

# Agricultural Colleges

## ...IN... CANADA.

By F. C. HARRISON, Principal Macdonald-Agricultural College.



PRINCIPAL F. C. HARRISON, Macdonald College.

Up to the middle of last century, the most apparent fact that in order to achieve success in agriculture one must first of all obtain a certain amount of technical knowledge, seemed to have been entirely neglected.



granted in 1899, and curiously enough among the recipients was the present president of the college. In addition to several short courses, which vary in length from a fortnight to three months, in the various departments, there are two long courses—one lasting two years and the other four. The two year course, which includes animal husbandry, horticulture, agronomy and many other subjects, leads to an associate diploma, and is designed to meet the requirements of those who intend to take up agriculture as a means of livelihood. The four year course leads to the degree of bachelor of the science of agriculture, and allows of specialization in chemistry, physics, biology, bacteriology, dairying and agriculture. Many boys who take the long course return to the farm, some few, however, become teachers, investigators and assistants in agriculture as well as agricultural editors and journalists.

In addition to its educational activity the college has given a great and needed impetus to agriculture in general; an impetus the magnitude of which can be estimated by the large number of bulletins issued by the institution. The now well-known farmers' institutes, women's institutes, city and poultry associations, nearly all owe their existence to the (Macdonald) Agricultural College; while the

the college was formally opened in 1906, by the lieutenant-governor of the province. The courses given are similar to those at Guelph, great emphasis being placed on the two year course, as it is framed for young men who earnestly desire to improve their knowledge of agriculture, and intend to be directly identified with farming at the conclusion of their course. Some of the peculiar requirements of the western provinces are catered for, as evidenced by the provision of short courses in steam and gasoline engineering for threshermen and farmers. In 1907, Sir William Macdonald, who has always shown the deepest interest in everything that tends to increase the prosperity of Canadian agriculture, established a magnificent college at Ste. Anne de Bellevue, 20 miles west of Montreal, on the banks of the Ottawa river. This institution differs from those already established in that it is composed of three schools; one for the teaching of agriculture, another for instruction in domestic science,

Entomological Society and the Fruit and Vegetable Growers' Associations are deeply indebted to the same source. The result of the formation of these societies has been astonishing, for instead of regarding the college as something quite without their sphere of interest, Ontario farmers have come to be proud of their local institutions.

Up to 1904 the Guelph College, which is familiarly called, was restricted entirely to the education of men; but in that year, a women's department was inaugurated. The courses in this branch of the college have been designed to give, by means of many lessons

and a third for the training of public school teachers. The benefits accruing from the combination of the schools of domestic science and agriculture are obvious and the idea of the addition of a school for teachers is that, as many teachers will be required by the rural schools, an early sympathy for agriculture is useful, and will enable them to bring the needed stimulation of technical knowledge to the farmers' children, who will thus be attracted to rural occupations.

After spending a sum of five million dollars on the buildings, equipment, and endowment of Macdonald College, Sir William presented the institution to McGill University, of which it now forms an important part. Some of the advantages which Macdonald College hopes to assist in providing for Canada are, an increase of productivity, with improvement of products in the field and, in the in-

struction of a school for teachers is that, as many teachers will be required by the rural schools, an early sympathy for agriculture is useful, and will enable them to bring the needed stimulation of technical knowledge to the farmers' children, who will thus be attracted to rural occupations.

For twenty years there was only one agricultural college in the whole of Canada, but in 1893 the province of Nova Scotia established one near Truro. Short courses are offered in horticulture and live stock, special care being given to fruit culture, in view of the local interest in fruit farming. Through the beneficent policy of the local government, any student who has completed two years

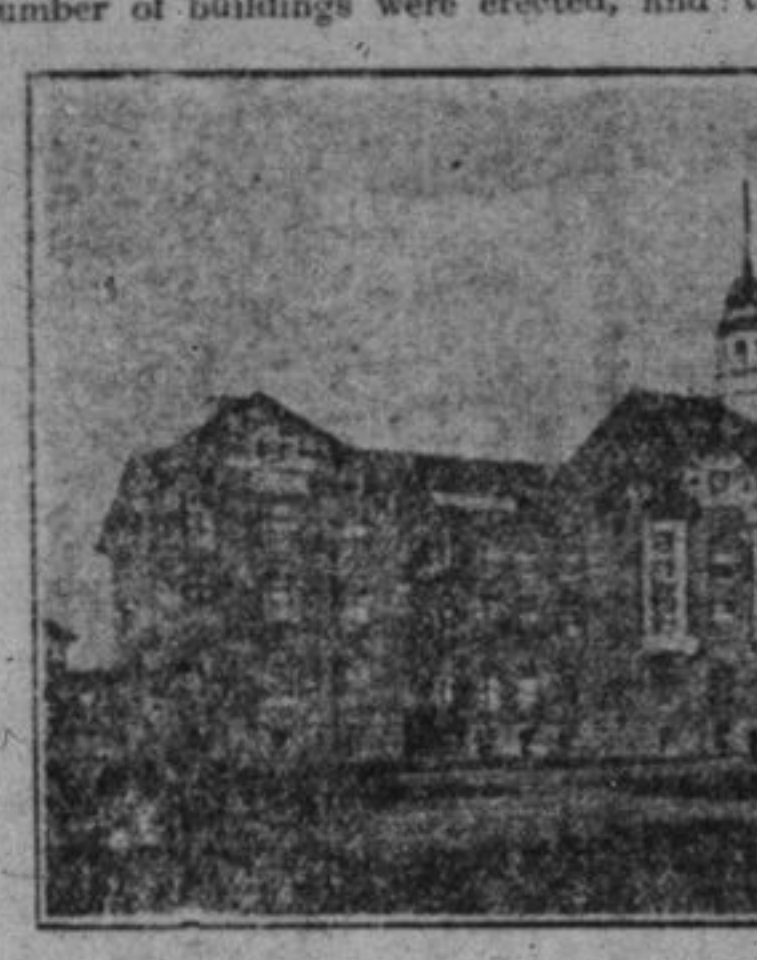
and as much individual practice work, a good foundation in the different branches of ordinary household work, such as cooking, sewing and laundry; and above all, an endeavor is made to awaken an interest in the wider question of sound bodies, wholesome dwellings and real homes.

The courses offered are of necessity very similar to those of the institutions already mentioned. Short courses are provided in live stock, animal husbandry, horticulture and poultry raising, while longer ones embrace such subjects as dairying, animal husbandry, poultry farming and agriculture lead in two years to an associate diploma, and in four to a degree in agriculture. The object of the domestic science courses is to fit girls for the duties of home-making, while the school for teachers gives a thorough training to teachers by instruction and training in practice schools and in such subjects as manual training, nature study and household science.

In the few years that have elapsed since the establishment of Macdonald College, two more agricultural colleges

studies at Truro may travel to Macdonald College or the Ontario Agricultural College at its expense, to complete their course, and obtain a degree in agriculture.

In 1902 the provincial legislature of Manitoba appointed a commission to enquire as to the advisability of establishing an institution where young farmers might study the science of agriculture, and receive such an education as would fit them to perform the highest functions of citizenship. The commission found the necessity for an agricultural college to be great, and the desire of the agricultural classes for its establishment, undoubted, and in 1903 an act was passed calling for its establishment. The site selected was close to Winnipeg, on the south bank of Assiniboine river, and here a number of buildings were erected, and



MAIN BUILDING MACDONALD AGRICULTURE COLLEGE.

there is still much work to be done by the present colleges and as much by the colleges to come.

**LA TUQUE.**  
It is Said to Have Wonderful Water Power.  
The railroad towns of rapid growth are in the west alone. La Tuque on the Grand Trunk Pacific railway, 127 miles from Quebec, is a wonderful example of this. Two years ago there was not a house there. To-day, there is a handsome well laid out, well built town with two churches, a school, a bank, a sulphite pulp mill, two saw mills, some very fine stores and a resident population of about 2,000. The Quebec bank opened a branch there a few weeks ago, and in a very few days had \$200,000 on deposit. La Tuque is a divisional point on the Grand Trunk Pacific railway and will have the shops for that division of the Lake St. John division of the Canadian



VIEW OF AGRICULTURAL COLLEGE BUILDINGS, TRURO, N.S.

Northern railway, and the head of navigation of the River St. Maurice, which is navigable for steamers for seventy miles from La Tuque southward to Grand Piles.

But the principal advantage of La Tuque is its water power. The River St. Maurice, at this point, a magnificent stream half a mile wide, falls ninety feet, making available for industries no less than ninety thousand horse-power. This is only partially developed, but already the Messrs. Brown of Berlin, N.H., the owners of the position, have built one of the largest sulphite pulp mills in America, and in a few days will be producing sixty tons of sulphite pulp daily and a paper mill will follow in the near future. These two industries will use only a very small portion of the power, so that there will, no doubt, be many other industries established, which will make of La Tuque a flourishing industrial



BOYS' RESIDENCE, AGRICULTURAL COLLEGE, GUELPH.

town. A large flour mill is spoken of, to grind up the wheat to be brought from Manitoba and Alberta by the Grand Trunk Pacific, and as the level grades (four tenths) of that road will carry grain at rates which the canal navigation cannot compete, this industry can be an ideal spot for such an industry on a large scale, as it is also in close proximity to the ocean steamers at Quebec. La Tuque is evidently destined to be one of the most important manufacturing towns in northern Quebec.

**Made Him Feel Old.**  
Chicago Record-Herald.  
"What's the matter?"  
"Oh, nothing much."  
"But you look as if you had something serious on your mind."  
"Well, if you insist on knowing, a boy who was named after me has just become engaged to be married. How do you like that?"

tions have been founded, one in the province of Alberta and one in that of Saskatchewan. Both of these are departments of the new provincial universities, and as yet are only in the stage of construction.

Thus we see that whereas thirty-six years ago there was not a single institution in Canada offering a course in the science of agriculture, to-day there are six, but when we consider that the population of the dominion amounts to nearly seven millions of people, and further, when we bear in mind that in spite of the fact that Canada is wealthy in mineral products and may rise to great heights in the world of business and commerce yet for some time agriculture is bound to be the basis and foundation of her prosperity. When we remember this, we shall begin to realize that



VIEW OF AGRICULTURAL COLLEGE BUILDINGS, TRURO, N.S.

**Ruptured Pigs.**  
Male pigs valuable for breeding purposes are frequently ruptured by crowding or pushing through the fence. When the scrotum has been crowded full of intestines the case is a very hard one to treat, but a cure may be made if the breeder has sufficient patience to carry the undertaking through.  
The boat is thrown on his side, the intestines carefully pushed back into the abdomen and clamps fastened on between the body and the testicles. These are screwed tight and allowed to remain that way until the testicles dough off. Although such an operation makes it necessary to emasculate the boar, he would be of no use as a breeder in such a ruptured condition, and he is still valuable as a feeder.  
It is sometimes necessary to use a few stitches in such operations, but where clamps can be used the results are more satisfactory. Pigs wearing the clamps should be kept by themselves to prevent others from injuring them.—Farm Progress.



VIEW OF AGRICULTURAL COLLEGE BUILDINGS, TRURO, N.S.

**Dehorning Cattle.**  
An Iowa farmer writing in the Homestead regarding the dehorning of cows says: I never have any cattle with horns. I raise all the natural milks I can, and if any of them have horns they are sure to lose them in November or the last of March before they are one year old. They should be dehorned when the weather is cool and the flies are dormant. I have, however, dehorned a good many cows, and what first gave me nerve to do so was a big cow because she would not let a two-year-old calf drive her horn into my eye. For a moment I saw (I always use the saw), and when I got through with her she started to grieve. She never again, but never touched her, as she was carrying on a horn at least six inches long. Before night she was in the yard. In dehorning before the two-year-old calf drive her horn into my eye. For a moment I saw (I always use the saw), and when I got through with her she started to grieve. She never again, but never touched her, as she was carrying on a horn at least six inches long. Before night she was in the yard. In dehorning before the two-year-old calf drive her horn into my eye. For a moment I saw (I always use the saw), and when I got through with her she started to grieve. She never again, but never touched her, as she was carrying on a horn at least six inches long. Before night she was in the yard.

**For the Gardener.**  
One vine that grows quickly in the moon is the green known as Ipomoea mexicana grandiflora.  
The flowers are four or more inches across and open early in the evening and remain open until the sun shines upon them. They are most fragrant.  
It is interesting to watch the blossom grow. At the right time you turn your back upon them, closed, when you turn again to face them they will be open. Literally they open as quickly as one could open an umbrella.  
The three things necessary to make them grow are sunshine, lots of fertilizer and lots of water. Plant the vine, which may be a cutting, in a slight depression, so the water may soak in, and once or twice in two or three weeks give a liberal dressing of fresh cow manure or pulverized sheep manure for the water to carry down. It is not unusual for a vine to grow a foot a day.

**Lumpy Jaw of Cattle.**  
The disease is not spread from one cow to another, but is due to the infective fungus (actinomyces on grass, cereals, etc., says the Rural New Yorker. The diseased parts should be dissected out when loose from the bone and the wound well cauterized by the operator. If the bone is involved, better sell to the dealer in "canned" cows. The disease does not affect the milk nor the meat, so long as the animal is in good flesh and not run down from an aggravated state of the disease. Paint the lumps once daily with tincture of iodine until they soften and can be freely opened. Where the tumor is present without pus dissection is in order.

**Orchard Economy.**  
It is not profitable to fool away time in coddling a poor tree. Yank it out and plant a new one. It costs something, of course, but it costs more in time and annoyance to let it stay.—American Agriculturist.

**Produce and Prices.**  
Kingston, June 23.—The market clerk reports as follows:  
Carrots, 40c. to 50c. bag; apples, 80c. to 90c. turnips, 40c. bag; cabbage, (new), 8c. to 10c. head; onions, \$1 bag; potatoes, 25c. to 40c.  
Meat—Beef (local), carcass, 7c. to 8c.; prime western beef, \$11 to \$12 per cwt.; by carcass, cuts, 20c. to 22c.; live hogs, 7c. to 8c.; dressed hogs, 12c. to 13c.; pork, 15c. to 16c. carcass; mutton,

# Tips For Farmers

BY UNCLE JOSH.

Decaying organic matter in the soil is one of the most important ingredients. The natural method of improving the soil is to increase the amount of humus in it. The farmer's method of wearing out soil is to lessen the amount of humus in it. It helps to soil just as much for the farmer to add humus to it as it does for nature to add it. The farmer can add humus to the soil just as well as nature, and, as it is always the case, he can beat nature when he tries. Stable manure makes good humus—better than that supplied by nature.

Organic matter bears about the same important relation to the productivity of soils that the key stone does to the strength of the arch. The key stone always sits in the arch. The amount of sand and clay in a soil may remain fairly permanent, but not so with the organic matter. Farmers that improve soils add organic matter to them. If an adequate supply of it is to be kept in cultivated soil, and the farmer must regularly add organic matter as that in the soil constantly diminishes.

The use of stable manure and the plowing under of crops or parts of crops are the farm methods of adding humus to cultivated lands. While any organic matter is good, some is better than others. Stable manure and restorative or clover crops are the very best types of organic matter for the farmer to plow into his soil.—Home and Farm

**Neckwear Sale.**  
"My daughter," said the old broker, "is that young man familiar with the way stocks drop during the summer months?"  
"Yes, indeed, pa," hastened the pretty daughter. "Just the other day he bought a pink and blue one that had been reduced from \$2 to \$1.49."  
**The Dollar Mark.**  
Washington Star.  
"Have you seen the Washington monument?"  
"Yes," replied the New Yorker. "It's a pretty tall building, but what's the good of it without any offices for

**SERMON FROM SHAKESPEARE**

Beggars mounted, run their horse to death.  
Henry VI, Part III, Act I, Sc. 4.  
Shakespeare has used the old adage "Beggars mounted run their horses to death" with powerful effect. The figure is an excellent one. The beggar who creeps slowly and painfully along the highway, looking to charity for his daily bread, is in a new and unaccustomed world, when he finds himself mounted on a powerful steed. In his changed circumstances he loses his head and rides so furiously that he is in danger of running his steed to death. For a moment he is a king, and, exhilarated by the thought, he knows no restraint.

Wealth or power suddenly thrust upon most men has the same effect as the possession of a horse by a beggar. The American continent gives abundant examples of this general truth. There are on it thousands of men who from poverty have come to affluence. Lumber-jacks, brakemen, miners, have become millionaires. So long as these men are actively engaged in producing, there is but little danger to themselves. Their work keeps them from injuring their lives by excess or joining the race that has made them what they are. If they cease their activities they are in grave danger. The rich American continental perpetrate thoroughly enough. He flings his money recklessly about him, he plunges into excesses, he buys costly pictures and curios which he cannot enjoy and which are frequently frauds. He goes from excess to excess. Mounted on his wealth he rides to the devil's den. There are many exceptions. There are men who have risen from the ranks of the poor on whom wealth has but little or no deleterious effect. It is merely an instrument in their hands to enable them to accomplish greater things in the future. But so often it is true that the new rich abuse their opportunities, that Shakespeare's aphorism may be accepted as generally sound.

There are abundant instances to prove it. The work comes from the farm or village to the city. He is dazzled by the splendor, the luxury, the amusements. The unaccustomed world is so much for him, and he plunges into excesses which wreck his life. On the other hand the city has many men who have come from the country, occupying high positions. They have been tempted; the resistance has made them all the stronger, and holding a tight rein on their steed they have won the race and kept their mount in good condition. Society gives many examples of the

same tendency to ride a newly-acquired horse to death. King Cophtus no longer go about the world wearing beggar's rags; princes rarely cast their eyes on Cinderellas; Lords of Burleigh do not in these times wear peasant garb. However, men of great wealth are often attracted by pretty faces which are frequently masks of empty or vain minds. Suddenly raised from poverty, such women often play a ludicrous part. In their efforts to appear elegant ladies, leaders in society, possessors of culture and refinement, they make laughing-stocks of themselves. The world is still not without its Mrs. Malaprops. The extravagance and pride of vain women have disappointed many fortunes. They desire to cross the world, to be in the public eye. They think that by the glitter of their jewelry and the gorgeousness of their apparel they will win homage. The divorce courts, the society scandals, the suicides and murders in high places show where it is the life of vanity and display may lead.

It is the same with power. Richard III and Machiavel, the envy and scheming, achieved crowns. The abuses of their positions. From a degree of tyranny to another they advanced until the spirit of justice rose up and, in the person of a Madoff and a Richmond destroyed them. Had Napoleon been born to the purple his end might have been different. The vast power that was his got control of him. He was, in a way, a beggar mounted and rode his horse to death.

The woman who has been a servant often becomes the unkindest mistress. The man who has used the pick and shovel frequently makes the hardest gangster. The politician who has never known power or wealth not uncommonly is the most tricky legislator and the most shameless grafter.

How are such beggars to learn to ride? Common sense is all that is needed. Wealth and power are excellent steeds; they carry far and swiftly, but there should be a strong hand on the rein. They are sturdy beasts in a natural state, wild and untamed, and if the rider is careless they will take the bit in their teeth. And beyond control, a heart unused to virtue, a soul serious of purpose and unselfish need have no fear. Power and wealth will be accepted as are life and health, and gifts from the Infinite to be used for noble ends. The man of humbling origin in the saddle with such a position, makes well his best like a king. His steed, in the journey through life, instead of being torn to death, will gain greater strength by the wise use of spur and rein.

# AN EMPIRE BUILDER

LORD MOUNT STEPHEN IN HIS ENGLISH HOME.

Celebrates His 81st Birthday—Romantic Career in Canada of a Young Scotch Emigrant.

Lord Mount Stephen, one of the foremost among empire-builders, celebrates his eighty-first anniversary of his birth at his beautiful Hertfordshire home, Brock Hall, near Highgate, on Sunday.

Although he has had a long, strenuous and adventurous life, Lord Mount Stephen is still enjoying robust health, but he has forsaken active participation in business, and profound peaceful and secluded retirement amid the wooded glories of his picturesque country estate.

Lord Mount Stephen was, like Lord Strathcona, one of the creators of modern Canada. He was born plain George Stephen at Dufftown, Banffshire, in 1829. His father was a poor carpenter, and George, having for a few years attended the parish school, began his career as a shepherd boy on a farm.

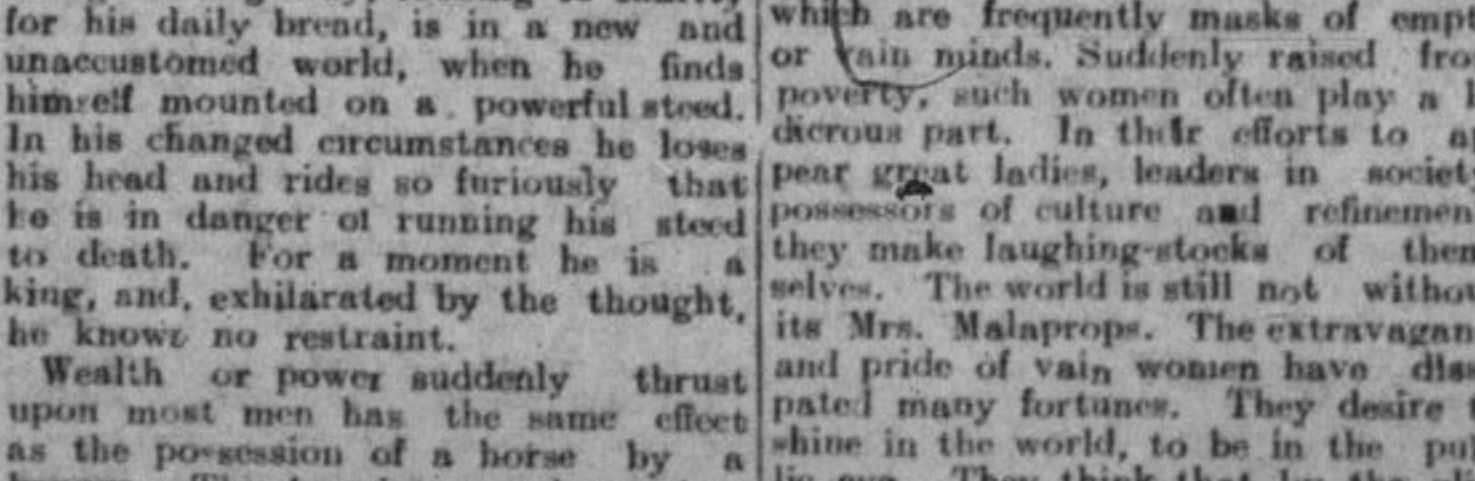
Ambition afterwards carried him to Glasgow, and then to London, where he obtained employment as assistant in a firm of drapers with a large colonial business. One day his cousin entered the shop and asked him to give up the drapery business and go to Canada. The boy—he was then only twenty—had a wide vision even then, and he consented to throw up the prosaic calling of a draper's assistant for the more energetic and freer life in a comparatively unknown country.

By this timely migration he helped to make Canada and established for himself a name which is as widely known as it is deeply respected. In conjunction with Lord Strathcona, then a struggling pioneer, he prospered exceedingly, acquired banking and railway interests, and undertook the construction of the great transcontinental line known as the Canadian Pacific railway, of which he became president.

He subsequently made an enormous fortune, gave largely to charities, and in 1886 was created a baronet, while in 1891 a barony was conferred upon him.

Among the large sums which he has distributed for philanthropic purposes are the following:  
£200,000 to the King's hospital fund.  
£10,000 for poor Scottish clergymen.  
£25,000 to Aberdeen infirmary, to clear of a debt.  
With Lord Strathcona he built a hospital at Montreal for £300,000, and provided a further £100,000 for its maintenance.  
Gave £35,000 to the Aberlour orphanage, Scotland.  
£10,000 to the Queen's unemployment fund.  
Distributed £500,000 among his relatives, preferring, as he said, to see that they enjoyed life now instead of waiting until after his death.

Lord Mount Stephen, who has on many occasions been visited in his country home by King George and other members of the royal family, received scores of congratulatory messages on the occasion of his eighty-first birthday.



LORD MOUNT STEPHEN.

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