderful) celery has been the winning variety of the Celery King Contest at the Annual Convention of the Vegetable Growers' Association of America held this year in Cleveland, Ohio, and won by Mr. James Little of St. Catharines, Ont., while another Canadian grower, Mr. G. Y. Bycroft of London took the second prize.

PRODUCE QUALITY VEGETABLES:

The buyer not only wants a good variety, that is suitable for the market, but he wants fine specimens of that variety. Plan your production to reduce to a minimum the small inferior fruit, spindly asparagus, bitter lettuce and woody, coarse celery and carrots. Bear in mind it costs just as much if not more to harvest, grade, pack and market inferior produce as it does to handle high quality. The market will always pay for quality, and your reputation is a valuable salesman.

PRODUCE CHEAPLY:

Produce as cheaply as possible and study your costs. Many growers who keep an account of their operating expenses are surprised at their figures at the end of the year. With these in mind they have eliminated certain practices and sometimes crops.

Attend the national conventions and look over the labor-saving machines. Garden tractors, gang seeders, three row cultivators, vegetable washers and tying machines are all helpful to eliminate hand work and lower the costs. I have been surprised to see the modern equipment on many vegetable gardens in the various States. They have also studied their fertilizer requirements and know that certain crops will not tolerate acidity. Do not lessen your profits by failing to use quick forms of available nitrogen, but do not apply sulphate of ammonia on small onions, celery and asparagus, for instance, if you want to produce fine produce, as these will not tolerate acidity. On the other hand, however, sulphate of ammonia is the best form for potatoes, as the slight acidity aids in the control of common scab which detracts so much from the appearance of the tubers.

MAINTAIN QUALITY:

Next use care in maintaining quality during the marketing process. Plan a succession of plantings to maintain a supply, and attend to the growth of each, especially later in the season to hold the quality. Remember that the buyer wants it in prime

condition. David Stone Kelsey of Springfield, Mass., the famous corn grower, never permits an employee to strip an ear of corn or pile one bag on the other after picking until they have cooled. He has established a name for supreme quality, as he never lets his grocer sell corn left from the previous day. He picks it up in the morning, when he delivers the next day's supply, and takes it home for his cows. The secret of marketing any crop is to grow the best strains of a variety and pick them at the proper time. Quick growth ensures tender, crisp, succulent produce which, if properly handled and kept fresh, attracts buyers.

FLAVOR:

There are very few market gardeners who appreciate their greatest asset, the quality, and the wish it creates in the purchaser for more of a well-grown, quickly handled, and finely prepared vegetable. Flavor has been lost sight of by commercial growers and is only appreciated by the suburban gardener. Few know for instance the sweetness and quality of freshly-gathered corn. It is only in the last few years that the restaurants and hotels have commenced to pay special attention to the serving of vegetables, and there are many interesting articles in their trade magazines on preserving the flavor and quality of vegetables to tempt their patrons to eat more.



"Standard Box, Farm Produce" used for all vegetables in the New England States.

High class hotels and restaurants of our large cities no longer purchase fresh string beans and green peas, as they cannot secure competent labor to prepare such vegetables, and are at a loss to maintain a sufficient supply of the grade and quality required. We find they have to use canned products put up in canning centres where the growers use the best seed obtainable, often supplied by the canner, and where even the culture of the crop and kinds of fertilizer are looked after by field men from the companies. Cannery report a tremendous increase in the use of their goods, and growers producing the product are finding it a very profitable business.

It takes a very keen grower to make money on the wholesale market, as generally he only receives $\frac{1}{4}$ of the ultimate sales price. Some day an enterprising group of market gardeners will handle their vegetable products as the dairies and bakeries do theirs. They will get their product to the table in as fresh and alluring condition as other foods. This is where some of the best restaurants are educating the eating public, and such national advertising as Aylmer Soups, Campbells and Hienz products, etc., are creating an increased desire for fresh, fine-flavored vegetables. A further and a stronger reason why gardeners should make direct contacts with the consumer is the necessity of bringing their fresh-gathered, stringless, full-of-flavor vegetables to the notice of the consumer in contrast to that from the refrigerator cars.

A great many splendid growers produce a quality product but are poor salesmen, as they regularly haul their loads to the city markets, dump them mountain high on the curb and then at the end of

the week wonder why returns are low. Why cannot the vegetable producers in this country co-operate and sell through a central selling agency where the salesmen devote their whole time to marketing and have no crops or help to worry about?

WATCH YOUR COMPETITORS' PACK:

Market efficiently, and watch the pack and methods of competitors. Wholesale houses do not like local supplies because they come in loose rather than properly packed in containers. A few cents spent on labels and proper packages will be more than repaid. Quebec apple growers a few years ago never thought of boxes, yet to-day they are turning to them and even beginning to use a half box for apartment trade. How many market their cabbage in crates to meet competitors or use new, clean onion sacks for their onions? The writer has been greatly impressed on the New England, Rochester, Cleveland and Detroit markets with the uniform packages used and the neatness of the packs.

The great success of the road-side market has clearly demonstrated the value of directly meeting the consumer, and in many cities we find grower-owned and managed markets. The St. Louis gardeners bought their land for \$145,000 in 1915 and built their first buildings at a cost of \$54,337, and the venture paid so well that they built a new market in 1923 at a cost of \$151,000. They charge their members an annual rental, and each man's space is available up to a certain hour each morning, when it may be rented to other growers. The success of your selling depends on a suitable market, where the produce can be kept fresh and the grower is protected during bad weather. Detroit has a municipal market which is a model for other cities; every grower has his name with his address above his space, which is sufficient for two trucks. I noted many there from places sixty to eighty miles away. In wet or cold weather they pull down the steel roller doors and are very comfortable.

Produce should be prepared attractively after you have grown a fine sample. Celery and asparagus are very attractive when tied with vegetable tapes. The red tape stands out and looks better to the buyer than common string. Proper washing removes the soil, and careful trimming improves the appearance. Remember green crowned carrots are not attractive any more than are greened potatoes. Proper hilling will protect the crop and improve the appearance and quality.

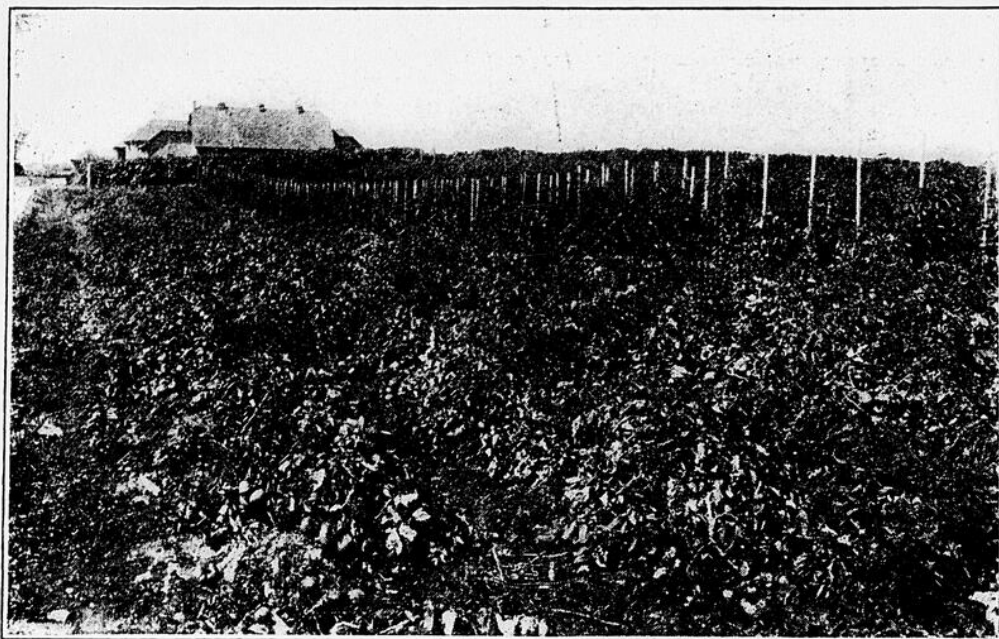
Plan to build a reputation for good quality and a dependable pack. The writer believes many reputations are made by building a compost pile. Never market inferior produce. It pays to let it rot for manure. Grading saves the consumer time and helps the grocer's sales. It enables the buyer to procure just what is wanted and no more. Purchasing agents for large retailers and chain stores cannot buy highly perishable products from the growers because of the lack of grades and standard packages. One buyer I talked to at the convention in Cleveland bought for a chain of 12,000 stores, and used as an example of a graded commodity 15,000 cars of potatoes. It is easy to buy standardized products, but very difficult to handle ungraded perishables in bulk.

Grading lowers the cost of marketing by reducing to a minimum the quantity that must be handled or stored. It removes the culls, dirt, spoiled and useless specimens, which the consumer will not buy and the buyer has to allow for in purchasing his products.

Consumers want more quality products, and to increase quality production requires that the premium be placed upon quality. This is not possible without accurate grading and standardizing.

Build a reputation for grade and pack. Use clean containers and try careful grading on the same plan as your competitors.

Then study the crop reports. Remember that the earliness and success of the Southern plantings will affect your plans. If they freeze, hurry your early stuff and watch your plantings, as a light crop prospect in early potatoes for instance will result in high prices here. Onion growers should study the supply to the south of us and the crop in Spain. It also pays to study the requirements of your local markets for certain crops, or a section of the trade may want well-graded supplies in a special container.



Tomatoes at Macdonald College—early on stakes, main crop on the ground.

Successful marketing begins with successful growing, and your choice of varieties is a very important one. You may supply a large city or a series of towns or summer resorts, but always remember that your greatest asset is the original flavor in the fresh-gathered vegetable. Concentrate your energies on it and plan to save it. Your business depends on acquainting the consumer with the wonderful health-giving properties of vegetables, and then by a regular dependable service supplying the demand created.

The old-fashioned market garden with its numerous crops is rapidly giving way to the specialized truck farm on which a comparatively small number of individual crops are grown on an extensive scale. The whole trend of the vegetable industry during the last ten or twelve years has been towards specialization and the production of important

crops on a large scale in certain rather well-defined locations. The concentration of population in the large industrial centres has to a great degree eliminated the personal equation between producer and consumer, and has more definitely commercialized the production and handling of vegetables on a large scale. The trends have also been toward reduction in the number of varieties grown, greater uniformity in production practices, and the establishment of definite standards of grade and pack to meet the market requirements. These changes have brought closer co-operation among the growers and a more definite working understanding between the growers and the dealers. Possibly no change will mark a greater advance in vegetable marketing than co-operation with the dealers, as they know what the consumer wants and the way it should be packed for their trade.

PLANT DISEASE POINTERS

By Dr. B. T. Dickson, Macdonald College.

Late Blight of Potato.

THERE are two blights of potato, known according to the part of the potato growing season in which they mainly occur. Early blight is found mostly in July; the spots which it causes are dry and brown, and in each spot concentric rings resulting from the growth of the fungus can usually be seen. The spots are not large but they may be numerous and they may run together, thus involving considerable areas of the foliage, and thereby reducing the yield, since a good crop depends upon healthy foliage.

Late blight is most noticeable in August and September, as a rule, but in a cool wet summer it will show up in July. In any case it is sure to be present in July even if not in noticeable amount, and it is from July infections that the later season development in quantity occurs. The earliest spots are on lower leaves or stems and are first water-soaked and then dark brown in colour. If the weather turns dry the spots dry up, but if it is cool and wet they increase in size and the fungus begins to grow out from the leaf surface on the under side, giving it a mildewed appearance. This pale-violet, mouldy effect is due to the presence of hundreds of branches of the fungus, each bearing many spores. When splashed by rain or dashed by wind onto other leaves, the spores germinate, each giving rise to eight smaller spores which in turn infect the new foliage in an hour or two. If the weather continues cool and wet the whole plant becomes infected and soon is reduced to an ill-smelling mass. This is so characteristic that one familiar with the odour can smell a badly diseased field at a considerable distance. Growers not familiar with the disease and its cause usually say that the wet weather is the cause, thus thinking that nothing can be done about it. The weather is certainly the factor which determines whether it is to be a blight year or not, for in most years when the rainfall for June, July and August is above the average and the temperature below the average those years are late blight years. At the time of writing, this season is promising trouble and growers are urged to look to their spraying program in order to safeguard the crop.

The disease is usually planted in the field in tubers which had small, and not easily seen, lesions containing the fungus in a dormant or resting state. As the young shoots develop some become infected and these then become the centres from which the disease spreads during blight seasons. The potato foliage appears to be most susceptible to attack from about blossom time onwards. It is therefore best to begin control just prior to blossoming; in fact, it is often recommended that control measures begin when the plants are 8 to 10 inches high.

The disease can be held in check by the thorough use of Bordeaux mixture, beginning about mid-July and spraying every two weeks to the middle of September. Much depends on weather, but one rule is absolutely essential to follow—*spray before rain*—it is too late after, for in an hour or so of rain the new infections have been established. It follows that since the coating of Bordeaux is a protective coating it must be put on thoroughly and must cover all the foliage on both sides. The new foliage developing in the interval between sprayings will be unprotected until the next spray and is therefore liable to attack. The Bordeaux used may be either a 6-4-40, 5-4-40 or 4-4-40 mixture, and it will require about 50 gallons per acre for the first spray, 75 gallons for the second and probably 100 gallons per acre for the remainder.

Later in the season a short account will be given of tuber rot, but it must be noted here that tuber rot starts from spores falling from the foliage. If there are no spores on the leaves there will be no tuber rot from late blight. It is therefore essential to control the disease on the foliage not only to obtain a good yield but to be able to keep that yield in storage later.

Blackleg of potato.

Plants affected with blackleg are prominent in July, especially in wet soil. The disease is caused by bacteria which multiply at such a tremendous rate under moist and fairly warm conditions that they plug up the conducting tissues in the potato stems. The upper part therefore suffers from lack of water and as a consequence ceases to grow, turns pale green or yellowish and shows signs of wilting. The bacteria gradually kill the whole tissue of the

base of the stem, turning it black and soft. A gentle tug at the top of such a plant will pull away the part above ground. If young potatoes are forming at the time of attack, the bacteria can pass along the underground stems of the potatoes and enter the young tubers at the stem end. There they may set up a soft tuber rot and in course of time infect the whole hill. Plants affected with blackleg should be entirely removed and destroyed since the bacteria can live over winter in decaying parts in the soil. Recent work in Minnesota shows that the seed-corn maggot is an efficient carrier and distributor of the bacteria causing blackleg. The larvae inoculate the seed pieces at the same time that they are living upon the tissues. The eggs are deposited on or in soil near the seed pieces or young plants. If there are no blackleg bacteria in the soil the hatched larvae cannot carry them to the seed piece and hence the importance of removing completely diseased plants when they occur.

Fire blight of apple.

This is another bacterial disease depending largely upon insects and rain for the spread of the bacteria. They overwinter in cankers on susceptible trees like Alexander, Yellow Transparent, Fameuse and Wealthy. When the humidity is high and the temperature around 65°F to 85°F the bacteria multiply excessively and ooze out of the cankers in sweetish, sticky drops which are visited by insects. Under such humidity and temperature conditions growth of the apple is succulent and succulent parts are very susceptible. Rain and aphids wash or carry the bacteria to twigs and set up twig blight. Pollinating insects carry the bacteria to the blossom thus setting up blossom blight. The central idea is therefore the elimination of the "hold-over" cankers, for if the source of the bacteria be removed the spread of the disease is effectually checked.

Oat smuts.

The weather at seeding this year was such that it is probable there will be more smut in oats than usual, and records are already coming in of very heavy infection in oats to the south, notably the Carolinas. Cool wet weather favours the growth of the smut fungus, which can attack the seedling oat plant only in its early stages of development. If the grain is protected by a coat of disinfectant dust or if it has been treated with formalin there is usually a high degree of control. Experiments with hull-less oats in the department of Plant Pathology at Macdonald College have shown a reduction from 50% smut to almost none by the use of copper carbonate dust, etc. It pays to disinfect grain, especially in such seasons as this.

July Among the Borders and on the Lawns

By M. H. Howitt

THE cool greens of summer have replaced the spring gaiety of color, and the well placed shade trees on the lawn will be much appreciated. Even the smallest of pools or water pieces proves gratifying, and nature seems to assure us that the spring rush is over. Consequently the garden items this month deal with the general routine of upkeep only. Although the weather is sometimes quite contrary, one must expect a dry spell this month and, therefore, there must be no slacking in the use of the hoe. Conserve the moisture and very little watering will be required.

The spring flowering shrubs will have finished blooming and may be pruned. All they require is a thinning consisting of the removal of the oldest and weakest wood and crossing branches. These shrubs form their flower buds for the following spring soon after blooming, so the pruning should not be delayed too long for best results. Do not prune, however, for pruning's sake, as most shrubs with the exception of the mock orange (which soon becomes very dense) will do very well naturally. By all means avoid shearing the top or sides, and remove the pruned branches at a joint well inside the mass or at the surface of the ground. One of the worst practices is removing the lower branches and exposing the main limbs. Shrubs will become "leggy" rapidly enough under natural conditions. Shrubs that are growing in semi-shaded places will benefit from fairly severe cutting back to increase branching.

Remove all forming seed heads as soon as the blossoms have fallen. This will conserve the vitality of the shrubs and improve their appearance. This applies to perennials and annuals as well; many will flower again if the flower remains are promptly removed. If it is desirable to save seed, select the

strongest growing specimens and take the seed from them. A very few will do and the remainder may be kept tidy. Better still, grow a number of plants for the purpose in a small nursery and keep the ornamental garden shipshape.

Many perennials become unsightly after blooming and must be cut down. This may leave gaps and the wise gardener will have planted a certain number of annuals to help to fill in.

Watch out for and remove the sucker growth of your roses. These suckers spring up below the graft or bud and will eventually sap the strength from and kill the desirable variety. Suckers usually have more leaflets to the leaf than the rose growth, which usually consists of five. There are exceptions, however.

Rambler roses will also need attention after flowering. Thin out the old, weak wood and select the best of the newer growths and tie them up. Allow each one plenty of room.

July is a good month for garden construction and a certain amount of planning. Lawn areas to be seeded in the fall may be graded and the surface thoroughly worked over and prepared. Thorough preparation is the basis for successful planting and later growth, but too often gardeners are content to carry on with last minute or no preparation. Provided the soil is loamy and reasonably rich this will do well nine cases out of ten, but if the conditions are at all adverse, preparation well ahead of time pays in the long run. In the very rocky or filled land where a minimum amount of digging is desirable, or to keep down the expense of preparing a bed, holes of a sufficient size may be dug and the soil in them may be thoroughly prepared.

Plan to have a small lily pool, flagstone walk, or rock garden and construct them at this time. Select and place simple pieces of garden furniture. The

centre of the lawn, however, is the wrong situation. Rather arrange them at the ends or sides, and the more formal or prominent pieces on some kind of garden axis. Arches for climbing vines or roses are especially desirable and these should never be placed except on a definite garden axis or path.

If your bearded iris have commenced to crowd and the rhizomes (rootstocks) are piling up, they should be renovated. This month will do nicely, although they may be planted later as well. Dig up the crowding plants, select the strongest growth and discard the remainder. Divide these large pieces before replanting into individual rhizomes, each with a fan of leaves. These are commonly known as standard divisions. Enrich the soil with a sprinkling of bone meal and replace the single divisions at irregular intervals of eight to ten inches. This will be close enough unless very quick results are desired. At this distance the plants will fill in nicely and not crowd too quickly again. Do not plant the iris too deeply as the rhizome must be partly exposed to the sunlight for best results. For details of planting of both groups of Iris (bearded or beardless) see last year's article in the Journal for this month.

Window box plants will have made some growth and require special attention by way of watering, etc. As they are usually set in exposed sunny positions, they must be watered frequently. In order to ensure sufficient moisture at all times, twice a day, forenoon and afternoon will not be too much. Remove all wilted flowers and leaves to keep the plants trim. Towards the end of the month apply a little nourishment as the plants will have absorbed a good deal of the original food supply. Obtain a small quantity of a complete fertilizer from your seedsman and apply according to the directions on the package.

satisfied that their alfalfa will behave well.

As we all know, alfalfa being a leguminous plant endowed with a deep rooted system, the soil on which it grows derives a double benefit from its culture, a physical improvement first, thanks to the penetrating action of the roots; a good supply of nitrogen secondly, equivalent to about the price of a ton of a commercial fertilizer per acre.

It is admitted nowadays that on a soil which is set aside for the first time to that culture, it is necessary to inoculate the seed with a certain bacteria culture before seeding, so that it can get nitrogen from the air. The Botanical Branch of the Department of Agriculture in Ottawa supplies to farmers, on demand, the necessary quantity of bacteria for that purpose.

In the Province of Quebec two varieties of alfalfa have proved to be adapted to our conditions, "Grimm", which is the preferred one, and the "Ontario Varigated" which enjoys almost the same good reputation.

Some farmers, very wisely, raise their own alfalfa seed. For that purpose, the practice consists in sowing the seed in rows having 30 to 36 inches distance from one another. It enables the farmer to give better care to the plants and thus secure a larger yield of seed.

Where it is not always easy to depend on a substantial crop of alfalfa hay, we suggest as a very convenient remedy a mixture of equivalent amounts of red clover and alfalfa, five pounds of each kind, plus two pounds of alsike and two pounds of timothy.

Or a mixture of fifteen pounds of alfalfa, three of timothy and two of alsike.

The Department of Agriculture of the Province of Quebec has 175 alfalfa demonstration fields, established in all parts of the Province. Every year new demonstration fields replace old ones. By going through the reports of the new fields, which are under our direct supervision, we see that in 1924 on 36 new fields the maximum yield was four tons, the minimum yield, one half ton (in Lower Quebec), and the average yield 2.6 tons.

In 1925, with 55 alfalfa fields, the maximum yield was 4.5 tons, the minimum $\frac{1}{2}$ ton and the average yield 2.5 tons.

In 1926, with 38 fields, the maximum yield was 5 tons, the minimum $\frac{3}{4}$ ton and the average yield 2.9 tons.

These fields were scattered in different parts of the Province; the results obtained were, as it could be expected, variable, but nevertheless they were good in the majority of cases. The researches undertaken by the Department convince us once more that the great region of Montreal, the heart of our hay industry, is the most favorable locality for alfalfa culture in the Province of Quebec and that it is precisely where it is to be wished that the farmers adopt alfalfa instead of timothy, for the great benefit of the milk industry.

Getting money is not all a man's business; to cultivate kindness is a valuable part of the business of life.—S. Johnson.

Is Alfalfa Grown Profitably in Quebec ?

By J. R. Rouso, Dept. of Agric., Quebec.

LET us establish once and for all the principle that alfalfa has about the same chances of growing successfully wherever red clover thrives well; it is largely a matter of care to secure good results with this kind of culture.

Considering its feeding value as a forage crop, which is the most important factor to analyze from the outset, we find alfalfa standing at the head of all grasses and cereals. It produces the largest yield of dry matter per ton; it has over twice as much of digestible protein as its sister leguminous plant, and over three times as much of that substance compared to corn, being however on the same level with corn as far as its total digestible nutrient is concerned.

Now, when it comes to timothy hay, the comparison is so decidedly in favor of alfalfa that it seems superfluous to pass any remark about it. Suffice to say that alfalfa is nine times richer in protein than timothy hay, which ought sooner or later to be supplemented by the queen of all the grasses, alfalfa.

On the basis of its comparative commercial value among the feeding stuffs, we must yield again to its superiority over any other kind of feed, its comparative nutrient value being rated as the highest.

Other forage crops might produce larger yields per acre, but it is very improbable that they could surpass alfalfa for the richness of concentrated protein and digestible matters per ton given.

So valuable indeed is alfalfa hay on the farm that the custom of wintering milk cows on a ration of alfalfa hay and corn silage, without the addition of any grain, is spreading rapidly in districts renowned for their milk production, just because the practice has proved to be a success from an economic and accommodating standpoint, a correct thing after all, considering that alfalfa is an almost complete ration by itself.

In the western regions of the United States, the fattening industry of cattle and sheep "has been revolutionized" thanks to the use on a larger scale of alfalfa. Hogs, too, find in alfalfa an ideal pasture.

Perhaps one of the major reasons why alfalfa is almost always preferred by breeders who raise the feed requirements of their stock is the fact that alfalfa is very palatable; all the animals eat it to the last straw with obvious relish.

From any angle viewed, we come to the conclusion that alfalfa is a wonderful crop, the best forage crop to be obtained. But that does not tell us why its culture is so limited in the Province of Quebec, why, too, its existence is so precarious, and why in very many cases it fails piteously.

WHAT IS THE MATTER WITH ALFALFA ?

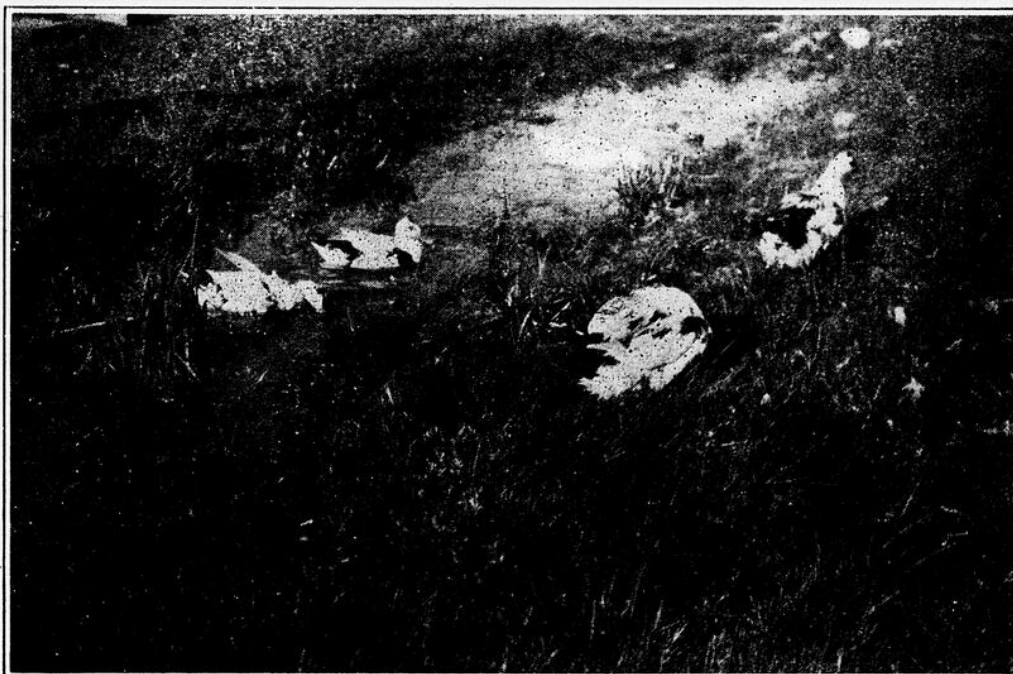
The truth is that nothing is the matter with alfalfa. No one ought to put the blame on alfalfa because apparently it turns out to be a failure on many farms.

This plant requires an alkaline soil, deep, rich and well drained, and the seed used in the Province of Quebec must be preferably Canadian grown seed. As a circular from the College of Agriculture of the State of Vermont emphasizes it, the best alfalfa in the world cannot produce a satisfactory crop without lime. To sow alfalfa on a sour soil is not merely running a risk, it is running into a certain failure.

Don't use common alfalfa; it dies out too quickly. Put the alfalfa on a rich, well manured soil, provided with about 1000 lbs. of acid phosphate per acre.

Then, and above all, do not establish your alfalfa field on a weedy land. It would be profitable financially to get rid of weeds before seeding down. Quackgrass is alfalfa's worst enemy.

The farmers who observe the above requirements have ninety chances out of one hundred of being



Saturday night in Birdville

Department of Agriculture News

Mr. Chagnon's appointment.

ONE of the important appointments recently made to the Quebec Department of Agriculture is that of Mr. S. J. Chagnon, B.A., B. S. A., M.S., who is now Assistant Chief in the Live Stock Branch, under Mr. Oscar Lessard, Secretary of the Council of Agriculture, and Chief of the Live Stock Service.

Mr. Chagnon, who entered upon his new duties on the 1st of May, was born at Coaticook, in Stanstead county. After taking his arts degree at the University of Ottawa, he studied for two years at the Oka Agricultural College, and then spent the next two years at the Ames (Iowa) Agricultural College, from which he was graduated in 1921 as B. S. A., specializing in animal husbandry. Since that time he has been Assistant Animal Husbandman, under Mr. G. B. Rothwell, Dominion Animal Husbandman, with his headquarters at the Central Experimental Farm.

In 1924 Mr. Chagnon returned to the University of Ames on a C. S. T. A. Scholarship, and took his master's degree in live stock and nutritional work. In 1926 he was sent by the Federal Department of Agriculture to Europe to study meat marketing,

visiting Scotland, England, Belgium, and the Channel Islands.

Mr. Chagnon has already made himself well known in this province, both through the farm survey work that he carried on in a number of Quebec counties a few years ago and through his work as a judge of French Canadian Cattle at a number of our more important fairs...

The Federal-Provincial inspection for the awarding of premiums for stallions is now getting under way for 1927. This annual inspection is carried on for the purpose of selecting and bonusing only the best individuals in each breed, and thus encouraging owners of stallions to work for as high a standard as possible.

Date Set for Plowing Match.

The Provincial Plowing Match will be held at Farnham this year, on October 18, 19 and 20. The farm of Oliva Lague, situated about 1½ miles from the town, has been selected, and Mr. Saurette, the local provincial member, has been appointed president of the Association for 1927.

The dates chosen are slightly later than those of last year, but the lateness of the season, together with the fact that if the match were set a week earlier it would conflict with the International Plowing Match at Toronto, decided the directors in making this choice. It is hoped, by the way, that Quebec will be represented by a number of plowmen at the International this year.

The county agriculturists report a good crop of hay, but state that the seeding of grain has been delayed throughout the province, with the exception of Abitibi, where good weather has enabled them for the first time to be as early as the rest of the province. Wet weather in the Montreal district and cold weather in Rimouski and Matane have made these sections particularly late as compared with the average year.

Prof. Geo. Maheux, Provincial Entomologist, has asked us to warn our readers to be on the lookout for broken tassels in their corn fields at the end of July and early in August, as these may indicate the presence of the European Corn Borer. If anything of the sort is noticed the owner of the field should advise the Provincial Entomologist, Department of Agriculture, Quebec, at once.

Take care of the orchard or use it for fire-wood. Trees unsprayed and not pruned are a source of loss to their owners and to their neighbors.

THE TECHNIQUE OF FLOCK CULLING

In Two Parts — Part II

By W. A. Maw, Poultry Dept., Macdonald College.

QUALITY OF EGG LAID

When selecting females for future breeding work, number of eggs laid is not in itself sufficient. High quality market eggs must be of good size, shape and colour, as well as being strictly fresh, if they are to attract the attention of the buyer. It is therefore essential that considerable attention be given to quality of egg laid when the females are being culled. In many instances high producers will be found to be layers of small eggs, or of eggs abnormal in shape or colour for the breed. Abnormal colour for the breed is at present thought to relate to the white-egg class only, but why not also the same rigid selection with the brown-egg class? Light-coloured brown eggs are really not brown eggs but only tinted eggs in many cases. Such light colour when found in brown egg breeds should be discarded as well as the yellow-tinted white egg.

Egg size and shape go hand in hand. Only a normal-shaped egg of a size weighing two ounces and better should be selected for in future breeding females as well as in females which are to be the dams of future flock sires. Abnormal shapes, such as the blunt-ended egg, the egg with a ridge on it, or the poor-shelled egg, should be discarded, as such qualities are apt to be inherited by the progeny of stock laying such eggs. Normal-shelled eggs of good size should give a better class of chick and higher percent hatches. Such facts emphasize the necessity of rigid culling of all future breeding stock for egg quality.

METHOD OF BANDING TO RECORD COMMENCEMENT AND PERSISTENCY OF PRODUCTION

Where prospective breeding stock is being culled, all possible data regarding the females' production performance should be considered. If the stock has been under trap-nest record work, such information as age at first laying, date of commencement of laying, and persistency in production throughout the year, can be easily recorded for future use in selection or culling work. Where the laying flock is not trap-nested, to record the date laying commences or ceases requires the invention of some scheme by which such records can be made. It is quite easy to ascertain whether a pullet is laying or not upon physical body examination. The external body characteristics, such as head parts, comb and wattles, designate the approach of laying condition. The condition of the vent and abdomen will designate whether laying has actually started or finished. In starting to lay, the abdomen becomes soft and pliable, the pelvic bones spread apart, and the vent become dilated and moist. When laying is ceasing the reverse happens, the abdomen draws up, the skin becomes dry, the pelvic bones close in and the vent closes to a dry, puckered condition and takes on a yellow colour, denoting that the yellow colour is returning to the skin. We can therefore discover, by individual examination at regular intervals, whether the females are laying or not. Since this is possible, a method of marking the females to denote laying commencement and finishing and the approximate date of each must be adopted. The following system has been worked out and serves the purpose fully:

Four different colours in celluloid key-ring leg-bands are used, each colour denoting a different month. For example, the blue band is used for September beginners, the red band for October beginners, the green band for November beginners, and the black band for December beginners. This allows for a colour for each of the four fall and early winter months, during which time all pullets should have commenced to lay. If the pen of birds was examined previous to the end of each month, all beginners during that month could be marked according to the colour schedule. This examination would only be necessary once a month for the four months. The birds not starting before January first, provided they were of the same ages, could be separated and sold as meat, or kept separated from those intended as breeding stock. The bands representing precocity or starting of production should be placed on the left leg.

The same idea can be used for the recording of the persistency of laying. The colours would be the same, only that they would be reversed in use, the

black being put on the July quitters, the green on the August quitters, the red on the September quitters and the blue on the October quitters. These bands are put on the right leg to designate the different meaning of persistency in place of precocity on the left leg. After this has been done, we can at once spot the individuals in the flock that commenced early or late as the case may be. You will also be able to note that some start early and lay late, laying over twelve months, whereas others start late and quit early. This allows for a valuable record being kept without the use of trap-nests or book records of hen numbers. It is a practical application of important breeding record work, most essential to improvement work, which can be adapted to any flock by any person with little extra time spent.

TABLE OF COLOUR BANDING

Precocity	Persistency
Left Leg	Right Leg
Laying Commences	Laying Finishes
Sept. — Blue	July — Black
Oct. — Red	August — Green
Nov. — Green	Sept. — Red
Dec. — Black	Oct. — Blue

The use of some such method of recording such factors as precocity and persistency in laying will do a vast amount of good in the improvement of our farm flock average egg-productions in the course of a very few year's work. These factors are generally thought to be hereditary, and are handed on from generation to generation, hence their value in improvement breeding work.

FARM FLOCK CULLING RESULTS

The average farm flock where no definite attempt has been made to select the pullet flock for uniformity in production characteristics and also where yearling and older birds which are past their most profitable period of egg production have been allowed to remain in the flock, shows that approximately thirty percent of the flock are culls and about the same proportion good layers while the balance are mediocre layers. The well-selected flock of production bred stock should show more good layers and fewer culls.

The following table, showing the results of farm flock culling in the Province of Quebec carried out by Macdonald College, bears out the findings of many other institutions doing similar work in other parts of the country:

YEAR	No. of Hens	Good Layers	Per cent	Medium Layers	Per cent	Culls	Per cent
1924	8041	2321	28.9%	3346	41.6%	2374	29.5%
1925	8130	2199	27.1%	3586	44.1%	2345	28.8%
Total and average for 2 years.	16171	4520	28.0%	6932	42.8%	4719	29.2%

CULLING GROWING STOCK

In culling the young stock, the work must start with the chicks as they are brought from the incubator. All weaklings, cripples and deformed chicks should be killed. Such stock is not worthy of any attention on a well-managed plant. If a system of rigid culling is followed throughout the growing season, the feed cost per pullet and cockerel raised will be reduced quite materially. There will also be found certain birds which do not feather as quickly as do others. If we watch such slow-feathering stock, we will generally find it to be late-maturing and poor egg-producing stock. Such stock is best disposed of as broilers at the first opportunity.

Systematic and rigid culling of all stock carried on continuously throughout the year will eventually result in higher flock average egg-production, a more uniform flock of stock, smaller feed and labour costs per unit of production, and more satisfaction in working with the flock because of the increased returns.

JOTTINGS FROM JAPAN

By D. S. Dunford

II

*Suffling Along — Tatami —
Japanese Babies — Slings and Things.*

Suffling Along.

CLACK CLACK ! Shuffle Clack ! It sounded just like the noise of clogs on the cobblestones of a small Lancashire or Yorkshire town. Sure enough, when I looked to see what was causing the din, it was footgear. Now you will be wondering what sort of shoes would make such a clatter, so I must tell you what *geta*, *zori* and *tabi* are. *Geta* make the noise, but first of all I will describe the *tabi*. These are the Japanese stockings. They are something like a mitt with a place for the thumb, only instead of the thumb, there is a pace for the big toe. They are made of different colors and materials, the women and girls generally wearing them of velvet, and the men and boys of stout cotton. They only reach to slightly above the ankles and are neatly fastened at the back with press fasteners or clasps. The soles of the *tabi* are of soft washleather or heavy cotton, to prevent their wearing out. The reason of the big toe business is apparent when considering the rest of the footgear, for the big toe compartment goes around one side of the sandal strap and the rest at the other side of it. *Zori* are sandals, made usually of straw, but some are of lacquer and have thick cork soles, these latter being used on "dress" occasions by the maids (*amahs*) in foreign households and waitresses in the hotels and cafés frequented by foreigners. *Geta* are a kind of clog, worn in the street and varying in height, according to the weather and state of the roads. They consist of a flat piece of thin, smooth wood, the size of the foot, with straps like the *zori*. Underneath, at right angles to the top and about two or three inches apart, are thin pieces of wood, anything from one to three inches in height. These are the things which go clack, clack. Of course, hanging on as it were by the big toe and the rest of the foot free, causes a kind of shuffling gait, but in spite of this it is amazing how rapidly the wearers get over the ground and how easily and quickly the people can run in them. Often, when walking along a muddy road, I have wished I could patronize the native footwear.

Tatami.

Another thing I must tell you about, before I go any further, is the *Tatami*, for—to use a "bull"—it is all wrapped up in the *geta*, *zori* and *tabi*, or vice versa. The Japanese houses have little or no furniture, as we understand it, but are carpeted with matting, made of rice straw. This matting is very thick and soft and is made on frames of standard size. These frames are fitted neatly together and rooms are described as "six mat rooms," "twelve mat rooms," "thirty mat rooms," etc., as the case may be. Now it is the gravest breach of etiquette to walk on *tatami* with the shoes on, because it takes the place of furniture, and to do so would be equiva-



JAPANESE BABIES

(Note the *geta*; as it is summer time the girls are not wearing *tabi*.)

lent to our walking on our chairs or sofas with dusty or dirty boots, which naturally is not done. Therefore, at the entrance to every Japanese house, are to be seen little rows of *geta* and *zori*, for the people only walk around indoors in their *tabi*. They kneel or squat on cushions, which take the place of our chairs, etc. The idea is really excellent, for it certainly prevents a lot of dust being brought into the house, but most foreigners would find it hard to adopt this method of living. I know I have tried squatting for only a few minutes, but got such horrible cramp that I was glad to stand up !

Japanese Babies.

If any of you have been in Vancouver and moved in "lumber" circles, the title of this paragraph will immediately bring to your mind the lengths of wood cut in the shape of small squares, which are known to lumbermen in Western Canada as "Japanese Babies," for these baby squares are very extensively exported to Japan. Merchants speak of 100,000 ft. of this lumber as "One hundred thousand Japanese Babies," etc., and, to the uninitiated, the phrase is rather startling, to say the least of it. But I am going to deal with the *real article*. The babies here are perfectly adorable and the dearest, happiest things. One might say that they view life from aloft, for from infancy (just a few weeks I should

imagine) they are strapped on the backs of their mothers, brothers and sisters, and that is how they spend their babyhood. The first time I went out I wondered why the women seemed so bent and what the bumps were on their backs, and then I saw a tiny, black downy head appearing out of the top of the bundle and behold: "His Majesty the Baby." The strange thing is that the people seem to be entirely unconcerned about the burdens on their backs, because they work and play just the same. The women perform all their household duties and it is a most usual thing to see quite small children playing in the streets, carrying the baby brother or sister in this manner. I have seen men on bicycles taking the infants for an airing and one day I watched two women having a most animated game of battledore and shuttlecock, with their babies strapped securely behind them ! The tiny tots don't seem to mind. I have seldom heard them crying, but if they do, their carriers just jerk first on one foot and then the other, and the tapping of the *geta* soothes the infant and sends it off to sleep. This method of handling may not be very hygienic, but it certainly seems to agree with the children, for a hardier and more contented set of youngsters are not to be met with.

Slings and Things.

Another most remarkable sight is the method the people have of carrying things from place to place. This is how they manage. They have a stout pole—perhaps three inches in diameter—about five feet long, at each end of which is suspended a flat circular basket, ten to twelve inches across. Earth and manure for their gardens, coal, vegetables and all manner of things are carried in these baskets. The men must have immense muscular strength in their shoulders. Flat, square pieces of wood are also slung sometimes from these poles, for I saw a man carrying in this manner a heavy load of roof tiles which he had neatly piled on the square. Food vendors also use this means of portage, only they have covered boxes of various sizes and shapes, instead of baskets. In some instances, when the burdens in the baskets are very heavy, another pole is used—not so long as the shoulder one—one end of which is employed to ease the weight. It is amazing the freedom with which the loads are transferred from one shoulder to the other and the skill and dexterity of the men in this respect are much to be admired. The other day I was watching the workmen who are at present deepening and widening the Canal running from Yokohama to Tokyo. Two men were conveying a huge block of stone on thick pieces of rope slung from the centre of one of these poles. How they managed it I don't know, for the weight must have been tremendous, but I couldn't help wondering if the slaves in ancient Egypt used to sling about the stones for the Pyramids in this way !

(To be continued)

Floor Coverings

RUG making began in the East. The Oriental made rugs as a means of self expression just as Europeans painted pictures. It is said that Mohammedan rules forbade the use of colors for the reproduction of figures for fear it would lead to idolatry. In this way the Oriental was forced to turn to some other medium for the expression of his artistic tendencies, and we find him using thread and yarn instead of paint.

These people lived in tents, and the rugs were used for wall decoration, and covers for divans. Originally they were not intended for floor coverings. Even later, when rude structures took the place of tents, the woven rugs were made to clothe the architecture.

When a rug was finished in the home of a native weaver it was felt that something worthy of recognition had been accomplished. The father of the girl weaver would invite other members of his tribe to "come and see the rug my daughter has made". The neighbor would see the rug, and congratulate the father of the girl who could make so fine a rug—one that she might use as a dowry rug. By the rugs thus woven the girls were judged by their suitors. The dowry rug was the last the women would sell, consequently we do not see many of them in this country.

Then there was the prayer rug, made to be knelt on during the prayer; and the hearth rug upon which the guest trod as a token of friendship.

The oriental rug was originally a thing of sentiment. With unsandled feet the ancients stepped upon it, and the poetry and religion mingled with the "detail of daily life to make smooth its surface of silk and wool."



A Japanese Shoe Store.

DESIGNS

Primitive peoples ornamented their tents, tabernacles, and tombs by embroidered canvas, or engraving on wood or soft stone. Such methods of decoration antedated weaving in pattern. When the effort was made to copy these designs in warp and woof, the weavers found it impossible to work in the curves because of the imitations of the art. This forced the geometric ornament with straight lines, such as the star, equilateral triangle and octagon. Later these gave place to curves and circles. These signs were altered, first by one weaver and then by another, and finally patterns came into being. These patterns were handed down from generation to generation by aged weavers, who drew in the sand the well remembered details for younger workers to copy. These designs became tribal patterns.

By means of wars and pilgrimages rugs were carried to strange countries. There these rugs were copied by families and tribes who incorrectly in-

terpreted designs, and but poorly imitated them. In this way designs became crossed.

Sometimes the same pattern is found on both coarse and fine rugs. The chief or monarch may have ordered a rug made of costly materials, or he may have ordered a "tribute" rug. The weaver who made this fine rug for his ruler at the same time made one of coarser material for his own private use, but both rugs had the same tribal pattern.

An effort is being made by modern commercial houses to have these old styles reproduced rather than have the market flooded with western designs.

The poetry of rug making has been turned into prose by the modern manufacturers of the western world. They found the hand weaving of the Orient too slow and they developed looms that did the weaving more rapidly.

These domestic carpets and rugs come in many styles, but the simple, old fashioned carpets with little definite pattern are among the best in designs; they are modest and dull in color and generally

appear to stay where they belong—on the floor.

Naturalistic designs of flowers on carpets are not pleasing, for walking upon a bed of flowers is something we carefully avoid in nature. Also carpets or rugs having large separated spots of color are not pleasing either. In fact, they may be a bit trying to the nerves. One wonders if it would be possible to walk across the room without stepping off the spots, or would it be possible to step on every other spot, or would it be better to try it diagonally? The spots make too energetic an appeal to the eye.

Occasionally one sees a rug portraying an animal. Imagine walking on one! If one so enters the room that he cannot view the thing correctly, he must offer silent apology, and move around until the picture rug can be seen to the best advantage.

Rugs ought to seem to be right side up from any view point.

Naturalistic designs of flowers as well as portrayals of animals on floor coverings violate the law of "fitness to purpose".

WOMEN'S INSTITUTES CONVENTION

THE fourteenth annual convention of the Quebec Women's Institutes opened with the meeting held on Tuesday evening, June 14, at Macdonald College. Miss Philp, Head of the School of Household Science, presided. In presenting greetings from the Cercles de Fermieres, Miss Durand reported 6363 members, who by the sale of products realized \$93,675 for 1926.

"Organized Mother love" was the term used to describe the work of the Women's Institutes in the address given by Mr. Putnam, Superintendent of Ontario's Women's Institutes. He said the members have the desire to serve others and to stimulate activity in various organizations; they utilize what they have at hand in the work of their own societies. This results in the development of their own talents, and success comes from the effort they put forth.

Mrs. John Savage, of the Handicrafts Guild, Montreal, claimed that handicrafts were not only useful, but they were educative, as thought continued while the hands were employed. About 25 years ago, the speaker said, some Russian immigrants came to the province and needed help. They sent their handicrafts to Montreal and sold them at a fair price. Later a depot was opened for the sale of such work, and this was the beginning of the Guild, whose aims today are to get reasonable prices for work, and to help crafts from all parts of Canada.

Mrs. F. S. Lusk presided at the Wednesday morning meeting. In her Presidential address she maintained that rural women should take a forward step, that no longer can they afford to isolate themselves. She suggested that the farmer's wife and family should visit other scenes, so that by comparison they might see their own advantages. She urged the members to work for the improvement of rural communities and help in making them more attractive.

The address of welcome was given by Sir Arthur Currie, Principal and Vice-Chancellor of McGill University.

"I fully appreciate," said Sir Arthur, "the honor and the privilege of addressing a few words of welcome to the members of this important body. I approach the task with pleasure, and with diffidence as well. With pleasure, because I assure you it is a real pleasure to all of us associated with McGill University to welcome such a progressive body of women to one of our foremost colleges,—the one with which you have had the closest associations and in whose work you probably have the greatest interest. With diffidence, because I may lose an opportunity here afforded of saying something which will draw us closer together and help us to work with a greater degree of co-operation in the accomplishment of those purposes we have so much at heart.

"We have much in common. Our function is to equip the young men and women who come to us, for future citizenship in a free country, to teach them how to be better citizens and better comrades, to help them to understand, to appreciate and to interpret their fellow men. Our responsibility is to bring to bear upon the young and plastic minds such forces and such influences as may guide them, strengthen them, and give them courage, confidence and understanding when they enter the great world outside. We try to show them not only how to make a decent livelihood, but how to make a decent life as well; not only how to be successful in their chosen life work, but how to discharge all the responsibilities of good citizenship.

"However, the university cannot be content with devoting its energy and its thought to bettering the individual within its walls, it must serve the community in which it is situated, and it must help in building up the nation of which it is a part. That, I know, is your ideal. It is ours as well. In the attainment of that purpose, the college, the community and the home must co-operate.

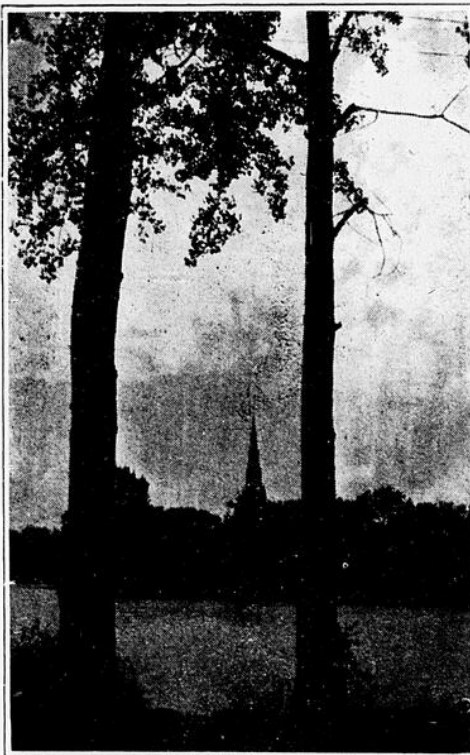
"Sir Henry Irving used to say that the line which he uttered with the greatest and sincerest belief upon the stage was "Men are God's trees but women are God's flowers." We must have strength in life, but we must likewise have beauty and fragrance. A college cannot produce both without your aid. It is from the homes of the land that the college in attaining its ideals must receive the greatest and most stimulating assistance.

"It is to be remembered that experience shows that great minds and character have come mainly from the soil. Ours is a great agricultural country, and great agricultural countries are the feeding grounds for great minds.

"And so, I welcome you to Macdonald College, with the fervent hope that our joint labors may in some measure fulfil the aspiration and the dreams of the founder of this college."

The reply to Sir Arthur's address was given by Mrs. D. A. Roger, Cowansville. She said that in coming to Macdonald College the Women's Institutes felt that they were coming home, for it was at the college the organization was formed 14 years ago.

In the presentation of the report on Agriculture, Mrs. F. S. Browne, Lennoxville, said it is not so much new fields of activity, bigger markets cheaper this or that, that is needed as it is more men and women, boys and girls with perseverance and zeal to make this province of ours what it can be, that is the rising generation's greater heritage.



Near Pointe Claire, Jacques Cartier County

Among the activities quoted were: conducting school fairs, the establishment of a community flower bed, the distribution of bulbs and shrubs among the members of the W. I., also of strawberry plants and small fruit bushes. Believing that keeping a village tidy is a good advertisement, the grass in Stanstead East was kept cut by the W. I. of that village.

Cranfordville W. I. had an exhibit of farm vegetables and flowers. The exhibits were obtained in rather a novel manner:—the response at roll call was the presentation of some article from the home garden.

The Secretary-Treasurer, Miss Abbie S. Pritchard of Wyman, reported the total receipts of \$987.80 for the fiscal year. The disbursements of \$522.15 left a balance of \$465.65.

Miss Hazel McCain, Superintendent of Quebec Women's Institutes, urged each society to make its contribution to the Canadian National Exhibition. She also expressed her appreciation of the assurance given by Mr. Desilet, Supt. of the Cercle de Fermieres, regarding their co-operation with the Quebec Institutes in sending a display to the C. N. E. During the year, visits were made by Miss McCain, and her assistant, Miss Beatrice Adams, to all branch Institutes, where lecture-demonstrations were given. County conventions were also attended, and short courses were held at various points. Assistance was given at school and county fairs. Emphasis was placed on co-operation with the Agronomes in holding joint meetings of the Farmers' Clubs and Women's Institutes.

A demonstration on the dressing of poultry was given by Miss MacMurray of the poultry department. With deftness and skill of manipulation she showed how the bird could be dressed and trussed in a very few minutes.

Miss Philp, Head of the School of Household Science, in her address on "Economics in the Home", said the subject included a host of things. She advised the making of a plan of procedure, apportioning the work for the day, the week, as well as for seasons. The speaker stressed nutrition, saying the child has a right to be well born, and the baby with a healthy mother has a good start in health and makes nutrition an easier problem. Miss Philp went on to say that proper nutrition will help materially with temperance. If the body is not properly nourished the craving for food may be satisfied by the perennial cup of tea, by candy or by alcohol,—that well fed men means less temperance.

In his address on "Culture in Agriculture", Dr. Lattimer stressed "wealth using", as the way wealth is used is more important than its accumulation. "To secure a good education" said the speaker, "is a greater problem in the country than in the city, but it does not necessarily follow that there should be a greater amount of illiteracy in the rural than in the urban communities. Unless the material prosperity is reflected in the educational standard, what hope is there for the democracy?"

Wealth that is not used for the well being of those who have gained it fails to achieve its highest goal."

Miss Charlotte Whitton, executive secretary of the Canadian Council of Child Welfare, Ottawa, said, that in her opinion, one of the key problems of the Dominion is the question of population, and while immigration has been emphasized, the question of the preservation of child life has been over looked. "That no man's land of pre-school life", said the speaker, "is the time when he is expected

to have measles, whooping cough and other diseases that carry with them such possibilities of disaster. Our decade is making a contribution to life that ranks with that of Pasteur, in discovering immunization to these diseases".

Miss Whitton went on to say that the crying need of the day is the extension of medical and nursing service to the rural districts. As the rate of infant mortality has been driven down, that of maternal mortality has been driven up, until now it is higher than that of Great Britain or Belgium.

The 55 nations comprising the League of Nations, united for the removal of war, have created a commission for Child Welfare, because for economic reasons, the protection of children is essential to its purpose.

Dean Laird addressed the delegates on the question of "Rural School Education". He maintained that by means of the consolidated school is the only way the country child may receive the education he should have. It would mean better schools, more efficient teachers and higher salaries.

"Child labor is beginning to raise its head in Canada" quoted Miss Dorothy Heneker L. L. B. of Montreal, in her excellent address on "Child Labor Laws of Canada". The minimum age at which a boy or girl in Quebec may be engaged in industrial establishments is 14 years. Some provinces have excellent laws, some have laws on one phase of protection and some have laws on another, but there is no uniformity. In many places the Education Act supplements the Industrial Act.

The following officers were elected: Hon. President—Mrs. F. S. Lusk—Luskville President—Mrs. G. B. LeBaron—North Hatley. 1st. Vice Pres. Mrs. D. Rodger—Cowansville, 2nd Vice-Pres. Mrs. Fowler—Fort Coulonge Sec-Treas—Miss Abbie Pritchard—Wyman.

Convenors are:
Agriculture—Mrs. F. S. Browne—Lennoxville.
Child Welfare—Mrs. C. E. Petch—Hemmingford.
Education and Better Schools. Mrs. W. Rexford—Ayer's Cliff.

Home Economics—Mrs. Amm—Beech Grove Immigration—Mrs. Pye—Inverness. Legislation—Miss Dresser—Richmond. Publicity—Mrs. G. G. McCurdy—Lennoxville. National Events—Mrs. C. McQuat—Cowansville. Canadian Industries—Miss LeFebvre—Canterbury.

Dean H. Barton, Dean of the School for Agriculture at Macdonald College, in his address, made an appeal in the interests of the farm boy. Dean Barton considered that less was done in an organized way for the youth on the farm than might be, and that something of far-reaching value might be accomplished in that line. There are boys who do not know Macdonald College. The delegates who do know it can acquaint the boy with the opportunities offered by the college that would aid him in helping himself.

The suggestion was made that next summer the College should set apart one day for the entertainment of farm boys, when they could inspect and see for themselves the lessons and the help Macdonald College offers them.

From An Old Prayer

THESE striking lines, taken from an old prayer found in Chester Cathedral, and happily appropriate to the season, were included in the card of good wishes received by employees of a well-known North-country firm:—

Give me a good digestion, Lord,
And also something to digest;
Give me a healthy body, Lord,
With sense to keep it at its best.
Give me a healthy mind, good Lord,
To keep the good and pure in sight;
Which, seeing sin, is not appalled,
But finds a way to act aright.

Give me a mind that is not bored,
That does not whimper, whine, or sigh;
Don't let me worry over much
About the fussy thing called "I".
Give me a sense of humour, Lord;
Give me the grace to see a joke;
To get some happiness from life,
And pass it on to other folk.

Report of Quebec Women's Institute

ARGENTEUIL COUNTY

Argenteuil Institute—The meeting was held at the home of Mrs. John Bradley. Plans for the coming year were made. A debate was held resolved, "That reading is more beneficial than observance"

in which the negative side won. *Lakefield branch*.—Letters from Miss McCain were read at the May meeting which was held at "The Parsonage". A paper on "Salads" was read by Mrs. A. Bothwell. *Hillhead and Jerusalem-Bethany branches*. No meetings held. *Chatham branch*. This branch enjoyed an address by Mr. Valois, Notary, entitled "Laws relating to Women in the Province of Quebec." *Upper Lachute W. I.* The meeting was held in the school house. Eight members were present. Exhibit for Lachute Fair was discussed. Delegates to the Convention were appointed.

BONAVENTURE COUNTY

New Carlisle branch held annual meeting when plans for the work of the coming year were discussed. *Cross Point, New Richmond, and Port Daniel Institutes*.—no reports.

BROME COUNTY

Abercorn W. I. entertained the County Convention, which proved most interesting and helpful. At their April meeting it was decided to impose a fine of five cents on each member who failed to respond to the roll call of the day. Three new members joined. *Foster institute* is busy making exhibits for the W. I. exhibit at the C. N. E. *Highwater branch*. As mentioned before, this branch has bought a building, and is having it moved to a suitable location and will fit it for a hall. "What is a Woman's Club" was the title of a paper read. *McNeil's Crossing branch* has donated prizes for the school children, and a general treat and good time for the school closing. This work is in the hands of the Convener of Education and Better Schools. A social evening was planned. *South Bolton institute* is financing the treatment of a crippled child at the children's hospital, Montreal. A study of the League of Nations is under discussion. *East Bolton institute* held regular meetings with a good attendance. *Sutton Juniors*.—No report.

CHATEAUGUAY AND HUNTINGDON COUNTIES

Aubrey-Riverfield members responded to the roll call with a memory verse. Report of the County Convention was read, and a paper recalling "National Events of our Empire" was given. *Howick W. I.* is arranging for an exhibit of geraniums and coleus among the members in September. Response to the roll call was "My favourite Work". Subjects of papers read were "Products of our Forests" and "Autumn in Nature". *Dundee W. I.* members responded to the roll call with Current Events, and a paper on "The Secret of Getting Along with People" was read. Springtime Garden Planting was the subject discussed. *Franklin Centre W. I.* had a demonstration on painting and a paper on "Legislation" given by the convener of that department. *Hemmingford branch*. Talks were given on the following topics: "The Ministry of Happiness", "Mosquitoes" and "Current Events". *Huntingdon W. I.* An address was given on "Milk our Greatest Food", and the report of the County Convention was read. Three members joined.

COMPTON COUNTY

Brookbury Institute is taking steps to secure a music teacher for the benefit of the children during vacation. Also, are looking up the matter of medical inspection in their consolidated school. *East Clifton branch*. The subject at this meeting was Legislation, and interesting papers were read. *Cookshire group* took time to discuss the Chinese Situation. They are making plans to have a new fence placed around the cemetery, planning to serve a community supper, and are furnishing soap for use in the school. *Sauyerville W. I.*—Education and Better Schools was the topic of this meeting, and papers were read on that subject. *Canterbury Institute*.—Members are planning a flower contest. An address was given on flower culture. Committees were appointed to visit the sick and enter community work. *Bury*—No report.

MEGANTIC COUNTY

Crawfordville branch had a paper entitled "Poise of Dancing". A demonstration and discussion on uses of the flour sack was found interesting and helpful. Seeds were distributed to the school children for school fair work. *Inverness branch* appointed delegates to the county and provincial conventions. *Lemesurier W. I.* enrolled one new member. This branch is giving the use of their hall for Sunday School during the summer. Arrangements were made for entertaining the County Convention.

MISSISQUOI COUNTY

Cowansville, Dunham and Noyan—no reports. *Stanbridge East W. I.* is planning how best they can celebrate the 60th anniversary of Confederation, also other Institute community work.

OTTAWA COUNTY

Cantley Juniors elected delegates to both the County and Provincial conventions. A paper on "Birds" was read, and a pleasing recitation was given. *West Templeton Branch* had papers on the following topics—"Planning the Daily Menu", "The Country House and Its Furnishings" and "How to adjust Household work so as to avoid Monotony and insure Recreation". Music furnished a pleasing variation to this meeting.

RICHMOND COUNTY

Cleveland Institute enrolled one new member, appointed a delegate to attend Convention, and conducted a sale of slips and plants. Plans are being made to hold a social evening later. *Dennison's Mills W. I.* Economics was the department dealt with at this meeting and the topics discussed were culture of flowers, reliable varieties of flowers and vegetables, and storing of furs. *Melbourne Ridge W. I.* enrolled two new members. Flags are being provided for three schools. A delegate was appointed to attend the Convention, and the remainder of the evening was spent socially.

SHEFFORD COUNTY

Granby Hill donated \$25 to the Girls Industrial School at Sweetsburg. Plans are being made to hold a lawn social with sale table of useful articles. A paper entitled "How to make our W. I. Meetings Interesting and Entertaining" *Shefford Mountain*—no report. *South Roxton Institute* had an address on Home Economics. Two new members joined. Arrangements are being made to hold a Travelogue, "Canada from Coast to Coast", and improvements to the school are under way. *Warden and Waterloo branch* had an interesting meeting. Five new members joined. Papers were read entitled "Laws of Quebec Regarding Women and Children", "Patent Medicine" and "Plants and shrubs that are easily grown".

SHERBROOKE COUNTY

Ascot Institute enrolled one new member. A paper on Music was read. Plans are being made to help the consolidated school in various ways. *Belvidere* has sent flowers to sick members and friends in the hospital. A paper on Immigration was read. *Brompton Road branch* is preparing for a sale during the summer. Program for the year was submitted and accepted. Report of County Convention was read. *Lennoxville branch*. "Benefits derived from Confederation" was the title of an interesting paper. Sunshine committee reported calls made on the sick, and Easter cheer sent. Arrangements were made to cater to the W. I. Convention to be held in Lennoxville. Report of County Convention was read. *Orford W. I.* held usual meeting when the report of the County Convention was read.

STANSTEAD COUNTY

Ayer's Cliff W. I.—At the April meeting the roll call was answered with "my favourite flower". Discussion on gardening was held. A birthday party was given to an orphan child at which suitable gifts were presented. At the May meeting committees were appointed to arrange for a community picnic. Report of county convention was read. Roll call was answered with Canadian Statesmen. A paper on "Canada from 1867 to 1927" and an essay on "United Empire Loyalists" were read. *Beebe branch* reports a paper on "Immigration", and report of County Convention was read. A successful dance was held, and proceeds used for financing the Skating Rink. A needy family has been helped in various ways. Sale of flowers for Mother's Day amounted to \$23. Part of this sum is to be sent to the Sherbrooke Hospital, remainder to be used for benefit of sick at home. Framed pictures of Fathers of Confederation placed in school. *Hatley branch* entertained the annual county meeting in place of its regular meeting. *North Hatley W. I.* An interesting paper was read on "Historic London". A bean dinner was served to the public at noon, and the meeting followed. A delegate was appointed to Convention. Convener of Agriculture reported many trees planted on Arbor Day. An exhibit of 200 mounted specimens of wild flowers was shown by one of the members which proved very interesting. *Tomifobia W. I.* is entering the contest for "Historical Compositions of a Local Nature." Delegates were appointed for the County and Provincial Conventions. *Way's Mills W. I.* is giving financial help in providing street lights in the town. Also have asked that signs be placed at the entrances to the village re the speed limit. Roll call was answered by "Health Hints". A paper "Nipping Trouble in the Bud" was read, and delegates appointed to attend county and provincial Conventions.

MRS. W. S. ARMITAGE,
Convener, Publicity Department Q. W. I.

Ormstown Show 1927

SUMMARY OF 1st, 2nd, and 3rd. AWARDS
ON CLYDESDALE HORSES AND YORK-
SHIRE, BERKSHIRE AND TAMWORTH
SWINE, ORMSTOWN SHOW—
1927.

EXHIBITORS.	Firsts	Seconds	Thirds
CLYDESDALES.			
Ness, R. R.	7	5	
Roy, A.			1
Taylor Bros.	2	1	
McClintock, Geo.		2	
McCormick, D. A.	3	1	3
Elliot, R.			1
Todd, Sam.		1	
Nussey, R.		1	1
Elliot, R.			1
YORKSHIRES.			
Charpentier, H.	1	3	1
Sylvestre, R.	2	1	1
Clark, Wm.	2	1	2
Hooker Bros.	3	3	
Beauregard, Rod.			2
Hooker, Geo.			1
BERKSHIRES.			
Sylvestre, R.	3	4	2
Elliot, R.	3	1	2
Mark & Sons	1	2	2
Charpentier, H.	1	1	1
TAMWORTHS.			
Hooker Bros.	2	1	
Hooker, Geo.	1	3	3
Charpentier, H.		1	1
Sylvestre, R.	2		

Investigation of Serviceability of Reenforced and Unreenforced Butter Boxes

At the request of the Dairy and Cold Storage Branch, the Forest Products Laboratories, Montreal, of the Interior Department, recently conducted tests to determine the serviceability of different types of butter boxes, both unreenforced, and reenforced with wire and metal straps.

Boxes of lock corner, dovetail, and nail construction were used, each box containing fifty-six pounds of butter.

A detailed report of the tests has been issued by the Forest Products Laboratories from which the following is reproduced:—

Purpose of Investigation:—

"This report sets forth results of an investigation carried out at the Forest Products Laboratories of Canada, Montreal, at the instance of the Department of Agriculture, to determine the comparative serviceability of the various types of export butter boxes, and also the serviceability of the various methods of reenforcements of these boxes.

The information desired is detailed as follows—

- (1) Comparative strengths of the four types of export butter boxes unreenforced.
- (2) Comparative strengths of the following types of reenforcements:
 - (a) Two wires paralld around sides, top and bottom.
 - (b) Two straps paralld around sides, top and bottom.
 - (c) Two wires at right angles.
 - (d) Two straps at right angles.
 - (e) One wire at centre around sides, top and bottom.
 - (f) One strap at centre around sides, top and bottom.
- (3) A comparative of the strengths of the reenforced and unreenforced boxes.

Method of Tests:—

Representative butter boxes of various types reenforced and unreenforced were submitted to hazard machine tests.

The hazard machine is a 17 foot diameter revolving drum with six interior floors arranged in hexagonal form. As the drum revolves the box is dopped from floor to floor and

guides are so arranged as to cause it to fall successively on corners, edges and sides, simulating in a comparative short time the various stresses induced in actual transportation."

Conclusions:—

The results of tests indicate:

- (1) That the Ontario box of dovetail design is the strongest of the four types tested without reenforcements.
- (2) That based on the single tests of the first series, the box with two paralld straps $\frac{1}{2}$ " x .018" withstood five times and the one with two paralld wires, 13 gauge, three times the number of drops sustained by the unreenforced boxes.
- (3) That the lighter strapping $\frac{3}{8}$ " x .015" when applied two paralld or two at right angles does not

give as strong reenforcement as the 13 gauge wire similarly applied but still gives double the strength of the unreenforced box.

- (4) That the two paralld wires or two wires at right angles apparently impart reenforcement of equal value, so far as first failure is concerned, but under continued abuse, wiring at right angles holds the box together better than paralld wiring. The same is true for strapping.
- (5) That one strap or one wire applied around centre of box gives nearly double the strength of the unreenforced container.
- (6) That the use of reenforcement of one wire (13 gauge) or one strap (preferably $\frac{1}{2}$ " x .018") applied around centre of box over sides,

top and bottom should prove sufficient to increase serviceability of any of the four types of butter boxes tested, namely, Ontario dovetailed, Manitoba nailed, Alberta Lock corner and Quebec lock corner, to insure a minimum of breakage on export shipments.

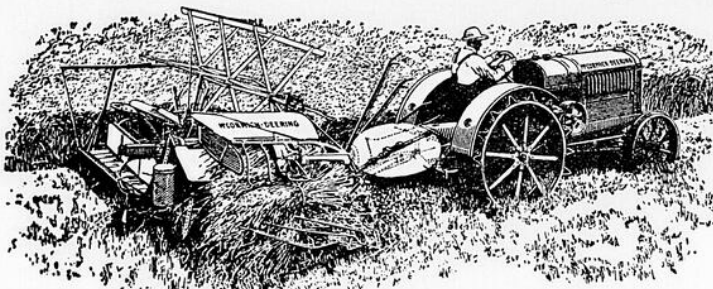
A copy of the detailed report may be obtained by applying to the Dairy and Cold Storage Branch, Ottawa-Ontario.

Resolution Regarding Standard Butter Box.

At the annual convention of the Canadian Creamery Association held at Toronto on the 17th and 18th of November, 1926, the following resolution was adopted:—

'Resolved that this Association recommend to the Dairy Commis-

McCORMICK-DEERING
Grain Binders are built in 5, 6, 7, and 8-foot sizes. The many improvements made in recent years add to their efficiency, ease of handling, and length of life. Light-running binders, with nearly a century of harvest machine experience back of them.



THE 10-foot, power-driven McCormick-Deering Tractor Binder enables you to cut from 30 to 40 acres a day. A highly efficient binder of special interest to McCormick-Deering Tractor owners.

Headquarters for Harvest Progress!

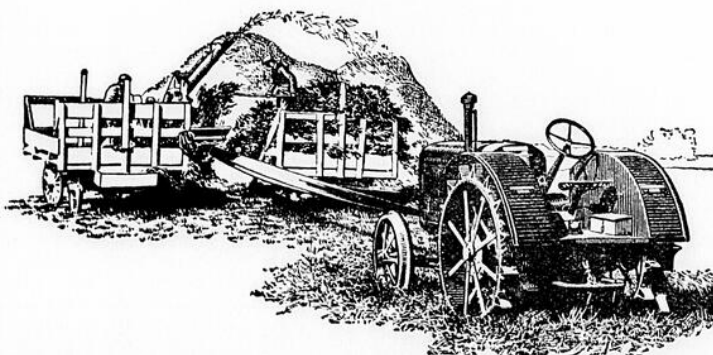
THE McCormick-Deering agent in your community is in close touch with harvest machine developments. He can tell you about the latest refinements that have been made in horse-drawn McCormick-Deering Binders. He can point out the advantages of owning the fast-working 10-foot McCormick-Deering Tractor Binder that operates from the power take-off of the McCormick-Deering Tractor. He can give you interesting information concerning the McCormick-Deering All-Steel Thresher, and point out the savings in power effected by the ball

and roller bearings. And he can discuss the McCormick-Deering Harvester-Thresher with you to your complete satisfaction.

Note the complete harvesting and threshing equipment service offered by your neighbor, the McCormick-Deering agent. He is in position to offer you exactly the machine required by your acreage, crop, or climatic conditions. We suggest that you discuss harvest machines with him as soon as possible; you may need new equipment or repairs, and it is always to your advantage to make your selection and place your order as early as possible.

INTERNATIONAL HARVESTER COMPANY

HAMILTON of Canada, Ltd. CANADA



McCormick-Deering All-Steel Threshers

THESE famous all-steel threshers, with the worry-proof ball and roller bearings, are built in two sizes; 22 x 38, and 28 x 46. Ask us for further information and the nearest address at which you can see these threshers on display.

McCORMICK-DEERING

HARVESTING MACHINES

sioner of Canada that the dimensions of the proposed standard butter box for export purposes be $12\frac{1}{2} \times 12\frac{1}{2}$, and of sufficient depth to contain fifty-six pounds of saltless butter, and that the box be made with dovetail corners."

Farm Radios

THE radio has made it possible for every farm home to come in direct contact with the affairs of the world. It seems to us the radio must mean more to the farmer than to any other citizen. It brings him music, information concerning his business and discussions on subjects of national importance, advises him concerning the weather, and brings stories and lullabies to help send his young children to dreamland.

It is evident the farmer appreciates the radio for, according to the United States Department of Agriculture, there are now 1,252,126 farms equipped with radio receiving sets. On July 1, 1925, there were little more than a half million radio receiving sets on the farm. At this rate it will not be many years before every farmer will have a receiving set and it will be possible for

one person to talk to the entire farm population of this country.

The radio is something that passes human understanding and makes us wonder what will be the next great invention. It is difficult to conceive of anything that would be of more value and entertainment than this invention which can pick music and speeches from the air. We accept all this as a matter of course and give little heed to its wonderful mysteries and the enjoyment that it brings to those who live on the farm.

In a survey made by the United States Department of Agriculture to gather facts concerning the desires of the farmer, it was found that they prefer radio talks to music nearly two to one. Voluntary comments accompanying the formal answers indicate a strong dislike for jazz. In music, they want old-time tunes and classical music.

Aside from educational farm programs weather and market reports, political talks are evidently popular and more current news programs are in demand.

Hoard's Dairyman)

Under the
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His Excellency
THE
GOVERNOR
GENERAL



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F.L.S.
London, Eng.
Congress Director
F. C. Elford
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World's Poultry Congress

OTTAWA
July 27 to August 4

IN selecting Canada for its third tri-ennial gathering the World's Poultry Congress invites universal attention to this Dominion's remarkable progress in poultry raising. Our era of development has only begun and this epoch-making convention will serve to spur on every Canadian interested in the industry.

COME to the congress. See the most representative display of live birds ever assembled. Hear the instructive addresses of scientists and leaders from over forty countries. Visit the interesting educational exhibits and displays of poultry accessories.

IF you cannot, the best alternative is to obtain a copy of the Proceedings of the Congress, a bound book containing all papers read and all discussions taking place. Every Poultry raiser should have a copy, for it will be the last word by the highest authorities on poultry in all its phases. To be sure of receiving a copy it is necessary to send your name and Three Dollars to Secretary, World's Poultry Congress, Ottawa, at once.

Reduced Rates on All Railways

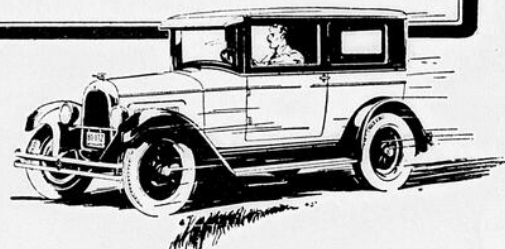
For further Information, Apply to
ERNEST RHOADES, CONGRESS SECRETARY, OTTAWA.

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Whippet's
First Birthday

111,300 BUYERS

in its First 12 Months

The Greatest Success ever attained
by a new Car in its First Year —



The Whippet has
emerged from its
try out period
with flying colors

—It is now A PROVEN PROPOSITION

111,300 enthusiastic owners will tell you
that the Whippet has lived up to
every claim we have made for it.

In hundreds of gruelling tests it has broken world's records in a most impressive way. Below are listed some of the more important ones.

Economy—Cannonball Baker, in a Coast to Coast run, averaged 51.9 miles per gallon. 5,205 drivers in a nationwide economy test averaged 46.3 miles per gallon.

Power and performance—55 miles or more per hour; 5 to 30 miles in 13 seconds. At Rockingham Speedway the Whippet ran 500 miles in 10 hours, 23 minutes, 14 seconds, bucking a terrific 50 mile gale.

Hill-climbing—A non-stop run to Pike's Peak in one hour and 13 minutes, without boiling.

Stamina—From Death Valley, 284 feet below sea level to the crest of White Mountain, 13,150 feet above sea level . . . the highest spot ever reached by an automobile on the Pacific Coast.

The Whippet has also established new standards of safety, roominess, comfort, beauty.

4 wheel brakes—The only car in the low priced field with this necessary factor for safety.

Low gravity centre—Built low to the ground for safety, yet with ample road clearance due to its new-type design. No skidding, no slipping, no side-sway.

More room—By actual measurement the Whippet has more leg, head and elbow room than any other light car—due to its unique body and dash construction.

Greater beauty—Long, low graceful lines resembling the exclusive custom-built cars of this Continent and Europe.

Just drive the car . . . that's the only way to judge its remarkable value.

NEW LOW PRICES

Coach	- - - - -	\$795
Touring	- - - - -	795
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OVERLAND
Whippet

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Says Emerald Oil Must Give Complete Satisfaction or Money
Cheerfully Refunded

Your feet may be so swollen and inflamed that you think you can't go another step. Your shoes may feel as if they are cutting right into the flesh. You feel sick all over with the pain and torture and pray for quick relief. What's to be done?

Two or three applications of Moone's Emerald Oil and in fifteen minutes the pain and soreness disappears. A few more applications at regular intervals and the swelling reduces.

And as for Soft Corns and Callouses a few applications each night at bed time and they just seem to shrivel

right up and scale off.

No matter how discouraged you have been with powders, footbaths or other applications, if you have not tried Emerald Oil then you have something to learn.

It's a wonderful formula—this combination of essential oils with camphor and other antiseptics so marvelous that thousands of bottles are sold annually for reducing varicose or swollen veins.

Every good druggist guarantees Moone's Emerald Oil to end your foot troubles or money back.

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PEDLAR'S
Nu-ROOF



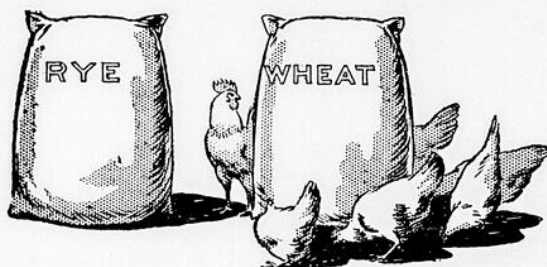
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Greater covering area than any other corrugated
sheet on the market

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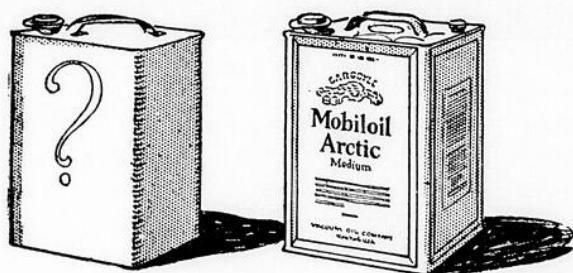
THE PEDLAR PEOPLE LIMITED, 26 Nazareth Street, MONTREAL, Que.
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Branches: Halifax, St. John, Quebec, Ottawa, Toronto, London, 19
Winnipeg, Vancouver.

Rye may look like wheat—but—



"Rye is the poorest grain you can try to feed a hen," says a prominent farm paper discussing the substitution of rye for wheat as an ingredient in mixed poultry feed. "It looks so much like wheat that it is often a temptation to try it on poultry. Hens do not like rye until starved into eating it, and as plenty of feed is required by hens that lay many eggs there is no economy in forcing them to eat a grain they dislike."

Many oils may look like Mobiloil—but—



Appearance is no guide to low-cost running. Many farmers are tempted to use a cheap oil because it looks like Mobiloil. They accept "just oil" and forget that Mobiloil is a specialized lubricating oil. And with less than Mobiloil lubrication they get less than Mobiloil protection against wear, repairs, over-heating, and carbon troubles. The correct grade of Mobiloil often cuts oil consumption from 10% to 50%—proving the cheapest oil to use on cost alone.

It pays to use Mobiloil—because—



THE correct grades of Gargoyle Mobiloil for engine lubrication of prominent passenger cars are specified below. The grades of Gargoyle Mobiloil, indicated below, are Mobiloil "E", Mobiloil Arctic ("Arc."), Mobiloil "A", Mobiloil "BB", and Mobiloil "B".

If your car is not listed below see any Mobiloil dealer for the complete Chart. It recommends the correct grades for all cars, trucks and tractors.

NAMES OF PASSENGER CARS	1927		1926		1925		1924	
	Summer	Winter	Summer	Winter	Summer	Winter	Summer	Winter
Cadillac	BB	Arc.	BB	Arc.	A	Arc.	A	Arc.
Chandler Sp. 6	A	A	A	A	A	A	A	A
Chandler Other Models	A	Arc.	A	Arc.	A	Arc.	A	Arc.
Chevrolet	Arc.	Arc.	Arc.	Arc.	Arc.	Arc.	Arc.	Arc.
Chrysler 4	A	Arc.	A	Arc.	A	Arc.	A	Arc.
Chrysler Other Models	A	A	A	A	A	A	A	A
Dodge Brothers	A	Arc.	A	Arc.	A	Arc.	A	Arc.
Ford	E	E	E	E	E	E	E	E
Franklin	BB	BB	BB	BB	BB	BB	BB	BB
Hupmobile	A	Arc.	A	Arc.	A	Arc.	A	Arc.
Jewett	A	Arc.	A	Arc.	A	Arc.	A	Arc.
Jordan 6	A	Arc.	A	Arc.	A	Arc.	A	Arc.
Jordan 8	A	Arc.	A	Arc.	A	Arc.	A	Arc.
Lincoln	A	A	A	A	A	A	A	A
McLaughlin-Buick	A	Arc.	A	Arc.	A	Arc.	A	Arc.
Moon	A	Arc.	A	Arc.	A	Arc.	A	Arc.
Nash	A	Arc.	A	Arc.	A	Arc.	A	Arc.
Oakland	A	Arc.	A	Arc.	A	Arc.	A	Arc.
Oldsmobile	A	Arc.	A	Arc.	A	Arc.	A	Arc.
Overland	A	Arc.	A	Arc.	A	Arc.	A	Arc.
Packard 6	A	Arc.	A	Arc.	A	Arc.	A	Arc.
Packard 8	A	Arc.	A	Arc.	A	Arc.	A	Arc.
Paige	A	Arc.	A	Arc.	A	Arc.	A	Arc.
Pierce-Arrow	A	A	A	A	A	A	A	A
Star	A	Arc.	A	Arc.	A	Arc.	A	Arc.
Willys-Knight 4	A	Arc.	A	Arc.	A	Arc.	A	Arc.
Willys-Knight 6	A	Arc.	A	Arc.	A	Arc.	A	Arc.



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and you work the horse same time. Does not blister or remove the hair \$2.50 per bottle, delivered. Will tell you more if you write. Book 4 R free. ABSORBINE, JR., the antiseptic liniment for mankind, reduces Varicose Veins, Ruptured Muscles or Ligaments, Enlarged Glands, Wens Cysts. Alays pain quickly. Price \$1.25 a bottle at druggists or delivered. W. F. YOUNG Inc., 134 Lyman Bldg., Montreal, Can.

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TOTAL COST FROM HALIFAX

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culture and Natural Resources, Montreal,
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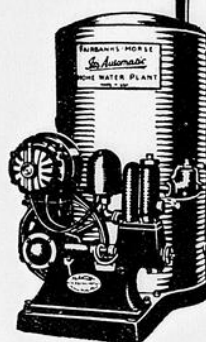
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Fairbanks-Morse

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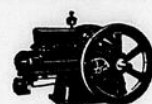


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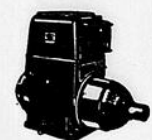
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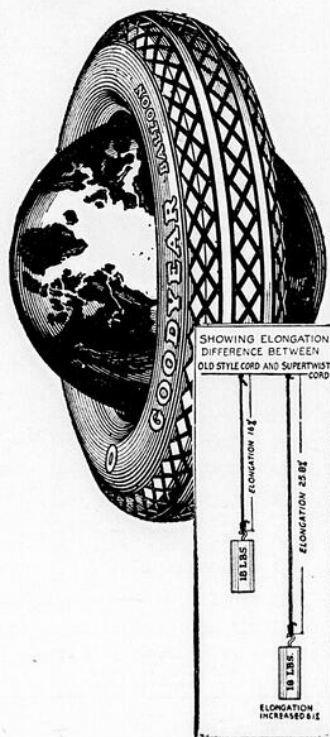
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Far in advance of any
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AN entirely new Goodyear Balloon—the greatest tire ever offered.

Exclusively Goodyear's—another Goodyear triumph!

Its first big advantage is long, slow, even wear.

The second big advantage is *traction*. Safe and sure-footed, the sharp-edged, diamond-shaped blocks in the tread's centre seize and grip and hang on.

The third advantage is appearance. This tire will grace the highest-priced car and improve the appearance of the lowest-priced car.

These are major benefits—made possible only by this advanced, new-type, semi-flat tread bristling with road-gripping edges and by the amazingly durable and elastic Supertwist Cords of which the casing is made.

Supertwist Cords are 61% more elastic than old-style cords. They give the tire longer life because they stretch and recover instead of breaking under shocks. (See chart for difference in stretch.)

Selected from more than 80 separate and individual designs—this tire has been tested for a year under the harshest kind of conditions. We proved its traction, its wear and its strength for 5,400,000 tire miles on Goodyear's test fleet before releasing it to you.

This great tire is available from all Goodyear Selected Dealers. It is the newest reason why *more people ride on Goodyear Tires than on any other kind.*

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IT'S the always-ready, always-reliable Coleman Quick-Lite Lantern. Carry it anywhere—use it wherever you need good light and lots of it—in your barns, garage, milk house, feed lots, chicken house—anywhere on the place. Gives a flood of clear, steady, pure white light—brighter than 20 old-style oil lanterns.

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Dealers everywhere sell Quick-Lite Lanterns and Lamps. If your dealer can't supply you, write for full information. Address Dept. 816

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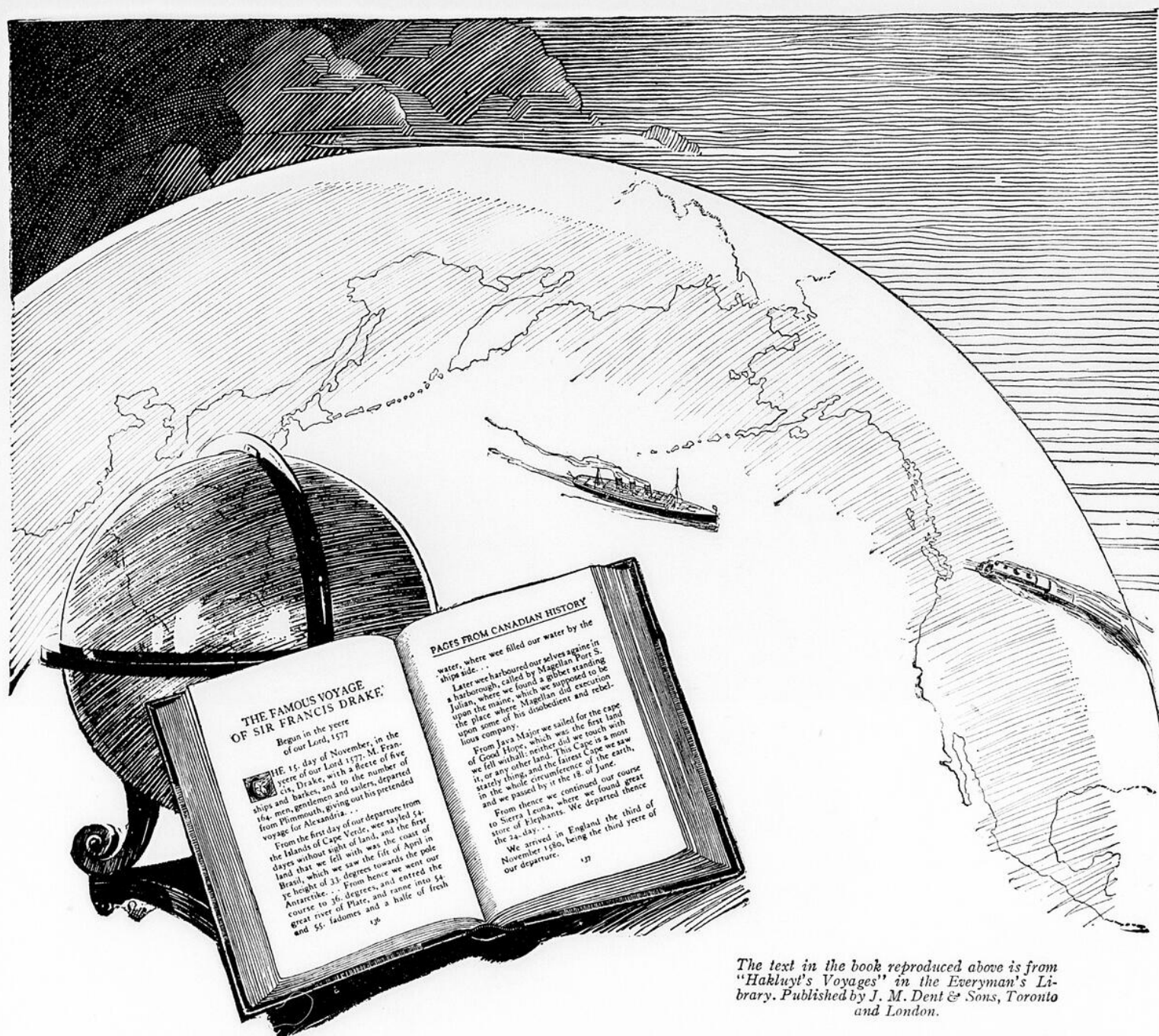
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Coleman
Gas Pressure Lanterns

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WITH all their faith and all their foresight, the Fathers of Confederation cannot have even imagined, sixty years ago, the world influence that their new-made country was destined to exert in the twentieth century.

Their chief concern was to keep the Provinces together, to preserve their integrity, to bind them, with tracks of steel and cords of understanding, into a great nation.

But the effect of their accomplishment, of the unification and opening up of this vast territory, has been felt to the ends of the earth.

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This traffic enhances the trade of Canada, gives employment to more than 80,000 workers, consumes a huge volume of supplies, mainly of Canadian origin.

But more important even than this is the world outlook that it gives to the Canadian people, the influence that it gives to Canada in world affairs.

Where the Canadian Pacific goes, there goes Canada, her men, her standards, her ideals.

CANADIAN PACIFIC
 IT SPANS THE WORLD



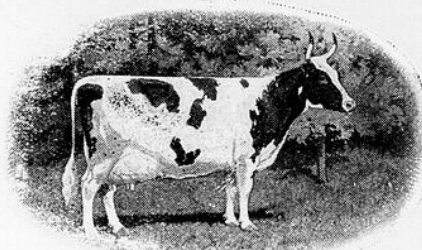
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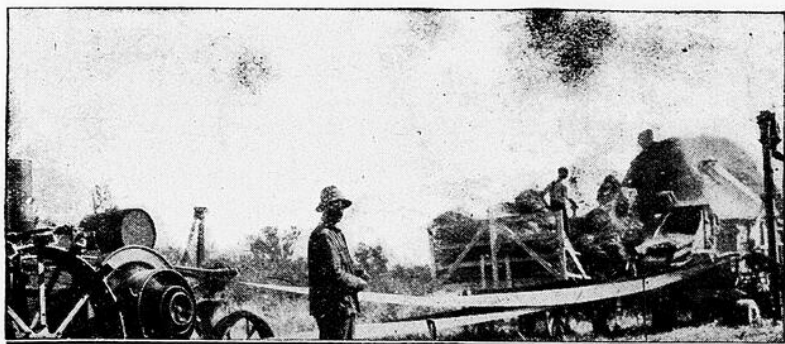
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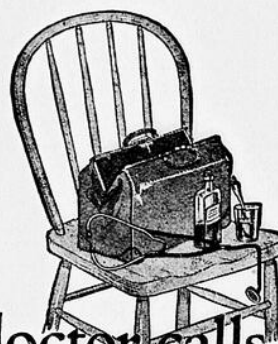
Goodyear Belts are made in endless type for engine drives and in cut lengths

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BELTS

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No question about it! The business-farmer of today who is a loving husband and a fond parent is recognizing that running water is the finest kind of health insurance. It protects growing boys and girls. It adds years to the life of his wife by cutting down drudgery that drains her strength. It gives his home the comfort and convenience of city bathing and sanitary facilities.

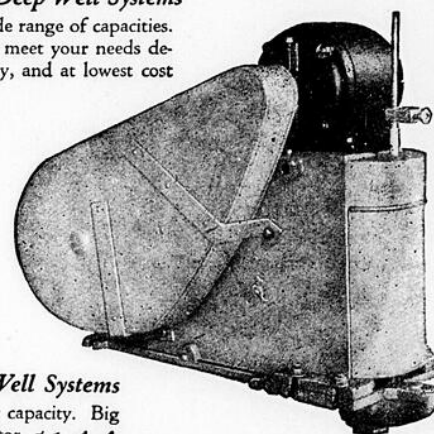
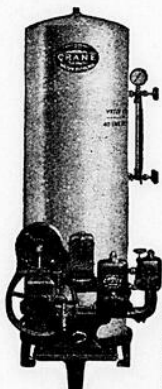
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