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MISSING

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THE DIGNITY OF A CALLING IS ITS UTILITY.

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A Work for the Graduates of the O. A. C.

By W. L. SMITH.



It is time the farmers of Canada were beginning to seriously consider their standing, as compared with other interests, among the several bodies which control things industrially and politically in this country. Farmers have so often been told they are the bone and sinew of the land, and theirs is the basic industry of the Dominion, that they have been lulled into a sense of comparative indifference based on the belief that they need barely stir themselves in order to ensure the direction of things both politically and commercially to their own liking.

The facts have not shown themselves to be in accord with the pleasing belief so long entertained. Agriculture, even to-day, does not occupy so predominant a position as is generally believed, and each passing year sees some of the other great interests making greater relative progress than is being made by that connected with the soil. It is true

the last Federal census credits an investment to farming about four times that of the investment in manufacturing; but at the same time the value placed on the products of the factories of all Canada in the last census year was nearly double that put upon the value of our field crops, plus a fair addition to the latter to represent the profit realized by turning these crops into beef, bacon, dairy products, etc. It is true the value of the field crops of this, the banner Province of Confederation, has increased by about 34 per cent. in ten years; it is equally true that in the same time metallic mineral production in all Canada has increased by well on to 700 per cent. It is gratifying to learn that in ten years the value of the output of Ontario cheese factories has advanced by about 50 per cent.; it should at least be a stimulus to enquiry when we learn that the earnings of the railways of the Dominion have gone up 100 per cent. in the same period.

The facts given, with others that might be added, point to the probability that agriculture in this country will soon occupy the same relative position to other interests that agriculture in the United States to-day bears to other interests in that country. Forty-five years ago the value of the products of the farms of the United States was equal to that of American manufacturing establishments. In 1905 the output of American steel mills alone was about equal to that of the farms of the Republic, and the annual value of agricultural products—great as this is—is only one-fourth that of the output of the factories of the country.

It is stating a fact within the knowledge of every one who reads, when it is said that the agricultural interest—despite all the compliments paid it by the politicians at election time—has not exercised that measure of control in the direction of public affairs in Canada which its importance would have warranted it in exercising. Those who control legislation live wholly or largely in cities. They have become more or less impressed by this modern craze for wealth—the wealth that comes from stock manipulation, real estate speculation and Cobalt gambling. They have become affected by that volatile spirit which seems to generate naturally where people assemble together in large numbers and their minds turn from serious and difficult problems to the subject of the moment's excitement as naturally as the needle turns to the pole. Moreover, they are surrounded daily by men representing their other interests—men possessed of social accomplishments and the faculty of making things pleasant for their guests. Is it cause for wonder, even

without any suggestions of improper influences, that there is a growing deafness to the voice coming up from the farm? And if this is the condition of things to-day, what will be the condition twenty years hence, when other interests have outstripped agriculture in development?

There is no reason, however, why agriculture in Canada, even when it becomes less important relatively than now, should not have greater control politically than it has at present. In Ontario nearly 60 per cent of the total municipal assessment is levied on rural municipalities; in New York only about 13 per cent of the total of assessed values is represented by farm property. Still, not a single bill to which farmers objected has, of late years, passed the New York State Legislature. Why? Because there is in York State a farmers' organization with 70,000 members which scrutinizes every bill as it goes through the House. Not a bill goes through the United States Congress, affecting agriculture, without a legislative committee representing a farmers' organization with 500,000 members being consulted.

What is the lesson? That if the Canadian farmer desires to hold his own he must organize too. I can conceive of no greater service the graduates of the O. A. C. can render their Province, than by going back to their old homes and there setting an example in good farming and becoming apostles in the movement for organization. The old men are fixed in their ideas, and they are rapidly passing from the stage. Hope is in the young, and the young should find their natural leaders in the graduates of our Provincial Agricultural University.

An Advance in Experiment Station Work

By R. W. WADE.

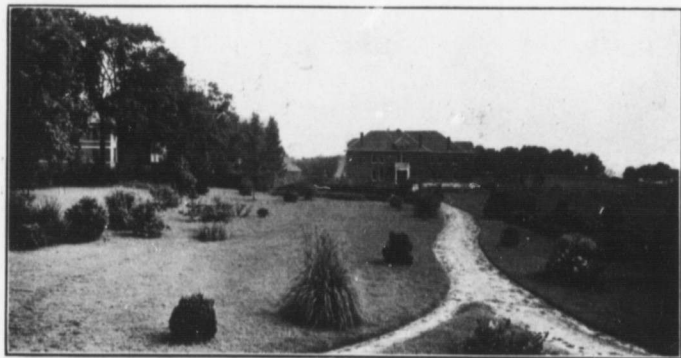


HERE are now in the United States of America eight hundred and forty-five persons engaged in experiment station work.

This vast country, with its varied products, its many climates and its innumerable types of soil, affords a wide field for exploration. In this work, as in other occupations, financial

economy, have lessened the efficiency of their stations, and while some of the most valuable work may have come from these stations, it is only as the exception which proves the rule.

Station work undergoes a process of evolution. At first the easier, simpler problems are attacked, and as the station grows stronger more advanced work is taken up, although the every-



A Portion of the Grounds at the Arkansas Experiment Station.

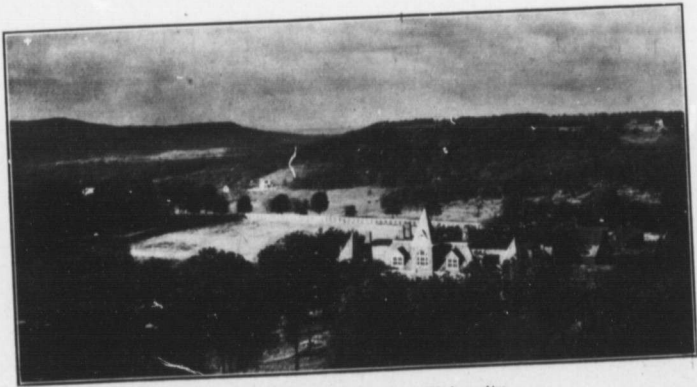
strength is one important factor, and those States which have responded generously to the call for funds, have been getting the benefit of the services of a greater number of well trained men. As a result, their agricultural problems have been more nearly worked out. The less progressive States by their unwise

day, practical problems of farm and orchard are not neglected. The workers begin to take a broader view, and as a result undertake more difficult problems. They will attempt to discover the fundamental truth, and will not be satisfied with careless generalities, which sometimes passes for it.

This may not seem as directly beneficial as some practical problems, easier to undertake and more quickly completed, but remember, the discovery of truth supplies a foundation on which all subsequent agricultural work must rest, if it would endure.

Up to the present time the weaker stations were only able to struggle along, working at what seemed of most pressing importance, and leaving to their better equipped neighbors the pleasure and distinction of performing the more enduring work of agricultural

menter-than from deficiency in funds. This grant should increase the usefulness of the stations by broadening and deepening their investigations. At the same time it should open a door to the trained investigator, and give him a standing not hitherto acknowledged. Agricultural colleges should also take note that it is not the common graduate, filled to overflowing with agricultural knowledge, who will be required to fill these new positions, but students who have been trained to think under the guidance of a teacher who is him-



Fayetteville from Arkansas University.

investigation. By the passing of the Adams' Bill, this state of affairs will, in a measure, be changed. This bill calls for an appropriation of \$5,000.00 to each station the first year, and a yearly increase of \$2,000.00 in the grant until \$15,000.00 is reached. This fund is to be spent entirely for research work. The weaker stations will now be able to carry on work of a higher order than heretofore, and its importance and magnitude will be gauged more by the capacity of the experi-

self a successful investigator. There will always be room for the thorough, patient worker, but the best positions will most assuredly be found occupied by those men whose dispositions and training fit them peculiarly for advanced work.

The Ontario Agricultural College has compared favorably and competed successfully with American agricultural colleges in the matter of turning out graduates capable of undertaking experimental work. One reason, per-

haps, is that the American agricultural departments are, for the most part, merely supplementary to the engineering departments, and, although there are, even at Ames, apparently many hundreds of agricultural students, yet when one analyses the class roll, he will find that a great part of these so-called agricultural students graduate in engineering or pure science, and have simply elected a few hours in agriculture to fill out their course.

The Ontario Agricultural College has been especially favored in being situated at a distance from any university,

so that the work taken up is purely agricultural, and it has created an agricultural atmosphere, we might say—a thing not so truly said of American institutions purporting to take up the same work.

We all appreciate the practical nature of the work of the O. A. C., but while not lessening its practical value, an increase in advanced work as a post graduate course would give additional prestige to the college, and be a means of training students for the higher work which will soon be demanding more men, not only in the United States, but also in the Dominion.

CANADA.

How fair her meadows stretch from sea to sea,
 With fruitful promise; changing robes of green,
 Varying ever, till the golden sheen
 Of autumn marks a glad maturity!
 How gay 'mid orchard boughs the russets be!
 The uplands, crowned with crimson maples, lean
 Long cooling arms of shadow, while between
 In sun or shade the flocks roam far and free.
 From east to west the harvest is her own;
 On either hand the ocean; at her feet
 Her cool lakes' sweetest waters throb and beat,
 Like cool, firm pulses of her temperate zone;
 Gracious and just she calls from sea to sea,
 "No room for malice, none for bigotry."

—Emily McMa.

The Claims of Citizenship.

BY WALTER JAMES BROWN, B.S.A., L.L.M.



DO NOT RECOGNIZE the claims of citizenship and to discharge its duties should be considered a privilege by every right-thinking man. Unfortunately, our ideas on the subject are not very clear and in spite of our boasted enlightenment the responsibilities of citizenship in this country are by far too many men carried indifferently. Apparently few realize that today Canadians stand on the threshold of opportunity. In a special sense "the twentieth century is Canada's century." We have a country of vast proportions to govern. It is rapidly filling with peoples of various ideals and nationalities. Our resources of farm, forest and mine are valuable beyond our powers to estimate. Then, for decades we have been over-shadowed by a huge aggregation of badly ruled commonwealths—rich, powerful and aggressive—keen to drive hard bargains in diplomacy and trade, and whose social problems are the most complex in Christendom. If Canada is to keep her status and her people are to build a strong nation upon the broad and solid foundations laid in the blood of our fathers, the man of today must do some hard thinking, must become public spirited and make preparations for the future. It is humiliating, and yet the fact cannot be denied, that there is a strong tendency among Canadians to follow United States practice and live a selfish life. Our own traditions, the teachings of history and the models of the Old World are forgotten or ignored. Comparatively few men are today public spirited. Each one lives and works for himself, and for himself alone. This fact manifests itself among all classes, rural as well as urban.

In the towns and cities of Canada the adoption of "American" methods in business and in politics is becoming notorious and the end is not yet; while the love of luxury, the fondness of ostentation and the mad rush for more gold, or the excessive commercialism of the age, coupled with uninterrupted prosperity, make for extreme selfishness and render the city man as indifferent to public needs and public responsibilities as he is ignorant of public duties and opportunities. It seems to

require a crisis in municipal or national affairs to enlist his interest, or stimulate anything more than the most superficial activity. When legislation touches his own business, he springs into the political arena with the agility of a panther and fights his battle to the bitter end. It is not a question with him what is best for the whole people. He has but little regard for the rights of others. The results of such tactics have been amply illustrated in the United States during the past forty years. We are blind, indeed, if we cannot read the signs of the times.

The farmers of Ontario do not like to be told that they, too, are not public spirited, and yet, it is true. For illustration: Years ago the system of statute labor was inaugurated on the supposition that the farmers living and having property on a highway, would, because of their personal interest in it as well as their public spirit, keep the road in good condition and improve it from year to year. This was an easy and convenient method of "working-out" a part of the taxation on their land. The Dominion Government assumed the responsibility for the support of the militia and the provinces were allowed to delegate the spending of the annual per capita assessment for national defense to the municipal authorities. In rural Ontario this poll tax was also added to the statute labor. What has been the result? The system has failed and failed miserably. The farmers have not only defrauded the nation, but have cheated themselves. By the vast majority road work has been interpreted to mean "gentle exercise in the open air." They have done just as little work as possible, consequently the highways of Ontario are a reproach to our whole people. In the few counties where the system has been changed by the appointment of a road supervisor, the statute labor computed at fifty cents a day, and the same farmers employed to do the actual work of road making, the immediate improvement of the highways has been marked. Comment is unnecessary. Innumerable other illustrations might be given. For instance, the attitude of the agricultural classes in years past toward the Ontario Agricultural College and Experimental Farm, their present attitude toward the rural schools, toward the matters of forest denudation, tree planting and the destruction of weeds on roadsides, and toward the proper support of the Canadian militia. It is the spirit of selfishness that controls the actions of men who manifest their unwillingness to make some sacrifice of time and money for the general good. One of our leading educators says that extreme selfishness is the result of dense ignorance—certainly a selfishness that outweighs self-interest and public necessity combined must be extreme—yet, for a generation or longer we have been boasting of the excellence of our educational system. Is it

not about time that Canadians of all classes began to study the claims of citizenship and to investigate the elements of patriotism?

These claims are chiefly three: (1) character, intelligence and industry; (2) public spirit and civil duty, and (3) military service. To be a good citizen it is necessary to be a good man. Character is power. It is power in the individual and power multiplied in the community and in the nation to which he belongs. But goodness in the restricted sense taken alone is not sufficient. It must be strengthened by intelligence and industry. The modern tendency is to limit the meaning and application of each of the three words—goodness, intelligence and industry. Often our goodness is so narrow that it is merely a combination of selfishness and cant. We should ponder the words: "Not every one that saith unto me, Lord, Lord, shall enter the kingdom of heaven; but he that doeth the will of my Father which is in heaven." The truly good man, according to the late D. L. Moody, "seeks to do all the good he can, in every way he can, to everybody he can." How many interpret their mission in the world to this spirit? Our intelligence and our industry involve labor, long and arduous. Ignorance and idleness are not elements in the making of manhood, neither are they considered the virtues of citizenship; but because they cannot be displaced without effort, men often consider themselves under no obligation to use their intelligence or the results of their industry for the general good. It is because of this attitude of selfishness that the claims of citizenship must be amplified and the words public spirit and civil duty added. As to military service it is essentially a means of education and is to be commended chiefly for this reason. It also provides the only instrument a nation has to check the selfishness and aggression of its contemporaries.

After endless experiments extending through decades of time, it has been ascertained that the function of government is at best negative and restrictive, rather than positive and active; being resolvable principally into protection—protection of life, liberty and property. Laws wisely administered secure men in the enjoyment of the fruits of their labor, whether of mind or body, at a comparatively small personal sacrifice; but no laws however stringent can make the idle industrious, the thriftless provident or the drunken sober. It is the individual who by exercising economy and self-denial becomes the means of reform, and by improving his habits strengthens the body politic. A nation is through its government but the reflex of the individuals composing it. A noble people will only be nobly ruled and the ignorant and corrupt ignobly. Indeed, all experience serves to prove that the worth and

strength of a state depend far less upon the form of its institutions than upon the character of its men. Not long ago a writer in the London Times touched upon this thought in the following words:

"That which raises a country, that which strengthens a country, and that which dignifies a country—that which spreads her power, creates her moral influence, and makes her respected and submitted to, bends the hearts of millions, and bows down the pride of nations to her—the instrument of obedience, the fountain of supremacy, the true throne, crown and sceptre of a nation—this aristocracy is not an aristocracy of blood, not an aristocracy of fashion, not an aristocracy of talent only; it is an aristocracy of character, the true heraldry of man."

Men of character are not only the conscience of society, but in every well-governed nation they are its best motive power, for in the main, it is moral qualities and moral strength that rule the world. Napoleon said that even in war the moral is to the physical as ten is to one. The strength, the industry and the standard of civilization of all countries depend upon the distinctive character of their people, and the very foundations of their civil security rest upon this personal quality in their citizens. John Stuart Mill truly observes that, "even despotism does not produce its worst effects so long as individuality exists under it; and whatever crushes individuality is despotism, by whatever name it is called." In a nation such as ours, where law, liberty and opportunity are the foundation principles upon which public institutions rest, it is the individual who is paramount. His moral character, intellectual outlook, and unselfish interest in the state determine its condition.

Good citizenship demands that the individual shall endeavor to make the most of himself. Assuming that he strives to develop a moral character and that he has an adequate appreciation of the privileges resulting from the application of the principles of liberty and law to his national institutions, it is only reasonable that he should seek to inform himself as to the meaning and purpose of those things which are fundamental in the government of the community in which he resides. For example, a cursory reading of history is sufficient to impress upon one's mind how frequently the meaning of the terms liberty and law have been misunderstood and the principles for which they stand misapplied. It is said to be the primary virtue of every highly-civilized people that they love liberty and they love law, but law and liberty cannot rationally become the objects of their affection unless they first become the objects of their knowledge. The same studies properly directed will lead to a knowledge of both. Neither alone can be known because neither exists without the other.

Without liberty law loses its nature and its name, and becomes oppression. Without law, liberty also loses its nature and its name, and becomes licentiousness. History illustrates and proves beyond a doubt these facts. Hence the necessity of study and accurate knowledge in dealing with the problems of government. In fact, a knowledge of jurisprudence and political science should, especially among a free people enjoying manhood franchise, be disseminated universally, that each voter may pass judgment upon the claims of rival political parties and vote intelligently. Judging from the conduct of many legal controversies as well as some elections held during recent years, the fact is overlooked that the supreme or sovereign power of this country resides in its citizens at large, and that they always retain the right of abolishing, altering or amending their laws and charters at whatever time and in whatever manner they shall deem it expedient. Less than one hundred years ago our grandfathers esteemed it a privilege to exercise the franchise, and did not consider it a hardship to ride on horseback fifty or one hundred miles through the woods to vote. They were men of public spirit and did not shirk their civil duties. They resented any encroachments upon their liberties with the musket and the sword. They were men of honor and men of iron. They were not nursed in the lap of ease and selfish indifference like many of their unworthy descendants.

Until the South African War, few Canadians thought of the obligations of military service, but fortunately during that campaign the gallantry and heroism of our troops sent a thrill of joy through every Canadian heart, and the word "Canada" echoed around the world. Since the Battle of Paardeburg there has been a new elasticity and strength in the stride of Canadian men. On the morning of the 27th of February, 1900, the people of this country awakened, conscious of national dignity and power. Since that hour we have felt that steps were being taken to establish a measure of self-respect and to put our country into a better condition of defense. There is a long distance yet to travel before we can say to the mother country and to the world that we are prepared to stand alone and are able to protect our homes on land and our ships on the seas; but the time is not far distant when we shall take our share of the obligations imposed by our geographical position and by our place in the sisterhood of nations forming the corner stones of a vast and beneficent empire. But military service is essentially a means of education and is needed to develop a strong race of men, capable of grappling with the forces of nature, the problems of government, of agriculture, industry and commerce that must be

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solved in the near future if we are to enjoy the fruits of our national inheritance. There are, however, many people in this country who call black white, and white black, and designate every effort to improve the militia as "militarism." They stand on the brink of the future and shudder. They seem to think that any measure of self-defense is useless, and that in case of emergency would be crushed by a single blow. Therefore we should grow fat upon our land and let others cultivate virility and self-respect. "Militarism" is not applicable to Canada or to Great Britain or to any other nation which aims to protect itself and does not seek war for the sake of conquest. Even "militarism" as exemplified in Germany has its compensations. No other nation in the world can show the same record of progress within the same length of time that Germany can show. In education, in science, in commerce and industry, her people are utilizing their opportunities to the utmost, and all things considered, man for man, they are without equals among any other civilized race. Even war is not the worst thing that can happen a nation. If the teachings of history are to be considered it is not. Ruskin says:

"All the pure and noble arts of peace are founded on war; no great art ever rose on earth but among a nation of soldiers. . . . There is no great art possible to a nation but that which is based on battle. . . . When I tell you that war is the foundation of all the arts, I mean also that it is the foundation of all the high virtues and faculties of men. It is very strange to me to discover this; and very dreadful—but I say it to be quite an undeniable fact. The common notion that peace and the virtues of civil life flourish together, I found to be wholly untenable. Peace and the vices of civil life only flourish together. We talk of peace and learning, of peace and plenty, and of peace and civilization; but I found that those were not the words which the Muse of History coupled together; that, on her lips, the words were peace and sensuality, peace and selfishness, peace and death. I found, in brief, that all great nations learned their truth of word, and strength of thought, in war; taught by war, and deceived by peace; trained by war and betrayed by peace; in a word, that they were born in war, and expired in peace."

The foregoing has not been written in the spirit of pessimism, criticism or fault-finding; but with a view to stimulating thought and discussion. If any suggestion thrown out in the preceding paragraphs helps to widen the outlook and crystallize the thought of some young man or woman who is studying life's problems, the writer will be more than amply repaid.

Agriculture.

Agricultural Progress of Alberta.

“THE Twentieth Century is to be Canada's Century,” someone has said. It might, indeed, be called the century of the Canadian West. Unless the indications are misleading, a development will take place in this country within the lifetime of the present generation, such as has seldom, if ever, been seen before in any country. The word “west” has always had a certain attraction; the west has been the lodestone for the adventurous and progressive spirits of every age. But the popular idea of what constitutes the west has greatly changed. A hundred years ago our great grandfathers looked across the sea to this continent, any part of which was to them the great unknown west. Fifty years ago, the central plains of Iowa and Illinois were very far west, indeed. Twenty-five years ago the Dakotas and Manitoba were the goal of those who responded to the call “go west, young man.” To-day these are no longer the west. They have become old settled country, and the seeker for new worlds to conquer, agriculturally, has come to the last west in the great plains of Saskatchewan and Alberta. Beyond are the Mountains, behind are the crowded districts with high priced land, and back of all the huge and growing populations of the Old Land

and the American Republic seeking an outlet. Am I not right in saying that we are about to see a development such as it is hard to exaggerate?

The Province of Alberta being the most westerly and northerly part of the great prairie region, has been the last to come under the plough. True, her ideal climate has for some considerable time attracted the rancher. And his droves of cattle and horses have wandered summer and winter over the prairie for quite a few years. But the amount of land under crop has, until recently, been an almost negligible quantity. This is rapidly changing.

The realization of the extent of the good country to the north has been one of the features of this development. There is as much arable land lying north and west of Edmonton as people supposed lay north and west of Winnipeg twenty years ago. And the development of the former district in the next twenty years will be as great as has been that of the latter in the past. If you will look at a map of Canada you will see Peace River Crossing marked as a Hudson Bay Company fort on the Peace River in Northern Alberta. This point is about five hundred miles distant from Edmonton, three hundred west and two hundred north. One would suppose that this must be a

fur-traders' rendezvous or an Eskimo settlement. Not so! Three flour mills are in operation at this point. There is quite a numerous white settlement, and farming is carried on extensively. At Fort Vermillion, two hundred miles further north, down the Peace, there are two more flour mills and another farming community. A clergyman who spent several years in this district, informed the writer that the climate is almost identical with that of Edmonton. Greater proximity to the Moun-

to-date machinery. The great difficulty with which these people have to contend is transportation. All machinery and supplies have to be freighted from Edmonton. At present their agricultural products go north to the trappers and traders of the Arctic and sub-Arctic regions. The market is consequently limited, and no great development can take place until the advent of the railway. Then, when that great, practically untrodden, lone land, stretching from Edmonton to Fort Ver-



Wheat in Alberta.

tains practically counterbalances the greater distance north. The days are a little longer in summer and shorter in winter. Summer frosts are quite rare, and the Chinook wind blows a considerable portion of the winter, making it comparatively mild. Splendid crops are being produced in this far north region, but not as good as might be if it were possible to bring in up-

million and from the Rocky Mountains eastward as far as the Chinook extends its moderating influence, is thrown open to agriculture, who can say what the result will be?

Agriculturally, Central Alberta, i. e., that portion including Edmonton and extending one hundred and fifty miles south, is the oldest part of the Province. It has been generally acknowledged

for years that this region possessed agricultural resources of great richness, but until recently the development has been comparatively slow. In the last few years it has gone ahead by leaps and bounds. The growth of the City of Edmonton is a fair indication of the development of the whole district. In 1901 Edmonton was a town of 2,000 inhabitants without a railway; today it is a city of 12,000, the terminus of a great continental railway, the Canadian Northern, and the objective point of another, the Grand Trunk Pacific. Even its old-time foe, the C. P. R., is building a million dollar bridge to span the valley and bring their line in from Strathcona. Central Alberta will be the Ontario of the west. By that is meant that she will be a great mixed farming country, as opposed to purely grain-growing. Distance from market tends to discourage grain-growing; natural suitability of the country and the proximity of the British Columbia market tend to encourage the raising of animal products. True, grain will be grown in large quantities, but the tendency will be more and more to convert it into beef, butter, eggs or pork before marketing. This can have no other effect than to make this a community of comfortable, well-to-do farm homes. Already considerable prominence has been reached by stock-breeders, and there are few places even in Ontario where one can see in a day's drive as many really fine beef cattle of royal blue breeding, as one can around the town of Lacombe. The dairy industry has also made great strides. During the past season the creameries of Central Alberta produced over \$250,000 worth of butter, one alone at Innisfail, producing \$50,000 worth. Most of the creameries are operated by

the Provincial department, who have also recently introduced poultry fattening stations.

Sunny Southern Alberta was the ranchman's paradise, but now it is to him nearly a "Paradise Lost." The ubiquitous ever-encroaching farmer is driving the cowboy back to his last stand in the regions far remote from the railway, and in the broken foothill country. Calgary is no longer the cowboy town; it is the market town of an agricultural community, and the metropolis of an agricultural Province. As the growth of Edmonton is indicative of the center and north, so is that of Calgary of the south. In 1901 her population was 4,091; in 1906, it is 14,203, and this without any new railways. The business done has increased even more rapidly than the population. According to bank clearings, which are considered a fair indication, she ranks equal with such cities as London, Hamilton and St. John.

While it is over twenty years since the Canadian Pacific was built, Southern Alberta is just as much a recent discovery from an agricultural standpoint as the more recently opened districts. Known as a ranching country, entirely too dry for farming, the whole southern half of the Province was for years ignored as a farming possibility. The Mormons and other American settlers from the semi-arid States were the first to show what could be done. To-day as good crops are being grown without irrigation in the supposedly arid district as are grown in the moister districts. All that is necessary is a knowledge of the methods of scientific dry-farming. Nor is the district as dry as the rancher, who wishes to scare the farmer away, would make out. The rainfall at Calgary is greater than at

Regina, for instance. Two large irrigation systems have been established in Southern Alberta, one near Lethbridge is owned by the Alberta Railway and Irrigation Company, and one near Calgary by the Canadian Pacific. The areas which can be irrigated by these systems, while apparently very large, are infinitesimal compared to the total area of the country. Irrigation is very good in its place and insures a crop without any danger of failure, but there has been a great deal more talk of irrigation in Alberta than its importance justifies. It has been clearly shown in practically the whole country, that though beneficial, irrigation is not necessary. The extensive advertising of irrigated lands has prob-

ably kept away more settlers by creating a wrong impression of the country, than it has brought in.

The practicability of winter wheat-growing is another discovery that has done much for the southern portion of the province. The quality of Alberta Red winter wheat is quite equal to the best Manitoba hard. Southern Alberta will probably become and to a large extent remain a grain-growing country. The comparative dryness of the climate gives a wheat of better quality than can be grown in the north; in fact, as good as can be produced anywhere, and the wide, open prairies make farming on a large scale possible.

W. C. McKillican.

The International of 1906.

THE Seventh International goes down in history as a grand success, even greater than that of any of its predecessors. Larger entries and superior quality of exhibits characterized the great show this year. Exhibitors were there from far and wide and as usual Canadians crossed the line and kept the stockmen of different states guessing. In horses they captured their own fair share; Graham Bros., of Claremont, securing the blue ribbons in nearly all classes of our most popular breeds, the Clydesdales and Hackneys. While Canadians were well to the front in horses, cattle and swine, they figured most conspicuously in sheep. Here they clearly demonstrated to the American flock-

masters that they were alive to the increased demand and prevailing high prices for ovine excellence, by the strings of ribbons that adorned their pens and by the fact the Southdown wether of Drummond's carried the Grand Championship clear to Quebec.

Owing to the fact that last year Ontario won the trophy in the Stock Judging Competition, increased interest and enthusiasm in the International were aroused in the students of the College, and it is to be hoped that the success of this year's team will tend to further stimulate that feeling, for it is a regrettable fact that more of our boys do not take advantage of the opportunity to visit the International. There the magnitude of the great live stock industry can, at least to some

extent, be realized. The large, well-lighted judging arena in the huge amphitheatre when filled with strings of animals in the different classes, presents an object lesson which even the uninitiated observer cannot fail to see. The judging of the six-horse teams and a trip through Packingtown are an education in themselves.

The International is as its name indicates, international. Too many Canadians fail to realize this and are contented to live in ignorance in the background, rather than push to the front, awaken to the crying needs of the country, and avail themselves of the unexampled opportunities the International Exposition affords.

The Winter Fair.

SUCCESS has again crowned the efforts of the Winter Fair promoters. Attended by such a result the show can be reviewed with satisfaction. The exhibits this year comprised perhaps, more inferior animals than those of last year, but when we consider the larger number of entries and magnificent display in some classes, we can reasonably say that the show this year has not fallen below the high-water mark attained by its predecessors as an exponent of the agricultural resources of the country. Particularly were the swine and poultry exhibits remarkable, and they completely out-distanced any previous achievements in these departments.

We think we can safely assert that with the present facilities and accommodation, the show has reached its climax. The one deplorable feature was the lack of space. In this the directors were badly handicapped, and were unable to furnish accommodation to either exhibitors or visitors. The hampered condition of things cast a meanness upon the whole display and greatly impaired the opportunity for education as well as the comfort and

pleasure of the visitors who thronged around the little judging ring and in the narrow passages. The building is altogether too small and the time has come when something must be done if the show is to push forward or even retain its present standard.

One of the potent factors which influenced the locating of the show at Guelph was the inestimable opportunities that would be afforded the College students. It is unfortunate that at fair time examinations are a first consideration. Although lectures are all cancelled, a great many students occupy the time in study. The examinations of course are important, but any man who thought he was compelled to plug during the days of the fair made a great mistake; such a man could not afford it; the place for him to have studied was in the Fat Stock Show building. The only man who can form any idea of what there was to be gained is the man who watched the decisions of the judges, listened to their reasons and afterwards satisfied himself with those reasons, who conversed with the breeders themselves, and who followed the lectures enthusiastically and in-

telligently. Seldom, if ever, has such an opportunity been offered to gather up-to-date ideas and gain an insight into the most urgent problems with which the practical agriculturist has to contend, and yet, comparatively few of our students availed themselves as they might.

The judging competition, however, is one feature which seemed to meet with appreciation by the students. The interest taken was strikingly manifested by the number of entries; this year there being over one hundred entries, fifty in beef cattle alone. This can be accounted for largely by the fact that ten cash prizes were offered for each class of stock, beef cattle, dairy cattle, sheep and swine. Some men are not in favor of giving cash prizes for such competitions. Honor and educative value certainly mean a lot, but, after all there is nothing which

will arouse the enthusiasm, in either the student or farmer's son, like a little money in the scheme, and as a result both honor and educative value will be intensified.

The winners in the competition this year were: Sheep—H. C. Duff; Swine—R. W. Mills; Dairy Cattle—R. L. Moorehouse; Beef Cattle—J. James.

The block test formed a special feature and certainly a valuable adjunct, for herein culminated the ambitions of the consumer and producer. A study of the carcasses along with the illustrated lectures by Mr. John Gosling, of Kansas City, proved interesting and instructive.

The importance of this great show should be realized and a solution for the problem of space arrived at for next year in order that horses, too, may be included and make ~~the display~~ still more attractive.

THE REAL FRIENDS.

Call him my friend who seeks me in my den
For quiet chats which light the weary day;
Call him twice friend who knows exactly when
To go away.

Call him my friend whose voice is always free
In my defense when critics' words are rough;
Call him twice friend who understands when he
Has said enough.

Call him friend who comes in smiling faith,
For my assistance when the clouds are black,
Call him thrice friend!—though he is but a wraith—
Who pays me back!

—George Fitch in *Smart Set*.

Experimental.

Feeding Value of Corn.

In the Form of Silage.

CORN can be utilized during both winter and summer in the form of silage, and this statement applies to all extremes of temperature found in the United States. Some have believed that silage could not be used satisfactorily in warm climates. This is certainly a mistake, and that it can be used satisfactorily in cold climates is borne out by observations of the writer at Ottawa, Canada, this year when he was shown an ordinary stave silo in which silage had been preserved for several years and fed to dairy cows with satisfactory results. It is true that the silage froze, but it was simply thrown down into the stable and allowed to thaw before feeding, and if not allowed to stand and ferment, no bad effects have ever been observed. The silo economizes time and labor very materially, one man being able to handle the roughness for a large number of animals with comparative ease.

That the silo can be easily constructed and at a comparatively small cost is now a well-established fact. Two stave silos built in connection with our cattle-feeding barn cost \$1.50 per ton of capacity, even at the high prices now prevailing for labor and building materials.

That corn can be preserved in an ideal condition for feeding all classes of farm stock has also been clearly demonstrated. That care and good judgment in the cultivation of the corn crop for silage, and its proper preservation and utilization as a foodstuff is essential, goes without saying, but under intelligent management there is no crop which can be made to serve more useful purposes on the farm in providing the needed succulent roughness for winter feeding at a low cost for all classes of live stock than corn silage. The wonderful adaptability of this plant to a variety of soils and climates makes it unequalled for the purposes mentioned. Of course, other crops may be used for silage, but none has the general utility and the wide adaptability of corn.

As to the cost of corn silage, estimates vary materially, but a number of years' experience, where accurate records have been kept, indicates that it can easily be made for \$2.00 a ton; under the most favorable conditions possibly for a little over \$1.00 a ton; and under the most unfavorable conditions it may cost as much as \$3.00 a ton. From 8 to 12 tons of corn silage per acre is a fair yield, the smaller figures approximating the amount obtained in unfavorable seasons and on

soils of moderate fertility; and the higher figure the yield under favorable soil and climate conditions. Corn silage increases the carrying capacity of the land very materially, especially in sections where tame pastures cannot be relied on; and though the seasons are mild and open in the south, it is quite as important for the southern farmer to have a silo as his northern neighbor. In fact, a good silo on every farm would do much to encourage live stock industries; yes, and make them possible and profitable where they are now neglected with disastrous results and the endeavor made to maintain crop yields through the use of cheap and satisfactory grades of commercial fertilizers.

The feeding value of silage as a roughness for beef production has been under investigation for a number of years, some of the results obtained being summarized below:

Feeding Steers on Silage.

RATION.	Gain per Head Per Day, lbs.	Food Consumed Conc.	Food Consumed Rough	Cost lb. of Gain, Cts.
Silage and cotton seed meal	2.06	3.8	17.6	6.4
Silage and clover hay, C. S. meal 1, corn meal 1.....	2.19	3.9	15.2	6.0
Silage, clover hay and cotton seed meal.....	2.19	3.6	15.5	6.9
Corn stover, pea hay, corn meal	1.8	3.7	7.0	4.8
Corn stover and pea hay, corn meal 1, C. S. meal 2.....	1.5	5.2	7.8	9.9

These results show conclusively that much better gains per head per day were made by the cattle fed on silage than by those receiving mixed hay and stover. They also indicate that under favorable conditions over two pounds of gain per head per day can be obtained where silage and cowpea, clover or alfalfa hay were fed with a suitable grain ration. Two pounds

of gain per head per day for 180 days is as satisfactory an increase in live weight as can ordinarily be made with cattle in good flesh and a grazing period of similar length even in sections where the blue grass predominates and old-established sods are available. What further proof is needed of the high feeding value of silage for beef cattle? As to the amount of feed, that will vary from 30 to 40 pounds per head per day, depending on the age and condition of the cattle and the other forms of roughness fed. With these figures in mind it will be a comparatively simple matter to calculate how many acres of ground will be needed to fill a silo of a given capacity and supply the food needed for winter feeding.

That silage is a food of superior merit for dairy cattle is shown by the following feeding trials where it was fed with alfalfa and cowpea hay as a substitute for a certain proportion of bran and cotton seed meal which had formerly been fed. These figures speak for themselves and need not be dwelt on at further length.

Feeding Silage to Dairy Cows.

RATIONS	Food Consumed per gal. milk		Food Consumed per lb. butter		Cost of Gal. Pound	
	Conc. R'gh's. Lbs.	Conc. R'gh's. Lbs.	Conc. R'gh's. Lbs.	Conc. R'gh's. Lbs.	Cts.	Cts.
Silage, wheat bran and cotton seed meal...	4.4	23.6	9.2	48.7	5.9	12.2
Silage, pea hay and cotton seed meal...	2.0	29.1	3.9	54.9	5.2	9.9
Silage, alfalfa and cotton seed meal.....	2.6	27.0	3.8	48.0	6.9	12.3

In an experiment made at the Ohio Station it was further shown that liberal feeding with silage made possible a considerable reduction in the quantity of the concentrates required by cows. The figures summarized above are very striking and should drive home truths of momentous importance to all dairy farmers.

Silage can also be fed in limited quantities to horses and mules, though not over ten to fifteen pounds per head per day should be used. Sheep will relish and thrive on silage, but should not be surfeited with it. The value of silage is improved by feeding some dry leguminous roughage with it as already indicated.

As a Concentrate.

We now come to the consideration of corn as a concentrate. Corn may be fed in a variety of ways, but it is most commonly used on the ear. Sometimes it is shelled and fed, sometimes used as cornmeal and more commonly of late, a corn and cob meal, or corn, cob and shuck meal. Corn alone, as indicated by its composition, is a one-sided food; that is, it is a heating and fattening food, ideal for certain purposes, but not well-balanced and suited to the needs of various classes of live stock by itself. The following is the average composition of corn: Protein 12.6 per cent; carbohydrates, 79.3 per cent; crude fibre, 2 per cent; other extract, 4.3 per cent; and crude ash, 1.7 per cent. Strange to say, it has been the exclusive concentrate used on many farms for so long that farmers are skeptical about statements tending to show that when corn is fed in combination with other concentrates, better results will certainly follow. Of course, there are cases where corn alone is the proper thing and no one should attempt to gainsay this fact, but as the majority of the animals on our farms require more or less protein in the ration, it is clearly evident that a food so one-sided as corn is not adapted to their best nutrition, and an endeavor will be made to show briefly that experi-

mental data bear this statement out very fully.

In an experiment made at the Virginia Experiment Station last year with beef cattle, corn was fed in various forms along with silage, stover and cotton seed meal to 48 head of cattle. The results by groups are as follows:

Feeding Corn in Various Forms to Beef Cattle.

RATIONS.	Total gain Lbs.	per head per day Lbs.	Food consumed.		Cost lb. of gain Cts.
			Conc.	Rough Lbs.	
Silage and stover, C. S.					
meal, ear corn.....	2446	1.67	6.43	17.50	7.9
Silage and stover, C. S.					
meal, split corn.....	2140	1.47	7.45	20.02	9.5
Silage and stover, C. S.					
meal, shelled corn.....	2463	1.71	6.60	17.77	8.8
Silage and stover, C. S.					
meal, corn meal.....	2511	1.74	5.32	15.23	8.84
Silage and stover, C. S.					
meal, corn and cob					
meal (fine).....	2056	1.43	6.74	18.44	9.60
Silage and stover, C. S.					
meal, corn and cob					
meal (coarse).....	2002	1.39	6.92	19.61	9.79

The table shows the total gain made by each group in 150 days on ear corn, split corn, shelled corn, cornmeal, corn and cob meal, fine; and corn and cob meal, coarse. Hogs followed the first three groups and added considerably to the gains made. These results show that the largest gains were made by the groups receiving cornmeal, namely, 1.74 pounds. As the group receiving shelled corn made an average daily gain of 1.71 pounds, no margin was left to pay for grinding the corn fed to lot three. The split grain group made an average daily gain of 1.47 pounds, and the labor involved in splitting being considerable, it does not seem profitable to feed corn to beef cattle in this form. The ear corn group were close up to the shelled corn and corn meal groups, with 1.67 pounds of gain per head per day. These results

would indicate that ear corn or shelled corn would be the most satisfactory form in which to feed the grain, with the character of roughness mentioned and cotton seed meal in sufficient quantity to balance up the ration and supply the individual needs of the growing animals. In other words, large and satisfactory gains can be made with an ordinary grade of cattle on these rations which are adapted for use in almost every section of the country, and peculiarly so in the south. Corn and cob meal either fine or coarse, did not give as large gains as were anticipated, and it would hardly seem profitable to grind the corn save possibly when it is very high, and by so doing it can be made to go considerably further which is a very important consideration.

That corn alone should not be fed to hogs is brought out nicely by the following data:

Corn Alone and in Combination for Swine.

RATIONS.	Total gain Lbs.	Gain per head per day, Lbs.	Food consumed per lb. of gain, Conc.	Skim milk	Cost lb. of gain Cts.
Corn meal 2, wheat meal 1, skim milk 9.....	330.7	1.40	1.6	14.1	5.1
Corn meal.....	118.7	.50	4.1	5.8
Corn meal 1, skim milk 8.....	309.0	1.35	1.6	12.2	4.8
Corn meal 2, Soybean meal 1, skim milk 8.....	307.0	1.30	1.6	12.2	5.1

That it will give as good results when fed alone in the form of ear corn or shelled corn goes without saying, and that it can frequently be utilized in this way most advantageously for hogs is an undisputed fact. Where it is to be mixed with other grains, however, it will often be an advantage to grind it and feed it in the form of corn meal or corn and cob meal. Corn when fed with skim milk, as the data indicates, constitutes an ideal ration

because the milk being rich in protein helps to balance it up and so adjusts it to the needs of growing swine. For finishing off hogs that are fairly well matured, corn is unsurpassed, but when fed in combination with soy bean meal, cowpeas, linseed meal, skim milk, wheat and other concentrates having a narrow nutritive ratio, larger gains at a lower cost will always follow. Corn can be fed most advantageously with skim milk in the ratio of one pound to four to six of milk, depending on the abundance of the latter supply. When so fed, the milk will have a feeding value of 15 to 35 cents per 100 pounds, and corn has been known to give a return of 80 or more cents per bushel when fed in combination with skim milk. Corn alone is not a satisfactory food for hogs, as the table shows, the increase being small and very costly, and the gain per bushel of corn low in proportion to what it should have been.

For sheep, corn is a very fine grain. It should not constitute the exclusive ration for ewes, or for any class of breeding animals for that matter. Owing to the nature of the wool, sheep require a somewhat nitrogenous ration, and the protein may be supplied in clover, alfalfa or cowpea hay which will mitigate the fattening influence of corn to some extent. Corn combined with moderate amounts of cotton seed meal, linseed meal, oats, bran or middlings, will give better results with sheep and lambs than when fed alone. Young lambs should never receive an exclusive ration of corn. Many letters have come to our station asking for information that will prevent young lambs from dying where an attempt is made to raise them under "hot-house conditions. This trouble in

nearly all instances is due to the exclusive feeding of corn in an attempt to fatten them rapidly. A variety in the ration and a less heating and irritating food to the digestive organs will

tend to overcome the difficulty mentioned.

Andrew M. Soule,
Dean of Exp. Station,
Blacksburg, Va.

“The Union.”

THE Annual Meeting of the Agricultural and Experimental Union was held on Dec. 10th-12th, and, as was anticipated, proved very interesting and instructive to those who were privileged to attend.

The excellent work that the Union is doing for the Province, and the success that has attended its growth from year to year, need not be emphasized here. It is today recognized the world over, by all those connected with agricultural work, as one of the foremost organizations for directly benefiting the practical farmer, and its results are to be seen in better crops that are being grown throughout Ontario.

During the past year eighteen hundred reports have been sent in by those having undertaken co-operative experimental work, and if we may judge by the excellency of most of these, and also by the enthusiastic tone that was felt throughout the session just closed, we may look forward to a future which promises even better work and greater success than that achieved in the past.

The advisability of enacting a law to Control the Sale of Feeding Stuffs was the subject of an important paper read by W. P. Gamble. The importance of this question to the Province was clearly shown, and a resolution

was adopted urging the enactment of such a law.

Professor H. L. Hutt discussed the question of Introduction of Vegetable Tests in Connection With Our Co-



J. M. McCALLUM,
President Experimental Union.

Operative Work,” after which a committee was appointed to meet the vegetable growers and discuss with them some practical plan of conducting co-operative experiments in vegetable growing.

"The Improvement of Plants and Animals," was the subject of a paper read by Professor Hays, of Washington. The paper was perhaps the most interesting feature of the Union meetings, and was brimful of enthusiasm and glowing with the possibilities of agriculture in the future.

Another address of great practical value and deep interest to all was that of A. McNeill, Chief of the Fruit Division, Ottawa.

This year the Union is again fortunate in having the best men elected to

fill its various offices. To its newly-elected President, J. M. McCallum, Shakespeare, and A. E. Shuttleworth, Ottawa, Vice-President, as well as to the newly-appointed committees we extend our best wishes and trust that their efforts may be crowned with success.

The success of the Union during the past year is largely due to the untiring efforts of Mr. John Buchanan, who in the absence of Professor Zavitz, has most ably filled his place and carried on the work.

THE PASSAGE.

O Soul on God's high seas! the way is strange and long,
 Yet fling your pennons forth, and spread your canvas strong;
 For though to mortal eyes so small a craft you seem,
 The highest star in heaven doth lend you guiding gleam.

O Soul on God's high seas! look to your course with care.
 Fear most when winds are kind and skies are blue and fair;
 Thy helm must sway at touch of no wand save thine own,
 The Soul that sails on God's high seas must sail alone.

O Soul on God's high seas! sail on with steady aim,
 Unmoved by word of praise, untouched by seas of blame,
 Beyond the lonely ways, beyond the guiding star
 There stretches out the golden strand, the harbour bar.

—*Jean Blewett in Canadian Magazine.*

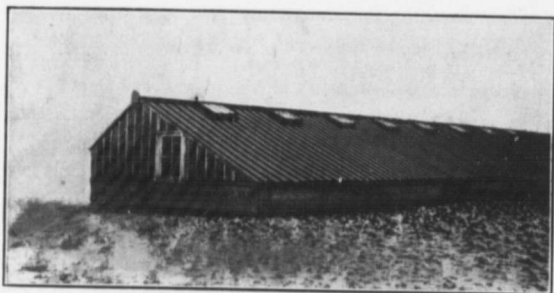


Horticulture.

Progress of Floriculture in Canada.

FLORICULTURE, in common with other arts and industries, has made great and substantial progress throughout our country during the past quarter of a century. This progress and development is not only true of floriculture, when viewed from an industrial or commercial standpoint, but is also almost as noticeable when looked at from a more aesthetic and amateur point of view. The class and quality of plants and flowers demanded by the flower-loving public of today, compared with

flowers were offered for sale in the markets of what are now our largest cities and towns. The writer well remembers a conversation he had about four years ago with one of Hamilton's oldest pioneer florists and plantsmen (Mr. W. Raynor, recently deceased), who took the first pot plants offered for sale in the Hamilton market. Only two out of the eighteen geranium plants were disposed of, one sold and one given away, as the result of this his first commercial venture in the sale of pot plants. Compare this fact, and



1880.—Dale's Original Greenhouse; about 45x15.

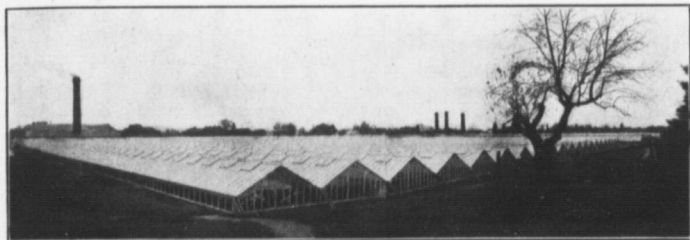
the demand of even ten or twelve years ago, would alone give a good idea of the immense progress and development of floriculture during that period.

It is within the memory of some of our oldest inhabitants and florists, when but few, if any, pot plants or cut

contrast it with the appearance the market place in Hamilton now presents in the summer season, with its grand display of exotic plants and flowers that have helped to make this market famous for its horticultural products among the markets of Western On-

tario. The experience of Hamilton in this respect is by no means exceptional, as every city and town in our Dominion, from Halifax to Vancouver, has experienced to some extent this rapid progress in the development of flori-

at least in places having good shipping facilities by steam or electric railway, have sprung up large commercial greenhouses, whose areas of glass structures devoted to floriculture, are estimated by the acre rather than by



1906.—The Dale Greenhouses; 14 Acres Under Glass.

culture. Even in our large villages, floriculture, as an industry, is claiming attention. Greenhouses in villages are now being built that are often far in advance, both in capacity and style of construction and general equipment, of many of the greenhouse structures of some of our large towns twenty years ago. When compared with some of the then existing style of greenhouses that were often mere dug-outs or forcing pits, with a few cedar posts and boards for sides up to the ground level, some scantling and hot-bed sash for the roof, and a brick flue as heating equipment, the development is still more striking. From all parts of the Dominion there is a keen and constantly-increasing demand for information as to construction, heating and management of greenhouses.

The flower lovers of the present day, however, do not depend entirely on local production to supply their requirements. Here and there, usually in close proximity to a city or town, or

the square foot, as was the case a few years ago. These immense establishments are devoted almost entirely to the production of what are known as staple varieties of florists' flowers: Roses, carnations, violets, chrysanthemums, Holland bulbs, lilies, and lily of the valley being the chief floral products. Large areas of glass are also devoted to the culture of smilax, ferns and varieties of the decorative asparagus and other similar plants, the foliage of which is necessary for the shading and relief of the elaborate designs and floral decorations so extensively used at the present time. The culture of the many fascinating varieties of the orchid family, natives of eastern and tropical countries, is another new feature of floriculture being extensively taken up by our commercial floral establishments. A few years ago an exotic orchid was a decided novelty, now they are used in great numbers.

Not only in the cut flower line is this rapid development of floriculture no-

ticeable; many of our florists devote large areas of glass to the culture and growth of decorative plants, as well as cut flowers. Plants, such as palms, dracenas, exotic ferns and other decorative plants of a tropical nature are grown in large quantities for house and window decoration.

The shipment of plants by mail and express, by both wholesale and retail growers, has also become quite an important feature in the commercial florists' trade. Several firms are successfully making a specialty of this line of business. With the opening up of New Ontario, and the development of the new Western Provinces, this phase of floriculture will doubtless assume much larger proportions than at present.

A few figures forwarded me by Mr. T. W. Duggan, managing executor of the Dale estate, Brampton, Ont., who has probably the best equipped cut-flower florist establishment on the continent, are very interesting. Mr. Duggan writes as follows:

"I may say that the business was founded in 1881 by the late Henry Dale. At the time of his death, in 1900, the greenhouses consisted of about 150,000 square feet of glass, covering about 3½ acres. Since that time the place has rapidly developed to four times the size, consisting of 650,000 square feet of glass, covering 14 acres.

"We are cutting bloom from about 80,000 chrysanthemum plants, 110,000 carnation plants, 125,000 rose plants, 2,500 orchid plants, in addition to violets, Easter lilies, Roman hyacinths, Paper Whites, and Dutch tulips by the million. We grow about one million and a half lily of the valley

pips, putting in the sand at present 30,000 per week.

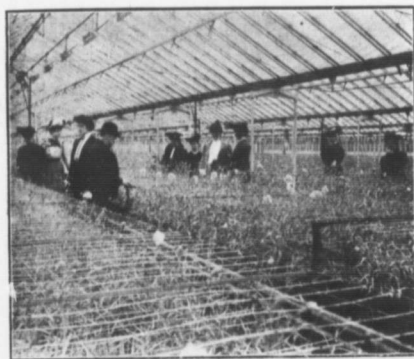
"We consume 6,500 tons of coal annually, and the walks through our greenhouses, if put end to end, would be about fifteen miles in length. We have 100 men in our employ, wage roll running about \$1,000.00 per week."

In addition to the Dale estate, Brampton claims the pioneer commercial violet grower of Canada, Mr. W. Fendley, who has about two acres of glass devoted chiefly to violet and carnation growing. Besides these firms, Dunlop, the Bedford Park Floral Company, Lawrence, and other large establishments are situated in and around Toronto. The Georgetown Floral Company; Jansen, of Berlin, Gammage, of London; W. Bennett, Hall & Robinson, S. S. Bain, and other growers of Montreal, help to swell the large acreage of glass devoted to plant and floriculture. Add to these the numerous floral establishments in other cities and towns, too numerous to mention, as well as those of less pretentious proportions springing up in our villages all over the Dominion, and it will give us some idea of the proportions that floriculture as an industry has assumed.

It is very difficult to give a close estimate of the amount of capital invested or the volume of trade transacted in floriculture per annum throughout the Dominion, as no Government statistics are obtainable on this subject. One item of the value of bulbs and plants, imported into Canada during 1905 from the United States alone, as it appears in the customs returns, places the value of these importations at considerably over \$100,000. The bulbs and plants represented in these importations comprise chiefly Holland and

Japanese bulbs, palms, and azaleas coming via the United States. The value of these annual imports alone

These figures represent only the values as applied to the actual trade of floriculture directly, and are possibly under-estimated. Florist supplies, such as wire designs, ribbon, baskets, boxes, seeds and other accessories of the florists' trade, would augment these figures by at least \$100,000 annually. One or two firms have of late devoted almost their whole attention to the sale of these florists' supplies only—a sure indication of progress and development of trade.



New Style of Greenhouse Construction.
Macdonald Institute Class '05 on a visit to a '05 Commercial House.

will give some idea of the volume of trade transacted, when it is borne in mind that these represent only a small proportion of the imports or of the stock-in-trade of an up-to-date florist's establishment.

In response to several inquiries sent out to prominent florists as to the amount of trade, etc., transacted annually in the Dominion, the following is a fair result of the figures given by them:

Amount of capital invested in greenhouses, equipment, stock, etc.	\$5,000,000
Amount of wages paid to employes annually	200,000
Value of trade transacted annually	2,000,000
Increase in value of trade during the past ten years, 400 per cent.	

Another industry in connection with floriculture, which must be noticed, is that of greenhouse construction. The King Construction Company, of Toronto, and other firms, make a specialty of constructing greenhouses and supplying special material for greenhouse construction. This firm has, during the past season, built or supplied material for upward of four miles of greenhouse structure, averaging twenty-one feet in width, or sufficient to make one continuous glass structure that would require nearly 800,000 square feet of glass alone, in their construction. These figures do not represent the entire amount of constructive material supplied by this firm, as in many cases only certain parts have been supplied, of which no close estimate can be given. Taking these figures, however, as a fair basis to estimate on, it would be quite safe to assume that at least from ten to fifteen miles of greenhouse construction for floral work alone have been constructed throughout the Dominion during the past season. Add to the figures already given the large amount of out-door plants and flowers

grown for commercial purposes, without the aid of glass structures, and it will materially swell the aggregate amount of business transacted annually.

These facts will give some idea of the magnitude the floral industry has assumed during the past few years. Compared with some of the other

work in this direction. The somewhat new line of work taken up by these last named societies in arranging for and encouraging flower-growing competitions among the school children, is most commendable, and must be productive of much good. All of these and similar organizations deserve great commendation for the good they are



Greenhouse No. 3, O. A. C., Jan. '08, Showing Old Style Construction. Since Rebuilt on Modern Plan.

auxiliary branches of agriculture, such as poultry, bee-keeping, or market gardening, none of them can make a better showing than floriculture, either from an industrial or commercial point of view.

Apart from the business aspect of floriculture, however, the more aesthetic, pleasure-giving, and one may justly add, the moral teaching aspect of floriculture must not pass unnoticed. Aldermanic councils, civic improvement societies, parks and cemetery boards, and other governing bodies in cities and towns have done much to develop the taste for landscape and floral art in their respective spheres. Our horticultural societies have for years past done good

doing to develop and encourage the spirit of improvement and progress in all that pertains to beautifying the surroundings and environment of the home. Still there is much to be done along these lines, more especially in rural districts situated a long distance perhaps, from the larger towns and cities. From all points the demand and desire for information in all that pertains to landscape and floral art is decidedly on the increase. Flower growing is being recognized more and more as a good asset around the home.

Floriculture has hitherto not made much demand for recognition from our educational institutions, either from a commercial or from a more sentimental

or amateur standpoint. The responsibility for this apparent lack of recognition rests very largely with those most closely interested and connected with floriculture, viz., the flower growers themselves. The fruit growers, bee keepers, poultrymen and others have, through their associations, derived many advantages and privileges that the florists have not had extended to them. The florists have, to a very great extent, worked out their own problems and difficulties, without the aid of scientific, and in many cases, of technical help from our educational institutions—oftentimes at considerable loss to themselves both of time and money. This latter fact is being recognized every day, as trade and interests develop as they are doing. Our commercial florists are already preparing to make overtures for more recognition along the same lines as the similar auxiliary branches of agriculture already mentioned have received from the Governments and the various educational institutions and experiment stations interested in this work throughout the Dominion.

From a literary point of view, great progress is noticeable. Scarcely a newspaper, periodical or magazine is published, but devotes some space to floriculture. We have one monthly Canadian periodical, "The Canadian Horticulturist," whose columns are devoted almost entirely to horticultural matters. It is rapidly increasing in favor throughout the Dominion, and is equal to, and in some respects surpasses many of the American journals published along the same lines, both in size and quality of reading matter. A

semi-monthly ten or twelve page-paper, "The Canadian Florist," a strictly trade paper, issued from the same office, is a splendid publication, filling a long-felt want. All of these have done much to develop floriculture in Canada.

Floriculture as a remunerative avocation for our young men and women especially, is rapidly developing, and many instances are known to the writer where a little insight into the practical, technical, and artistic features of floriculture for young beginners would have been most acceptable. This instruction can only be had in a very few commercial establishments, where a general collection of plants is grown. Some of the educational institutions in the United States have already adopted short course studies in horticulture and floriculture.

It is pleasing to see this development of artistic taste for floriculture in our people, as it augurs well for the future of our great country. The old time spirit of antagonism to any expenditure along artistic lines is fast disappearing, and instead, the demand is constantly increasing for more enlightenment, more information; the natural sequence of which means more progress and development.

In these days when so much importance is attached—and very rightly so—to the necessity of surrounding the home with all that is artistic, beautiful and pleasing, so as to develop the best and highest ideals of home life, too much attention can scarcely be given to floriculture as one of the sweetest and purest of all rural arts.

Wm. Hunt.

The O. A. C. Review

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SUBSCRIPTION RATES.

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Editorial.

“There are, both in the Province of Ontario and the State of Minnesota, some ten million acres of field crops which may be improved by modern methods of breeding. These breedable crops, at ten dollars per acre, are worth one hundred million dollars annually. The work at the Experiment Stations, both in Ontario and Minnesota, has proved that the world's staple crops can be so improved in powers of heredity that they will yield twenty-five per cent. more value per acre, and, furthermore, it has been proved that this improvement can be accomplished at a cost of less than one-tenth of one per cent. of the increased value of the crop. In this way, in forty years, there would be an increase in the value of

The Key to the Position

field crops in Ontario of twenty-five million dollars annually, while the cost of that increase would be but twenty-five thousand dollars annually, leaving a net profit to the Province of twenty-four million, nine hundred and seventy-five thousand dollars annually, or nine hundred and ninety-nine million dollars in forty years.”

In the above words Professor Hays, at the Experimental Union meeting, presented the results which it is possible to achieve under an advanced agriculture. Such figures are unthinkable, but they show that the resources of the soil are illimitable. The mines of Canada assure her of a position not to be excelled in the mineral realm. Yet, vast as are such treasures, they have a limit. Sooner or later will they di-

minish in value. Quite otherwise with the agricultural resources. Under proper management the soil will never grow less productive, but will ever return to its cultivator an increase of interest, and at the same time will steadily add to its capital value.

The future contains promise of increased wealth, position and happiness to agriculturists. What is the agent which is tending to this result? What is the agent which has in the past decade caused agriculture so rapidly to advance?

These questions both admit of the same answer. That answer is summed up in the one word—co-operation.

The force of co-operation does not always work along the same channel, nor does it always assume the same name. Nevertheless it is possible to discover the co-operative spirit at the bottom of all the great agricultural enterprises of the day. The Farmers' Institute system, cheese and butter factories, fruit packing stations, such enterprises are admittedly co-operative in their nature, yet there are others equally so, though the fact may not be so apparent. Undertakings, such as educational institutions, fairs and experiment stations, which are either wholly or in part supported by public funds, are truly co-operative in their working, though the co-operation is of another kind.

The agricultural communities of all countries have been slow to recognize the benefits of joint action for mutual benefit. Yet upon this is based their future progress and prosperity. Ahead of us there loom scores of problems which can be solved only by the concerted action of bodies of agriculturists.

The problems of breeding of plants

and animals are too vast to be solved by individuals. Individuals have not power enough to work out the problems of transportation and marketing. These and other like questions call for united action. At the first it may cost something, but to help all is a nobler thing than to help oneself, needful as the latter may be.

Elsewhere in this number a brief account is given of the success of the ex-students at the recent Winter Fair. Mention is made of McDiarmid, Smith, Hankinson and Dryden. Only three ex-students, to our knowledge, entered the competitions directly, but it is most gratifying to know that all three were successful. Hankinson, with corn; Smith, with poultry; McDiarmid, with swine, and Dryden, indirectly with finished steers, were all "red-ribboners." The triumph of scientific methods over the hap-hazard "rule of thumb" practice of farming was never, perhaps, more clearly demonstrated. What makes the case seem more remarkable is that three of the winners entered the competitions for their first time, and the marked success achieved is the result of but a couple of years of scientific work. In the year 1901, two of the boys were freshmen at the college, one had not commenced his course at all, and the other had left the institution but a year or so before. This is just a little better work than the most optimistic could expect. It takes time to build up prize-winning flocks and herds, and though there can be but one result to scientific labor against the cruder methods of agriculture, yet it is

Success of
O. A. C.
Ex-Students
at the
Winter Fair.

not always that success occurs so soon. The boys are to be congratulated, and in appreciation of their efforts and unusual success, none is warmer than The Review.

With this issue, The Review enters upon another new year, bright with hopes for the future. At this time our thoughts are naturally directed ahead rather than to the things of the past, yet our hopes for the future are largely governed by the experiences of the past.

**A
New
Year**

Though still young, the O. A. C. Review has passed the formative stage of childhood, and it now stands upon the threshold of 1907 in the strength and with the ambitions of early manhood.

Standing thus, we are apt to build castles in the air. For some of these castles at least there is a sure foundation. Under its various editors, from Professor Dean, in 1888, down through the times of Day, Ferguson, Macdonald, Ross, Pickett, Deachman, Macmil-

lan and Hamer, The Review has gradually grown and developed.

Though the past year has not been marked by a great and visible expansion in size, yet below the surface the roots of the paper have been strengthened, and preparation made for a greater production in the future. And this work is characteristic of the man who accomplished it. Hamer, the late Editor-in-Chief, is a quiet, but a strong man. Few know how hard he has worked for The Review. For some months he produced the paper almost single-handed, and throughout the whole year he has devoted himself unceasingly to the college journal.

The appointment of a salaried Manager to the staff of The Review some year and a half ago was but in the nature of an experiment. By his care and wisdom, Hamer has proved the experiment to be workable.

Our late Editor is a man of great reserves of power, and when these reserves shall, in the future, be called forth into action, we predict great things for him.



College.

O. A. C. Stock-Judging Team.

THE team which was picked to compete in the students' judging competition at Chicago this year consisted of H. Barton, R. S. Hamer, W. J. Hartman, A. McKenney and C. C. Nixon. The team sent last year had won the bronze bull trophy for best judging of cattle, sheep and swine. So these men were placed in a

position of additional responsibility; everybody looked to them to win the honor again. Three winnings give the trophy to any of the competing colleges.

Hope was high in the work of preparation for the contest. Every fourth year student in the agriculture special felt the impulse. So there was strong

competition for a place on the team. Four train trips and several local driving excursions took the class to see and to judge good stock. Professor Day and Professor Arkell spared no effort to put out a winning team. They entered with enthusiasm into the work of improvement, and with their aid the whole class grew in capability of judgment and in confidence in stating clear reasons for placing. Every man had an equal chance, and was scored for his work, as classes were judged each day. The professors gave hints, instructed the men and criticized their reasons.



The Upoor Trophy.

When finally the team was chosen there were left out several men almost as capable as those chosen, so earnest was the effort put forth.

The competition for students and farmers' sons is given a prominent place at the International. The opening day is devoted entirely to this important event. The Ontario team spent the day before the contest among the stock

Ohio, 6 men; Iowa, 5; Texas, 6; Kansas, 5; Michigan, 5—and in addition three farmers' sons entered independently. Supposedly every man was chosen to enter on account of his ability, and supposedly he worked hard to perfect himself.

So the struggle was a hard one, and held all the competitors at a tension for the long seige from 8 a.m. Satur-



THE O. A. C. STOCK JUDGING TEAM, 1906.

H. Barton,

R. S. Hamer,

C. C. Nixon,

W. J. Hartman,

A. McKenney.

on exhibit in the buildings, and learned a great deal from Professor Arkell about strange breeds. They saw from time to time other interested little groups of five—their rivals of the next day's contest. There were entered in all 35 men. Six colleges sent teams—

day, December 1st, to 8 p.m., with one hour for lunch deducted. The men were divided into four groups, and four lots of animals were brought into the great arena at a time—four head of each, horses, sheep, cattle and swine. Twenty minutes were allowed to place

each class and to make short notes. These groups interchanged, and so on till all classes had been judged by each group of men. Then the animals were taken out of the ring, and four groups of three judges prepared to hear reasons for each man's placing. Each competitor was permitted to occupy two minutes in giving oral reasons for his work. Every man had previously handed to the clerk a card stating his placing in each class as soon as he had judged it. Each one had time to look over his noted reasons, but when talking before the judge he was permitted only his placing card before him. Sometimes it was two hours after judging a class that reasons were given. So the test was a severe one on memory, and it was essential for a man to retain a clear mental picture of the sixteen animals he had judged. The competition continued in the way described above until all had been judged—three classes of horses, three of cattle, three of sheep and three of swine.

Ideal conditions were afforded for judging—plenty of room, bright light, water convenient—and so on. But in the breeds of stock the Ontario men struck a difficult proposition. The entire lot of horses were of strange breed: Belgian, Percheron and German Coach. For the rest they had to judge: In swine—Hampshires, Duroc Jerseys (both strange breeds to them), Yorkshires; in sheep—Lincolns, Hampshires and Shropshires; in cattle—Shorthorn heifers, steers of different breeds and 2-year-old Hereford bulls. So night saw a pretty tired and rather discouraged lot of men.

Reports Sunday night and Monday morning came as a surprise to all. O. A. C. had won the trophy for cattle,

sheep and swine once more, but Iowa had captured the separate trophy given for best horse judging, with Ontario standing fourth. Iowa, too, stood second in cattle, sheep and swine, though Ontario had a strong lead. Rumor previous to the contest had it that Iowa had never sent a better team to compete.

But the individual work of the O. A. C. team was the outstanding feature. R. S. Hamer came first in general proficiency over all competitors, C. C. Nixon third, and W. J. Hartman fourth. These men were not far apart in their scores. Each did excellent work and took a prominent place in every class but horses, which seemed elusive, for the reason of their strangeness to Ontario men. Thus \$160 of the \$300 offered by McLaughlin Bros. came to O. A. C.—first \$70, third \$50 and fourth \$40.

The entire team deserves great credit for their work. Thanks is also due to Professors Day and Arkell. The whole College is stirred by the accomplishment, and surely every ex-student will thrill with pride at the hard-won victory.

College Life.

Another Christmastide has rolled round. All but the Seniors have passed through the labors and anxieties of a week of exams, followed by two weeks of relaxation and recreation. The greater part of the student body left the College halls to spend the vacation at home. During that time but little of the usual throb and hum of life was heard on College Heights. Those not in a position to visit their far-off homes, had to make the best of the fortnight here. Doubtless they found that College Heights and the city of Guelph were not after all, such dull

spots in which to spend a vacation. We trust that all had a joyous and profitable holiday. We are glad to see all back again with such happy countenances ready to resume with energy and determination the work which lies ahead.

Conference of Institute Workers.

One of the most important conventions held at the College this year, was that of the Farmers' Institute Lecturers and Officers held here, Nov. 20th to 23rd. With the advances which have been made in agriculture in Ontario, and the increasing intelligence of the agricultural class regarding their vocation, it had been deemed necessary that provision be made to give the regular Institute speakers who are to instruct the farmers and their sons, an opportunity to still better equip themselves for the work in hand. This conference also afforded men who are to attend Institute meetings as departmental delegates for the first time, an opportunity to properly prepare themselves, and to start the work with a clear understanding as to duties before them.

A few of the subjects discussed will suffice to give an idea of the nature of the Convention: "Preparation of Material for Institute Lectures and Methods of Presenting the Same"—Professor G. E. Day and Professor Reynolds; "Model Judging Class"—H. S. Arkell, O. A. C. and John Campbell, Woodville; "Illustrative Material for Institute Speakers"—Professor A. M. Soule, Blacksburg, Virginia; "Co-Operation in Agriculture"—Robt. Thompson, St. Catharines, and E. Lick, Oshawa; "Methods of Conducting Discussions at Institute Meetings"—T. McMillan, Seaforth,

and Maj. Jas. Sheppard, Queenston; "Principles of Cultivation and Rotation"—Professor W. H. Day, O. A. C. and E. C. Drury, Crown Hill; "Heavy and Light Horses"—Dr. J. Hugo Reed, O. A. C. and Dr. J. F. Lavery, Sunderland; "Noxious Weeds and Weed Seeds"—T. G. Raynor, Department of Agriculture, Ottawa, and W. S. Fraser, Bradford.

That this Convention was of very great advantage to all who were present, goes without saying, and such gatherings should tell throughout the Province in greater uniformity of practice and in more effective methods in the work of spreading sound knowledge of agriculture.

Lecture by Mrs. Hubbard.

For some time back we have been favored with occasional lectures by experts on subjects about which everyone should know something, as for instance, architecture, sculpture, astronomy, recent scientific discoveries and the like. These lectures are not in any way a part of the regular course, and are delivered by men who have made an extended and special study of their subjects.

On Friday evening, Dec. 7th, somewhat of an innovation was introduced, when a lecture was delivered by a distinguished lady—Mrs. Hubbard, on a trip through an unexplored part of Labrador. Mrs. Hubbard has won for herself the reputation of being an eloquent, pleasing and forcible speaker in the different places in which she has delivered her account of her remarkable tour of exploration through the country from Hamilton Inlet to Ungava Bay. The speaker presented an excellent appearance on the platform and spoke with clearness and with the

same fearlessness and energy which enabled her to face the difficulties and dangers of an unknown land. Mrs. Hubbard possesses in no small measure, the power of painting very vivid word pictures of natural scenery. Her lecture was listened to with the closest attention by a large audience. In the course of her trip this daring explorer took a large number of magnificent photographs which were thrown upon the screen at the end of the lecture proper. Many of the pictures illustrating natural scenery, or the party at various stages of the journey, brought forth hearty applause.

Union Literary Meeting.

The last Union meeting for the year was held in Massey Hall on Dec. 8th, the President, H. Barton, in the chair. On this occasion, President Creelman gave a very interesting address on "The Sunny South," which he has recently visited. The debate was a good one, the subject being, "That National Decline is Inevitable." The affirmative was upheld by Messrs. W. A. Brown and T. G. Bunting, and the negative by Messrs. A. E. Slater and A. G. Turney. The decision was given in favor of the negative. The speech of Mr. Turney is worthy of special mention, as being exceptionally well-worded, and well delivered. It is evident that this speaker is a coming man in the public-speaking line. Mr. P. Semon delighted his audience with one of his original comic songs.

At a special meeting of the Union "Lit." held on the 15th of December, officers for the ensuing term were appointed as follows: President—A. McKenney; Secretary—H. W. McGill; Treasurer—R. J. Allen.

Excursion to Woodstock.

On the 23rd of November, a debate took place at Woodstock, between Woodstock College and the O. A. C., Messrs. J. W. Crow and D. M. Rose representing the latter College. A special train was chartered to convey the debaters and their supporters, the latter numbering 125, to the "Baby City." Every kindness was shown the visitors from Guelph. Though success did not crown the efforts of the debaters, a most enjoyable time was spent, our party returning to College Heights in "the wee sma' hours. There is always something to be gained by these visits of one college to another, and it is hoped that the practice of making such occasional visits will be continued and encouraged, and that other colleges be encouraged to visit the O. A. C.

Y. M. C. A.

After a year of very successful work, the President for 1906, Mr. J. W. Crow, has handed over the reins of office to W. Baker, who will be at the head of the affairs of this organization for the ensuing year. The other officers for 1907 are: Vice-President—P. E. Angle; Secretary—O. C. White; Treasurer—W. M. Waddell; Chairman Bible Study Committee—David M. Rose; Chairman Mission Study Committee—W. A. Brown; Musical Director—A. McLaren.

Experimental Union Banquet.

The Experimental Union Banquet, one of our yearly events, took place in the College gymnasium, on Tuesday evening, Dec. 4. President G. C. Creelman presiding. After the students, ex-students and staff had done ample justice to the tempting viands with which the tables were well-laden,

a programme consisting of a number of toasts, and some excellent music was rendered. Miss A. Springer, of Toronto, delighted her audience in two musical numbers, and Mr. R. W. Mills concluded the evening with the "Stein Song." Among the guests of honor present were: Hon. Nelson Monteith, Minister of Agriculture for Ontario; Hon. John Dryden, and Professor W. M. Hays, of the Department of Agriculture, Washington. A very important feature of the evening's proceedings was the unveiling of a magnificent oil painting of the Hon. John Dryden, Ex-Minister of Agriculture. This portrait was the work of the well-known artist, Wyley Greir, R. C. A., and was presented to the College by its ex-students, as a mark of appreciation of the long and faithful service of Mr. Dryden as Minister of Agriculture for Ontario. He has been directly and prominently identified with the great agricultural industry for many years, and both in his private and in his public capacity has unselfishly rendered invaluable and never-to-be-forgotten services to his country. His name is imperishable, for the works of his hands, of his heart and of his mind, are to be seen through the whole of Ontario. In conjunction with Dr.

James Mills and others, he has by his untiring zeal, his shrewdness, foresight, his clear understanding of the needs of the people and his business capacity done a great deal to make the O. A. C. the well-equipped, world-famed institution that it is today. From his efforts on behalf of the College and the agricultural industry generally, and by reason of his own great personal worth as a citizen and a gentleman, the agricultural industry and the agricultural community of this Province have received a great uplift. Long may he be spared in health and in strength to win further honors and to see the work of his life prosper.

Christmas Chapel Service.

Christmas service was held in Massey Hall on Sunday, Dec. 16th, every pew being filled. The speaker was Rev. John Hay, of Renfrew, Ont., who preached an eloquent and helpful sermon from Matt. xx:21. Appropriate music was rendered by the choir, under the leadership of H. G. Bell, B. S. A. Mr. Edwin E. Bell, of the city, sang a solo in a very pleasing manner. A collection was taken up in aid of the Guelph General Hospital, where a number of our boys, when seriously ill, have received the kindest and tenderest care.



Athletics.

First Year Indoor Meet.

ON Saturday afternoon of December the first, Trainer Hibberd and his First Year Braves held the Second Annual Freshmen's Indoor Meet in the College gymnasium. This is held primarily to create an interest in gym. work among the new students, and to get every man acquainted with the general gym. work, so that he may be enabled to look after his health throughout his college course, and to build up his body and muscle by the systematic course of scientific exercise. That the meet was a great success no one dare deny; the competition was hot and keen and the character of the work was fully up to the standard set the previous year. Indeed, many of the winners will make the older students go some to beat them out at the Annual Spring Meet. French was the most successful one, winning the championship with the good total of seventeen and one-half points.

Hockey Puckerings.

In the hockey line there is news that will bring gratification and joy to the heart of every hockey fan. Through the indefatigable labors of Mr. J. B. Fairbairn, the W. I. C. A. U. is still a reality; Woodstock and London have been safely sheltered in the fold, and Ridley College, St. Catharines, will probably be brought in to round up the league. For the first time in the history of hockey in this institution we are in

a league with other colleges and great success must assuredly attend our efforts, as competition between these four colleges will be at white heat. Ridley has defeated all the Toronto Prep. colleges at football and declare they must not lower their reputation; O. A. C. as football champion of the W. I. C. A. U. cannot afford to take back water from anybody, and are out to win. Woodstock is aching to get back at us for the trimming we gave them in football, while London is quite sure that they can at least take care of the "Farmers." Assuredly under such favorable and auspicious conditions we shall undoubtedly see the prettiest and fastest hockey that has ever taken place at our College. All the old standbys are back in their regular places, and the familiar faces of "Dan" Johnson, Norman Foster, Ron Hodson, Tom Savage and Captain Barton will be seen once more, and their repertoire of brilliant and dazzling trick plays should materially help the team in its large task of landing another pennant.

We are going to have better ice and more skating this winter than we have ever had before. By a very lucky arrangement with the management of the Royal City Rink Company, the Athletic Association is able to announce that they have secured the Royal City rink for two practices weekly, a game at night to count as one practice. All gate money is to be the property of the rink owners, but we have a fine

sheet of ice to practice on which we get for absolutely nothing. It is entirely owing to the high class of hockey we played last winter, and the fine reputation we thereby gained, that we were able to make such an excellent arrangement, and there is no doubt that if we play as well this winter that the satisfaction will be mutual to both parties.

The outdoor rink will again be running full blast this winter, and as the hockey boys will not require it on those nights when they practice down town, many an enjoyable skate with the Macdonald maidens will doubtless be arranged. The attention of the Athletic Executive has been drawn to the question of lighting the rink at night, and if their endeavors in winning the consent of our President are successful, skating from half past 6 to half past 7 will be the regular thing this winter. Then the next step in the right direction will be a full-fledged fancy dress carnival, something we have no doubt, which would be very popular and a great success.

A Covered Rink.

Every year the same old want becomes more and more apparent and pressing. We need a large up-to-date covered rink at this institution. Our hockey team is seriously handicapped by having to practice on an open-air rink when the ice is hardly ever available when wanted, and when available is generally in poor condition. With lack of practice new players are but slowly developed, and the regular players are never in the fine condition that comes only from regular, systematic practice. The concluding and deciding game played by the College team in the City League last winter we lost from lack of practice, and nothing else.

Surely if we are to make a name for our College in hockey, and hockey is the game in which we are judged by other colleges and the general public, we must see that suitable accommodation is very soon provided. Money spent for such a purpose will bring more lasting results and many times the advertising that it would bring if spent in any other manner. In addition to the hockey men, nearly every student in the College calls for a covered rink in as loud and forcible a tone as they. Every student in the institution skates to some extent, or if they do not, they are eager to learn, and, as is well known, skating is the ideal winter exercise and develops and exercises every muscle in the body without undue exertion, forming a most pleasant form of exercise and mode of relieving the mind when engaged in arduous study. In addition to our own students, the Macdonald Clan, one hundred strong, are just as keen and eager for an indoor rink as we are. Both Colleges are winter colleges, and most of the term's work is carried on at a season of the year when our magnificent campus is frozen solid and totally unavailable for exercise, and it is a pity that we can get so little skating.

It is certain that the students and ex-students are not able of themselves to provide a covered rink, much, no doubt, as they would like to do so. And after all they can hardly be expected to do so, for the building would be a permanent benefit to the College, whereas their enjoyment from it would be but temporary.

Though additions and improvements are continually being made to our buildings we yet look with confidence to the time when a covered rink shall

be erected. A building might perhaps be constructed that could, when not in use for rink purposes, be used as a horse judging ring.

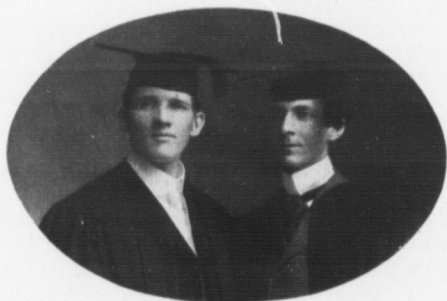
The Question of College Emblems.

A very spirited meeting of the Athletic Association was lately held at which a very heated discussion took place about the wearing and adoption of the College crests and colors. It was the unanimous opinion of the executive that no man should be allowed to wear any emblem on his sweater till he had won the right to do so by making some one of the College teams, and special attention was called to the fact that many students are boldly parading around with the monogram O.A.C. on their sweaters, although they have absolutely no right to do so. That emblem was adopted a few years ago by the College football team, and is at present the emblem of the College gymnasium team; but it had to be abandoned last year when the athletic executive were selecting emblems for the various college teams because of the very fact that nearly half of the students were at that time wearing it, and the executive did not like to cause hard feeling by insisting that the students who were not entitled to it take it off. But now things have come to a pass where it is absolutely essential that the matter be enforced. Those students who have won emblems feel no special distinction in wearing the honor when nearly every other student is wearing a monogram as big and as distinctive looking as theirs, and the result is that very little value indeed is attached to the wearing of an emblem. This is not as it should be. In nearly every college in America no man is allowed to wear any

emblem or sign whatever on his sweater until he has honestly earned it, and the result is that there is keen competition to get on the various teams; and any man who is fortunate enough to win his emblem, proudly wears it and is looked up to by his fellow-students as a little tin god. In conclusion, we boldly state that any man should be heartily ashamed to wear a crest that gives him distinction in the eyes of visitors and detract from the glory of his fellow-students who have earned their due by hard work on the playing field, until he has earned it; and we do not see why there should be any opposition or hesitation in adopting this rule. We must be governed by universal college laws; we cannot run our sports in a haphazard way or we will become sadly out of date.

Another matter that was brought up was that of distinctive college sweaters for the different teams. The old blue and white sweater is to be adopted as the regular hockey sweater, and any student who wishes it will be allowed to wear this sweater; but there is one thing that Manager Johnson wishes to be definitely understood, and that is that no student will be allowed to wear any emblem whatever on this sweater except those men who have won the hockey O by making the first team. A red sweater will probably be adopted by the football team, and it is similarly understood that no man can wear an emblem on that sweater without earning the privilege. None of the other teams have settled on their colors yet, but it is generally understood that distinctive uniforms will be adopted, and an earnest effort made to keep them distinctive for all time to come.

Our Old Boys.



L. A. Moorehouse.

B. S. Pickett.

The Reunion.

ON the evening of Monday, Dec. 10th, President and Mrs. Creelman, with their characteristic genial hospitality, entertained those ex-students who were in attendance at the Experimental Union, at an Old Boys' Reunion. From 8 o'clock until half past 10, the ground floor of the President's house, together with the adjoining postoffice, was crowded with an eagerly-talking, laughing, hand-shaking crowd of men, many of whom had not seen each other for years. Old times were discussed, old tales were told and "all went merry as a marriage bell." Several of the professors with their wives were in attendance to welcome the boys of Auld Lang Syne. To give brightness, color and vivacity to the gathering, and incidentally to preside at the refreshment tables, a number of ladies from the Macdonald Hall and Institute were in

attendance, and graciously were their pleasant duties performed.

For two days previously the President had been confined to his room with an attack of influenza, but he was able to appear among the guests, and he kept things moving in his usual jolly fashion. During the evening Miss Springer sang several songs. For some years now, Miss Springer has been the students' favorite soloist, but as she has recently accepted an important position as a soprano soloist of the Metropolitan Church, Toronto, her treats are somewhat rare in Guelph. Her appearance at the reunion was an enjoyable surprise. Mr. Reg. Mills also sang several times with his customary vim and artistic finish. Among those present, the greater number of whom are ex-students, were Hon. Nelson Monteith, Minister of Agriculture; Mr. C. C. James, Deputy Minister of Agriculture

for Ontario; Professor Hayes, of U. S. Department of Agriculture; Geo. Robertson, President of the Experimental Union; J. M. McCallum, Vice-President of the Experimental Union; T. G. Raynor, Ontario Representative of the Dominion Seed Department; R. F. Holterman, Brantford; F. M. Logan, Commissioner of Live Stock for British Columbia; C. M. McCrae, Assistant Dominion Live Stock Commissioner; G. A. Putnam, Superintendent of Farmers' Institutes and Women's Institutes for Ontario.

In the foregoing cut we reproduce the likenesses of L. A. Moorehouse and B. S. Pickett. "Shorty" Moorehouse entered the O. A. C. fresh from the green hills and native heath of Cairo, Ont., where he was born, raised and received his early education. He entered the College the same time as Pickett but took the course right through without any breaks. He graduated in 1902 and immediately was chosen to fill a responsible position on the staff of the State University of Oklahoma, situated at Stillwater. Last year he received a year's vacation during which he took a post-graduate course but is now engaged as Professor of Agronomy at Stillwater. The many friends and classmates of "Shorty" join in wishing him long continued success and prosperity in his new position.

In the fall of '98, B. S. Pickett entered the O. A. C. In his first and second years he ranked highest, winning at the end of his sophomore year the Governor-General's gold medal for general proficiency. During his third year owing to the retirement of Mr. Putman, now Superintendent of Farmers' Institutes, the position of secretary to

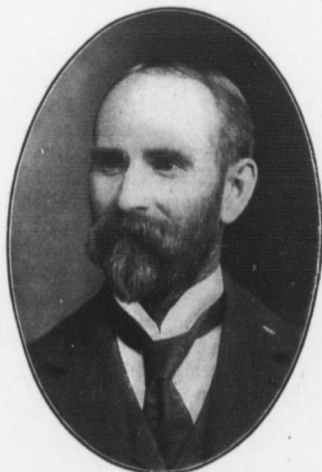
the President was left open. Mr. Pickett was chosen to fill this position, and remained the President's right hand man till the fall of 1905. During the term '03 and '04 he was able to successfully combine his studies with his other duties, and graduated with the class of 1904. After leaving the O. A. C., he entered the University of Illinois, to take a post graduate course, but his value was early recognized, and he was taken on the Horticultural Department, where he is at present.

Harry Loftus began his college career with the class of '06, but for various reasons, chiefly that his share of work on the homestead was being neglected, he never got more than the beginning. Harry's good nature and ready wit will never be forgotten by his class mates, even if his stay was short. After the first year was completed, he settled down to work at home, and has since been divulging his ideas to the natives by a process of practical illustration. In a recent letter, enclosing his subscription to The Review, Harry wishes us to let his classmates know that he will "swap" postcards with them at any time. His address is Apto, Ont. Members of '06 class and others please take notice.

Another son of honest toil is F. H. Fairweather, '07. He was born, when quite young, near Alma, but outgrew this disadvantage to the extent of about twenty years, before entering the college. The confining work of studying did not appeal very strongly to his freedom-loving nature, and after completing his associate course, returned to his father's homestead. Here he has successfully combined the knowledge gained with a good practical experi-

ence, and now has no doubts about the best methods of "makin' farmin' pay."

A graduate who has been more or less in the lime-light of public life during the past fifteen years is T. G. Raynor, '89. Born at Rose Hall, Prince Edward County, of U. E. Loyalist stock, Mr. Raynor received his early education at the public school there, and the high school at Picton. While working on his father's farm, he met



T. G. RAYNOR.

with a severe accident, which necessitated him following some less strenuous form of labor than farming. He entered the O. A. C. in the fall of 1883, winning the gold medal in his second year for general proficiency, and also some valuable prizes. He left college for four years, during which time he helped organize Farmers' Institutes in his home county and various other works for the public good. Mr. Raynor re-entered college in 1888, and gradu-

ated in 1889, after a most successful college career. Since then, besides being engaged in active farming, Mr. Raynor has been a lecturer in Farmers' Institutes in all the Provinces of Canada, and also in the State of Minnesota. In July, 1905, owing to the pressure of work as representative of the Ontario branch of the seed division, he found it necessary to give up the farm, and is now devoting all his energies to the work which his responsible position entails. Last August, Mr. Raynor, along with President Creelman, was elected to the University Senate to look after the interests of agriculture.

The following is a letter received by Mr. Buchanan, from Roger Pocock, who is now engaged as Commissioner of the Legion of Frontiersmen, London, England:

"Dear Sir,—I take it as a great compliment that you send me notice of the annual meeting of the college, where I once had the honor to be a student. My work is so entirely military, in the raising of an army for Imperial defense, that I have lost all touch with a vocation at which I was conspicuously useless. It is good to get this letter from the land I love, and to remember the great-hearted men whose teaching, if it failed to make me a farmer, gave me lessons in self-reliance and self-respect, never to be forgotten."

Emerson Bowman, formerly of Bloomingdale, Ont., is now farming at Knalt, B. C. When at college, Bowman was deservedly popular, and soon earned the reputation of being a bright boy. For a number of years he remained at the old homestead at Bloomingdale, but the call of the wild was on him, and at last he succumbed to a

severe attack of west fever, and for some time resided at Vernon, B. C. His eye, as his classmates can testify, was always peeled for a good thing, and in the opening up of the Salmon Arm district, an opportunity, not to be missed, came, and he took it. He is now comfortably situated at Knalt, B. C., proving to his fellow-countrymen that there are a few good things left in the west.

An old-timer is Peter Grant, who was a student in '76. To look at Mr. Grant now one would think he was a grandfather, so old and venerable he appears. He was one of the earliest in attendance at the college. During the recent Union meeting. Mr. Grant was an interested visitor at the college, and saw a variety of changes since the time when he landed here as a freshman. He is at present living at Beecher, Ont.

Another ex-student of whom we have heard and seen but little during the past few years is R. S. McLaren. Like Mr. Grant, Mr. McLaren is also one of the pioneers among the ex-students, having attended the college in 1879. Since then he has been living at McGarry, Lanark County. His visit to the college recently was one of considerable interest to him, as things have been happening on the grounds here since his name appeared on the roll call.

Conspicuous among the exhibitors at the Winter Fair, held at Guelph last December, were many of our ex-students. In practically all the classes ex-students' names were prominent, and it is with considerable satisfaction that we report a rich reward for their enterprise and efforts. In the seed exhibit, L. D. Hankinson, '01-'02, won the first prize of five dollars, given by the

Seed Growers' Association, first prize of seven dollars, given by the Winter Fair Society, and several other prizes. Hankinson is paying particular attention to the growing of pedigreed seed, and in addition is raising pure-bred Yorkshire swine. In both these lines he reports first class satisfaction, and in all probability will show again next year.

While a student at the O. A. C., no person ever thought of accusing "Bobbie" Smith, '02-'03, now of Columbus, Ont., of being a hen-man. In fact no person ever suspected him of having a partiality for "fowl" work. His success with his poultry at the recent Winter Fair shows him to be a past master in the science of chickenology. He expresses it as his intention to come back again next year, and we hope to see him there. Everybody wishes well to "Bobbie," and there is no person we would sooner see win than him.

Another ex-student who was a prominent winner is H. S. McDiarmid, '01-'02, now of Maple Grove Farm, Fingal, Ont. His attentions were confined strictly to swine, of which he is making a specialty on his home farm. In a strong class of fourteen Yorkshire sows, under nine months, he stood first, and succeeded in standing second in another large class. In the dressed carcass exhibit, he won first and also sixth. At London last fall he was very successful, winning several first prizes. At present he has about sixty head of young stock and will have about one hundred more in the spring, all of these being pure-bred Yorkshires. We all join in wishing "Mac" all kinds of success in his future efforts, and hope they may be as encouraging as the past have been.

Macdonald.

How Much Shall I Get Out of My Life?

THIS is a mercenary age, a cool, calculating age, that weighs and measures things, and asks at every step, "What is the value of this?" "Is it worth while?" How is it in business? Before starting in any business, the man of to-day looks carefully around, sizes up the locality as to business possibilities, social advantages, etc., and having found a place to his satisfaction, he invests his capital. Then, with wise discretion and tactful management, he watches it grow in value, and from its profits he surrounds himself with the comforts of life. At regular stated intervals he carefully examines even the most minute details of all his business concerns. In ordinary business language we say, "He takes stock." He must do this if he is to know whether or not his profits are commensurate with his investment.

How is it with us in this weighty business of life in which we are all engaged? Are we managing it with less concern than a man would expend to run a corner grocery? When I refer to this business of life I would reject all accident of circumstances, and speak of the real self, the only thing we can really bank on, and I venture to suggest that we shall get out of our life in proportion to what we put into it.

It is true that we cannot choose our ancestors, nor our environment, nor even our physical or mental makeup, but even this cannot take from us our

personal responsibility to God himself for what we shall do with our lives.

Those who had to do with the care of you through infancy and childhood, and up to womanhood, have coupled their efforts with the best knowledge they had, prompted by unselfish love, and now your life is, as it were, passing into your own hands, and the question arises, What are you going to do with it?

What we shall do with our life is intimately connected with our ideals of life.

If you trace back through the lives of earth's great ones, you will find that back of all their action lay a high conception of the meaning of life. With Florence Nightingale it was devotion to suffering humanity; with Frances Willard, a passion for the uplifting of her own sex. Many poets have voiced in beautiful language their conception of man's destiny. Browning, in the last century, said of it:

"Then life is to wake, not sleep, rise
and not rest, but press
From earth's level, where blindly creep
things perfected,
More or less, to the heaven's height,
far and steep."

And so on, we might enumerate others, high and lofty ideals, until we come to the meaning of life, as read by the greatest Being that ever graced this earth by His presence; who found life

to be just to do the will of God, and to His fellowmen he announced His mission, "I am come that they might have life, and that they might have it more abundantly."

What will the forming, the crystallizing of an aim in life do towards helping you to get the highest good from your existence here? It will do in this just as it will do in all the minor affairs of life; give direction and meaning to all your actions, keep you from drifting; keep you steady when otherwise you would falter by the way; enable you to encourage others by the way with the Gospel of hope, as you together climb "the world's great altar stairs, that slope through darkness, up to God."

In pursuance of any great aim in life there are many influences that are continually at work. In the first place, we are not separate individuals, leading separate lives as individuals, regardless of others, but each is a member of a larger society. We are born into families, and owe certain duties to the heads and to the different members of those families, and the family relationship is but a type of that larger family—society in general—to which we "owe certain duties also; and the education in the home ought to be a preparation for entering on the duties of society. The whole question of sociology, man's place in and duty to society, is the theme of endless writing by thinking people of the present day, and it is well even in our limited lives to ask ourselves if we have fulfilled, or are trying to fulfill, the conditions that make for highest good. One of the virtues that may be fostered in the home is self-surrender. Christ announced that the highest duty of this life consists in ser-

vice, and followed that announcement through a life of self-abnegation that does, and will, remain throughout the ages as the most beautiful, dignified, manly life the world has ever seen. If you want to know what self-surrender is, I would point you to the mothers of our land. Ian Maclaren, in one of his essays, says of mother love: "Other loves may not be all unselfish, all unsoiled of the flesh, but the ecstasy with which a mother hugs and gathers her child to her heart is the one pure passion, the white flame of which casts no shadow, since, like God's love, it seeks only to give."

In the home, too, we may learn loyalty—to each other—to the home—to all its institutions.

This spirit will, in turn, foster a sense of brotherhood of mutual responsibility. You are your brothers' keeper. As soon as that idea becomes firmly embedded in the minds of the race, evils will begin to disappear. In a recent publication I saw the statement made by a scientist, "tuberculosis and malaria, the two most deadly of known maladies, may be disposed of whenever the race pleases." Not many years ago I heard Sir James Grant, an eminent authority in medicine, in Ottawa, address a large audience of women on the subject of tuberculosis, and he said in effect much the same thing. It rests with the women of Canada to stamp it out, and if all women could have the right amount of education in this matter, and were willing to put it into effect, this plague could be stamped out in one generation. Pure air and sunshine, and plenty of nourishing food, and avoiding the extremes of heat and cold, especially moist heat and cold. This gospel, you

can preach and practice, and so benefit others and yourself, too. You are your brothers' keeper.

Another virtue that may be fostered in the home is cheerfulness. Some people look at their fellowmen who are bright and cheerful and say, "Oh, they are naturally cheerful. I wish I could be, too." That's the biggest lie the evil one ever invented to encourage people to go around with a long face and make others miserable. Some of the very brightest people I know are those into whose life sorrow has largely entered, and suffering is sapping their vitality. Do you think it was simply natural cheerfulness in Henry Drummond that made him bright and cheerful during all those long months of awful suffering preceding his death? Was it natural disposition only that made Stevenson one of the brightest inspirations this century has known? Some things of his are wonderful in the face of a life of suffering and weakness. Here is a morning prayer, written by him, that may explain in part his cheery attitude to life: "The day returns and brings us the petty round of irritating concerns and duties. Help us to play the man, help us to perform them with laughter and kind faces, let cheerfulness abound with industry. Give us to go blithely on our business all this day; bring us to our resting beds, weary and content and undishonored, and grant us in the end the gift of sleep."

What a beautiful attitude to life. For years he was subject to violent hemorrhages, and he knew perfectly that at any hour of any day he was liable to be taken away, and yet he wrote these words, to be placed over his grave:

"Under the wide and starry sky,
Dig the grave and let me lie.
Glad did I live, and gladly die,
And I lay me down with a will."

Another quality of which you may lay in as large a supply as you wish is patience. You will rarely find yourself overstocked, and its growth is very slow, so you may begin early if you want a harvest before the frosts appear.

"Plant patience in the garden of thy soul,
The roots are bitter, but the fruit is sweet,
And when at last it stands a tree complete,
Beneath its tender shade the burning heat,
And burden of the day shall lose control,
Plant patience in the garden of thy soul."

Patience smoothes the way out of our own difficulties, makes us tolerant of the failings of others, makes us a more comfortable person to live with.

A general misconception that is natural to youth is that life is a big pleasure garden, and you sing with some truth, "Gather ye posies while ye may." Browning's theme from first to last was that the business of life was the pursuit of happiness, but the meaning that he places on the word is a vastly different thing from the meaning we are prone to attach to it, embracing, as it does, all those highest things involved in the struggle upward to God, in whom man is to find his complete life. He constantly speaks of the struggle of man, and his deepest condemnation is for him, who, because of failure or adverse circumstances, gives

up. He says the soul grows through effort just as the muscles increase by use.

Phillips Brooks, that beautiful writer, says, in one of his essays: "Do not pray for easy lives; pray to be stronger men. Do not pray for tasks equal to your powers; pray for powers equal to your tasks," and again, in speaking of life's difficulties, he says: "Suffer, if you must. Do not quarrel with the dear Lord's appointment for you; only try, if you are to suffer, to do it splendidly." Browning, in a wonderful poem called the "Grammarian's Funeral," makes the disciples of a philosopher of the Renaissance period sing of his high virtues, as they, with steadfast personal devotion, carry his body aloft to the top of a mountain for burial. This philosopher, or, as he was then called, grammarian, had spent his time and energy trying to solve the meaning of life, after the manner of his age, spurning the lesser things of life, and had resolutely put aside all entreaties of his disciples to rest and enjoy himself, and before he had solved the problem death overtook him. Contrasting his struggle with the ordinary man of his age, he says:

"That low man seeks a little thing to do,

Sees it and does it;

This high man, with a great thing to pursue,

Dies ere he knows it.

That has the world here, should he need the next,

Let the world mind him.

This throws himself on God, and unperplexed,

Seeking shall find Him."

The whole poem, written long before, suggests, even in detail, the burial of

Stevenson by his devoted admirers, and makes us feel that to be so greatly loved he must have been worth loving, and somehow we feel if only we could learn the secret of such a life, no effort would be too great to conform our lives to such a model.

Another of the treasures life holds for all is love. Drummond calls it the greatest thing in the world. Its price, if you would have it, is sacrifice. The most beautiful love is that which expends itself lavishly upon the objects of its affection, looking for nothing in return; as witness the affection a mother bestows on a helpless infant; a devoted child to a parent that is altogether unconscious of that care, etc. The law of the conservation of energy works here as in all nature, and we know that no one ever gave freely, lavishly of devotion to a fellow creature that did not reap in depth and beauty of character a rich reward. You cannot measure the love of your life by what you get so much as by what you give.

Measure thy life by loss instead of gain,

Not by the wine drunk, but by the time poured forth,

For love's strength standeth in love's sacrifice,

And who so suffers most, has most to give.

One of the best things life has does not always come in the form of a good, yet God knew the best thing for mankind when He said, "By the sweat of his brow he must earn his bread." And Christ, for all time honored all labor when he donned the carpenter's dress and pushed the plane in the workshop.

Speaking of this, Van Dyke says: "This is the gospel of labor."

Ring it, ye bells of the kirk,
The Lord of Love came down from
above,

To live with the men who work;
This is the rose he planted,
Here is the thorn cursed soil,
Heaven is blessed with perfect rest,
But the blessing of earth is toil.

What will toil give back to you in return for what you put in it? Physically, I would say, tried sinews, strong pulses, increased powers; and spiritually, breadth of sympathy, the same mind, the healthy spirit, a deeper knowledge of God and His world.

Do not imagine that you are to have brain and brawn and muscle to serve in your generation without work. You cannot acquire it other than by entering strenuously into life's great work, getting from youth the strength for age, so that "fearless and unperplexed," you may pursue the struggle until you "pass" as Browning says, "approved, a man, for aye removed from the developed brute." We cannot see the last, but knowing the present, and our own life's possibilities, let us, looking forward on life, believe with Browning:

"The best is yet to be; the last of life, for which the first was made."

May I, in closing, give you that stanza of Van Dyke's on Life, one of the three best things—Work, Life Love:

"Let me but live my life from year to year,
With forward face and unreluctant soul;

Not hastening to nor turning from the goal,

Not mourning for the things that disappear

In the dim past, nor holding back in fear

From what the future veils, but with a whole

And happy heart that pays its toll
To youth and age, and travels on with cheer.

So let the way wind up the hill or down,

Thro' rough or smooth, the journey will be joy;

Still seeking what I sought when but a boy,

New friendship, high adventure and a crown,

I shall grow old, but never lose life's zest,

Because the road's last turn will be the best."
J. Muldrew.

The Dramatic Evening.

On the evening of Nov. 24th, the Macdonald Literary Society entertained the staff and students of the O. A. C. at their dramatic evening. The entertainment opened with three promenades, after which the guests assembled to enjoy the presentation of "Cranford," a dramatization of the novel of the same name, by Mrs. Gaskell. The curtain rose on the quaint old-world scene in Miss Mattie's parlor, where the hostess and her little protegee, Mary Smith, are making excited preparations for the reception of their guests, while Martha, the maid, is pinning down the newspaper tracks to protect the old-fashioned carpet. These three characters were strong throughout, but especially so in the touching scene in Act III., where misfortune overtakes Miss Mattie.

The parts of the courageous Miss Pole and the ridiculously humble Miss Betty Parker were well interpreted. Mrs. Forester's deafness, and Mrs. Fitz-Adam's plebeian language, caused much amusement. The distinguished guests, the Honorable Mrs. Jamieson and Lady Glenmire, added much to the humor of the play, to which the announcement of Lady Glenmire's plebeian marriage formed a fitting climax. The costumes were all well chosen and picturesque.

While the scenery was being changed the guests promenaded, again assembling in the gym, to enjoy the famous trial scene in *Pickwick*, as given by the second year of the O. A. C. Roars of laughter greeted the court and jury-men as they ascended the platform. The costumes were well chosen, the jury not even lacking the typical English swell, with cane, gloves and monocle. Justice Stareleigh appeared to have difficulty in maintaining proper gravity of expression for so solemn an occasion. The counsel for the plaintiff and defendant presented very good cases, and made strong speeches.

The blustering Mr. Pickwick was there in all the freshness of Dickens' famous character of that name. The suppressed sobs of Mrs. Bardell were heard far as she comforted her obstreperous offspring, who continually made havoc in the order of the court. The volubility of Mrs. Cluppins called forth most amusing reproofs from the judge.

Mrs. Saunders, clad in a Paris creation of pink and white, with hat to match, and long black suede gloves, acted her difficult part with great tenderness of feeling and grace of carriage. Her manipulation of her skirts and

arrangement of her hat, were very dainty. Sam Weller, irrepressibly impertinent, rose to each occasion as soon as he was thrown down. The part of the trembling Nathaniel Winkle was well taken, fear and agitation continuing throughout all the replies.

The parts of the pompous and corpulent Tracy Tupman, and the ridiculous Augustus Snodgrass, were among the best.

The foreman and his jury assumed the proper airs of interest, indifference, curiosity, stupidity and drowsiness at the proper moments.

Altogether the plays were very well staged and represented.

Miss Pritchard, of '06, has been appointed Household Science Teacher in the new department of the Owen Sound Collegiate Institute.

Miss Maud Davis has given up her work at 'Varsity, to accept a position as teacher of Domestic Science and Art in the W. G. and R. Shirt Factory in Berlin. This is a new department which is being worked up among the employees, and Miss Davis is the right girl in the right place. We were delighted to see Miss Davis in the Hall again the other day, and to have an opportunity of wishing her luck.

We were all so glad to have Miss Bertha Beamer back as delegate to the Woman's Institute meetings. It is good to see our girls going out to take such a prominent place in Institute work as Miss Beamer has done in her own locality.

We have had calls this month from Miss Fraleigh, of St. Marys; Miss Thorne, of Toronto, and Miss Smith, of St. Thomas, all girls of last year.

Locals.

QUERY—What is the “Macdonald Flying Shunt?”

The only solution as yet offered is “the means taken for ejecting loiterers after the Dramatic Meeting of the Literary Society.”

Campbell says he likes to see a pretty girl, but “we all do the same.”

I’m sitting on the style, Mary,

Sitting on the style,

But the bulldog in the front yard

Keeps barking all the while,

Why don’t you tell your Pa, Mary,

Or John, if he’s about?

To ask young Hughie Duff in,

And make the dogs get out.

MacGill—There used to be a Scotchman “up our way” who was a policeman and wore kilts.

Hodgins—Where was he born?

MacGill—In Dublin.

MacGill’s knowledge, instead of “doublin,” seems to be backing away.

There is an Arabian saying which runs, “Words are women; deeds are men.”

Has anyone noticed how talkative Law has been lately, and how silent others have grown?

Freshman—I think the man is a cad. I had not spoken to him a minute when he called me a cad.

Junior—What caused the delay?

“I’m a free thinker,” says Sunny Jim. We should think so indeed. It would

take more nerve than he has to charge for his thoughts.

What relation exists between an examination and a freshman’s excuse for not “working” (?)

Necessity is the mother of invention. The examination is a necessity; the excuse is an invention; therefore, the examination must be the mother of the excuse.

Mr. Jones (in literature)—Who is responsible for the passage just read, Turney?

Turney—I don’t know.

Mr. Jones—That is a very characteristic speech.

Everybody thought that “Peter” was late, as usual, until they heard a sound behind the scenes which caused the word to be passed along “Boddy has arrived.”

The sound referred to was like the scratching of a match.

McEwen was interviewed after the Breach of Promise case, and when asked how he managed to play Sam Weller so well, he remarked that it was natural to him.

New books: “Renaissance of Art,” MacGill.

“Rong by Rong Was Never Rited,” Cunningham. (We should think not. It would never do at all.)

The latest development in aquatic plants: “The Water Melon,” E. Lewis.

Overheard at Woodstock—Suppose we were to miss the train home, what would we do?

Strong (philosophically)—Oh, well! There would be no use crying over "skimmed" milk.

Professor Day (in sheep judging)—Why do you place number two above number one, Mr. Smye?

Smye—There is no "tendency to wool" in number one.

Scene: Street railway, college landing, the Duke standing waiting for the car. Presently the car approaches from Moore's Corner. The Duke observes a young lady hurrying for the car, with a dog behind her jumping up and catching her skirt. The Duke gallantly went to the rescue, and after victoriously vanquishing the enemy, and forcing him to retreat, he retraced his steps and just caught the car. Standing on the step he looked back, and, to his horror, he saw the young lady standing on the landing, and heard her crying, "Fido, poor Fido! Did he chase you away?" The Duke went "travelling."

Sirrett—What thesis are you writing on, Angle?

Angle—Certified milk.

Sirrett—What can you find to write on that?

Angle—Well, there are the manufacture, the composition and the "moralities" sides of the question.

Sirrett—The morality side! What do you mean?

Angle—Why, the deaths that it causes.

Cutler—You will have to educate the farmers up to that gradually.

Mr. Peart—Go home and get on the council and educate them, then.

Some extracts from speeches made when discussing the "Conversat":

"The idea of the conversat is not that we may meet our affinity, although that may also happen."—Coghlán.

"I think that it is a nice way of getting back at our down-town friends."—Mackenzie.

"When we get homes of our own we will have to entertain, so now is your chance to practice."—Atkins. "Tommy" has always an eye for the future, be it ever so dim.

"One, the quality of whose voice you very seldom see."—Frier.

Professor Reynolds (in composition work, after writing out the ladies' errors, he takes a glance at Campbell's performance)—H'm, just a moment till I get a longer piece of chalk.

Bowes, interviewed on the "Smoking Question," says: You might as well learn to smoke here as hereafter, but it will cost a lot if you have to pay \$1.00 for every smoke.

Mr. Peart (in landscape gardening)—Fences ought to be done away with altogether, as they are an eye-sore to the public.

Sharman—The fence around the orchard, most certainly is.

What is the difference between the Homemakers and Messrs. Sirret, Duff and Bell? The first is the female brigade, and the second is the "mail" brigade.

Armstrong has invented a new method of study; it is as follows: Start with the subject of your last exam, and study that up; then your second last, and so on. When the exams start, you will have your knowledge just as you

want it. This enables you to take it off a layer at a time.

Dr. Reed (when second year burst into his classroom, quarter of an hour early)—Can any one give any reason for this class being let loose before time?

Voice—Yes, we had a "Condensed" lecture from Professor Dean this morning.

President (to MacGill)—Are there many of your men dropping out at the end of their second year?

MacGill—There are few; for example, Webster and Hodgins.

President—Two bad.

Lloyd Jones (in Physics)—Will we have anything on "Cosmetics" on the exam.?

Professor Day—No! We don't study that subject here; that comes under Domestic Science and Art.

"GOES LIKE SIXTY."

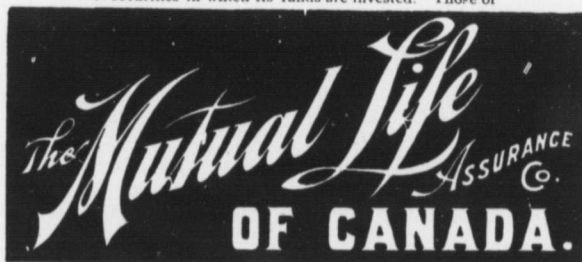
It will probably be only a short time before the words "Goes Like Sixty" will be as familiar to the readers of Canadian magazines and papers as they are now to the readers in the States.

This phrase is the slogan of the Gilson Manufacturing Company, of Port Washington, Wisconsin, who produce a unique line of gasoline engines, and refers particularly to their \$60 1-H. P. gasoline engine. This concern is now building a branch plant at Guelph, Ontario, Canada, and no doubt will make this phrase a feature of their Canadian advertising.

The Gilson Manufacturing Company has had a very great measure of success, owing to the many features which make their engines particularly attractive for the unskilled user of power. It is claimed for the Gilson engines that they are easier to operate, more economical, and consequently more efficient, than others. In addition to this, they are sold at astonishing low prices, yet they are unsurpassed in workmanship and material.

100 Per Cent. = 100 Per Cent.

The stability of a Company may be gauged by the class of securities in which its funds are invested. Those of



are all gilt-edged, as may be seen from the following list :

LEDGER ASSETS	PER CENTAGE	R. Melvin, President	Geo. Wegenast, Manager
Mortgages	\$4,265,533 86	48.22	
Debentures and First Mortgage			
Bonds	3,245,401 89	36.68	
Loans on Policies	1,617,480 99	11.50	
Cash on Hand and in Banks	261,960 60	2.96	
Real Estate	56,281 08	.64	
Total Ledger Assets ..	\$8,846,658 42	100 p. c.	
*This item does not include stocks of any kind.			
		W. H. Riddell, Secretary	
		Geo. Chapman General Agent - - McLean's Block GUELPH	

Please mention the O. A. C. REVIEW when answering advertisements.