

PAGES

MISSING

V. 19 # 2

The Farm Labor Problem.

By A. LEITCH, B.S.A.,
Supt. Rathbun Co.'s Farm, Deseronto.



O the Ontario farmer of to-day the all-absorbing problem is that of obtaining suitable farm labor. The great industrial activity of cities, and the inducements of free, or practically free, land in the west, have drawn from rural Ontario that section of the population which was once counted on to help the landowner with his manual labor. Moreover, the class of immigrants which nowadays come within our boundaries is either physically disinclined to farm labor or prefers the superior social advantages of city life to the monotony of agricultural pursuit. While the scarcity of farm labor is a serious problem with all branches of farming, the burden of anxiety falls most heavily on those engaged in the gardening occupation and in dairying. Machinery has done much to assist the farmer out of his difficulty, but nothing has yet been devised to successfully take the place of a pair of hands in the weeding, picking and marketing of vegetables, and in the care and milking of cattle. In fact the very existence of the profitable business of dairying is threatened in some sections of the Province.

Though there appears at present to be no means of totally relieving the situation, the problem admits of four partial solutions. The use of larger and up-to-date machinery will effect a

great saving in the number of men required to perform the necessary labor of the farm. Encouragement of immigration of skilled British farm labor and the careful allotment of such immigrants to suitable positions will do much to supply an excellent class of workmen. Better treatment of hired men by their employers will make them more content with their lot, resulting in more work being done, and encouraging others to enter that field of occupation. The retention of the boys on the farm assures a happy solution of the problem to the farmer with a growing family.

As before stated, the introduction of larger implements and the invention of new labor-saving machinery, are doing much to supplant hand labor on the farm. One man with three or four horses will do more and better work with a two or three furrow gang-plow than could formerly be done with single furrow plows, each requiring a teamster and a team. In the same way a man can manage a double width disc or two drag harrows side by side. The use of hay forks and slings has removed much of the laborious work of storing hay and grain. The hay loader, in its up-to-date styles, is rendering good service as a substitute for the hired man in the field, and if kept in good repair can be depended on never to go on strike nor leave in the midst of a busy season. The dairyman is earnestly watching the

development of the milking machine, which gives good promise of supplanting the hands in that occupation, which is such a bug-bear to the majority of farm help. These are some concrete illustrations of the saving in labor that can be accomplished by the use of



A. LEITCH.

proper machinery, and along the line of labor-saving appliances there is no telling what the future has in store, as there seems to be no limit to the inventive genius of man.

The rural sections of the British Isles are populated in great numbers by men whom long descent, and experience from the cradle upwards have evolved into the almost ideal farm laborer. The British farm laborer is steady, painstaking and trustworthy to a fault, and most important of all, the majority of them are excellent handlers and feeders of live stock. Unfortunately this type of Old Country man is but rarely seen

among the immigrants of late years. Although wages are higher in this country he is too much of a home-loving man to run the risk of knocking about a new country at jobs which, while remunerative, are not of the steady variety that he likes. Besides he is too independent to accept free financial aid. If he cannot pay for what he wants he will do without it. Much though he may want to move he will not do so unless a steady position is assured him. Therefore, it appears that here is an opportunity where Farmers' Associations and Institutes can do much to the relief of their members. Equipped with the names and conditions of farmers who want steady men the year round, and who can provide comfortable houses, agents of these associations in the old land could assure these British laborers of steady work, good homes and higher wages, with better advantages for their families than they could procure at home. Then by loaning them enough money to cover the cost of transportation, numbers of them could be induced to emigrate. By pursuing this course the farmers' associations would be better serving the interests of the farmer than they can ever hope to do by censuring corporations or memorializing lethargic governments. There appears to have been established a prejudice against the British farm laborer. This is due to deception practised by unscrupulous immigrants representing themselves as skilled farm laborers, to farmers greatly in need of help, who take them on the strength of their own word. Therefore, it cannot be wondered at that when he finds in the midst of a busy season that he has been misled, he should view with suspicion each and every one of

the immigrant class. However, when skilled farm labor from across the sea once gains a foothold here, this prejudice will be quickly uprooted.

It is a generally established fact that the occupation of farm laborer is not a popular one. This unpopularity is not because the calling is not a lucrative one, for, although on the face the wages do not appear large, the other accessories, such as board, free houses or low rent of houses in rural sections, free gardens and the low cost of farm produce at the farm as compared with at the city market, are of such value that the man who works for a fair farm wage is more money in at the end of a year than the laborer or mechanic in the city, drawing a much larger wage. Besides, for the man with a family the country affords better opportunity for the successful physical and moral development of his children, with nearly equal educational advantages. It seems, therefore, that the unpopularity of farm work lies in the long, irregular hours and the lack of the entertainment and social excitement found in urban sections. Therefore, any condition of farm life that tends to assure shorter and more regular hours for the hired man will aid much in making the occupation a popular one. Of course, there are such seasons as haying and harvest when any reasonable man realizes that the pressure of work demands long and trying hours, and hired men as a rule expect such a condition of affairs. The time has not come when farm work can be performed on an ordinary farm within stated hours, though on some large estates a ten or twelve-hour day has been found a successful practice. However, apart from the busy season it seems unreasonable

for a farmer to overwork his men by long hours, especially doing chores after dark. This practice will either make him discontented and hard to manage or cause him to make up for long hours by shirking his work through the day, often resulting in a smaller amount of work being done than would be accomplished in a shorter time by interested and contented men.

One of the most fruitful causes of annoyance to farmers is the lack of interest and consequent carelessness displayed about their work by hired men. While this is partly due to the class of men who offer themselves for farm labor, much is due to the treatment they receive at the hands of their employers. A good man who appears to like his work should be encouraged by his employer to take an interest in the operations of the farm on which he is employed. If he is given credit for some of the success of the work it will not only please him, but make him more satisfied and willing to take further interest. This leads to more careful handling of stock and implements, a better quality and greater quantity of work, a satisfied man, and consequently increased profits to the owner. If the hired man is found worthy of trust, it pays to trust him to the limit, even to the point of consulting him about the manner in which work should be done. However, he must never be allowed to suppose that his employer does not know his business, for contempt for employer's capabilities is fatal to a good understanding between master and man.

I will say little of the influence that a little attention to the bodily comforts of a man has in making him contented, for it is generally recognized among

farmers that a man well fed and cared for is a more satisfactory man than one whose comforts are neglected. As a general rule the average hired man in Ontario has little reason to complain on this score.

Perpetual nagging at a man does more to induce him to leave than will any other annoyance. If the employer would imagine himself, for a moment, in the place of the man, and would consider the effect some of his admonitions would have on himself, he would soon realize that he is doing himself harm and his man a great injustice by giving away to violent and persistent abuse. Few men object to correction if such be done in a just and unimpassioned way, but if the bounds of moderation be exceeded, there is awakened in the man a spirit of combativeness and discontent, certain to result in dissatisfaction on both sides. It takes infinite tact to manage men, and the employers are few who can manage all classes successfully. All men will not respond to the same kind of treatment. Therefore, the farmer employer of labor will do much to make the occupation of farm laborer a popular one if he study the peculiarities of each of his men and treat them according to his findings.

For the man with a growing family of boys the problem is already solved. This man has at his command a class of labor, the value of which it is impossible to estimate. With proper training and preparation, when they become old enough to work, his interests will become their interests; they will share his pride in the success of the farm and profit, and happiness is bound to ensue from such a community of interest.

Now, the problem that confronts this man is how to keep those boys on the

farm. In the first place, he himself must be in love with his work. There is no use his trying to make farmers of the boys if he is heard continually complaining of the hard lot of the farmer. Rather should he keep before their impressionable young minds the advantages and pleasures of such a life, the rough edges of which they soon enough will find for themselves. Again, he must make life pleasant for them. He may make them work hard, but he must not make ever-toiling drudges of them. Soon their labor will become one of love, a source of pride and pleasure to the father and profit to the family. If their home-life is made pleasant by bright surroundings, they will not leave on small excuse. If the parents will spend part of the money that such labor would cost if performed by hired help in making home pleasant, bright and cheerful, in entertainment of the young friends of the family, in improving the farm, and in education of the children, they will find it a profitable investment. The bank account may not be so large, but what is an accumulation of money as compared with an industrious, healthy and happy family of boys and girls in the house? Again, when the boys are old enough to realize the value of property, they should be given some article of stock or piece of land to cultivate, handle and realize on for themselves. Thus will they not only be kept interested in farm work, but there will be inculcated in them habits of industry and business experience which will be of inestimable value to them when they are doing for themselves.

There seems to be a tendency among fathers to make professional men of their more clever sons, while they keep

at home the boy who will make "only a farmer." This is, in the writer's opinion, a grave mistake. No man is too clever or bright to be a farmer. No profession yields such returns to an application of brains and ability as does farming, and as such, it needs the flower of our young men to raise it to and keep it in the exalted place it deserves amongst professions. But many fathers will say, "I cannot afford to buy farms for all my boys. I must educate some of them for professional life." Now, the money spent in educat-

ing a boy for such a life would give him such a good start toward obtaining his own farm that he, by close application to business, would soon pay for the remainder, and in the struggle he would learn to appreciate the value of his property and derive great happiness therefrom. Thus the father, by keeping his boys on the farm, insures for himself, besides a fine quality of labor, a prospect of happiness when in his old age he sees his sons on the old homestead or on their own farms, honored members of an honorable profession.



Impressions of Burmah.

By J. MCA. RUSSELL, Penang.



THE approach to a new country and the termination of a sea voyage can seldom be without interest, except to those who find no enjoyment in life. Happily there are few of such, and certainly there were none on board as we neared Rangoon, after a few days' sail from the sweltering heat of the equator. While still far out at sea the water assumed a muddy appearance, which gradually became more turbid, till, on reaching the lightship, the water had all the appearance of a river in flood. But we were two months behind the rains, and the Irrawaddy River was at its normal state, after its journey of one thousand miles to the sea.

Away on either side the low rich swamps began to show themselves, and in a short time we were steaming between the mud-banks. A few natives fishing at intervals, a scurry and a splash indicated where a crocodile had disappeared, an outgoing steamer or a rice mill served to attract attention for a moment. But all eyes were turned to thick haze, which indicated the site of Rangoon; and, as we turned a bend in the river the huge Shive Dagon Pagoda was revealed, glistening in the sun. All other sights in Burmah sink into insignificance when compared with this, the finest and most sacred place of Buddhist worship in further India.

The date of its commencement is uncertain, but about 588 B. C. the Pagoda was only twenty-seven feet high. In 1768

A.D. it had reached its present dimensions. With a base whose circumference is 1,350 feet, the structure rises to a height of 321 feet, and is of solid brickwork. Surmounting this is a peculiar network or Ti, in the shape of a cone, covered with solid gold plate, studded with jewels and hung with gold and silver bells, the whole weighing some one and one-quarter tons. From base to Ti the pile is covered with stucco and gilded with gold leaf, enhancing the effect of this marvelous structure. Surrounding it are hundreds of smaller pagodas or shrines, where the Burmese come to worship and offer alms to the scores of beggars and penitents who practically live there. These shrines are decorated with magnificent carvings in teak, and paintings from scenes in the life of Buddha.

The religious mendicants are worth a moment's notice. Here is one, who, for seventeen years has come to the same spot and sits there from dawn to dark, turning over between his fingers a string of beads and uttering prayers that he may gain favor from Buddha. Another squats with head, hands and feet on the ground, his knees higher than the rest of his body, and has done so for twelve years, that he, too, may be counted worthy of favor. Deformed beings, children with hydrocephalic heads and adults suffering from elephantiasis are met with in this strange place, while beside them, chattering and laughing gleefully, are the dainty Burmese women in their picturesque garb

of silk headgear, coats and sarongs. They, too, have come to pray, but in the meantime do not wear long faces, for life to them is not a burden. They are the most free of all the women of the east, and have no such restrictions placed on them as have the Chinese and Malays.

Of other attractions Rangoon has no lack. The harbor is always well filled with steamers from various countries taking away the rice, teak and oil which form Burmah's chief exports, and bringing in return materials for native consumption, the building of wharves, railways, engineering yards and the numerous adjuncts of western civilization. Along the river banks may be seen the huge timber yards and the "Hathis a pilin teak in the sludgy, squdgy creek," and the oil boats of the Burmah Oil Company loading up bulk oil to feed the fires in less favored lands, and the shallow paddle boats of the Irrawaddy Flotilla Company steaming up, towing alongside two huge flats or scows, laden with goods for the hinterland. The business part of the town is common enough, but the residential portion is a pleasant spot. There are splendid public gardens, well laid out with rides and drives, while the artificial lakes cannot be surpassed anywhere in the east. To the toiler in the hot stifling city a few hours in the cool of the evening in such a place must be greatly appreciated. Curiosities are always greatly sought after, and certainly in Rangoon one could spend many rupees in a very few hours. Indian filigree work in silver and gold, Burmese work in silk, ivory and teak, and samples of native industries all prove very tempting; but, with a judicious forethought as to the prices and worth of the articles, we pass on.

The railway journeys taken in any country seldom give a proper idea of what the whole land may be like. Here this is not the case. For a distance of some three hundred and eighty miles the scenery on both sides of the railway is exactly the same. A low, flat, moist, plain, covered in patches with a scrubby growth, intersected by great stretches of rice fields which extend to the horizon, where, through a light, blue haze, the low ranges of hills glimmer fitfully. As we reach slightly higher ground harvesting operations of the most primitive sort are to be seen. The sickle appears to be the most up-to-date tool these farmers have. Stooks of grain, which look as if they had been blown together by a gentle typhoon, readily give way to the threshers. Here they are. Not the bustling, energetic crowd of sturdy yeomen that one can see on any Canadian farm at such a time, but a meek-eyed ox, in charge of a youth, armed with a light cane. Round the heap they go, tramping out the grain as did the Pharaohs five thousand years ago. What opportunities for implement makers after these natives have had some up-to-date instruction from the agricultural college, recently established at Mandalay, which town we will notice briefly.

Built on the Irrawaddy River, Mandalay has a most interesting history, the chief item of which is the fact that King Theebaw was captured there in 1885, thus ending a period of strife which had lasted for sixty years. The old town is peculiarly attractive. It is one mile square, on perfectly level ground, surrounded by a brick wall four feet thick, twenty feet high and backed by earthwork fifty feet thick. On the outer side and encircling the town is a moat some seventy yards wide, ensuring at the

time of building a very secure retreat from enemies. Within the square are the barracks, now occupied by Indian troops under British officers, and occupying a site apart from this, the Palace of the Kings of Upper Burmah. These at one time may have been on a gorgeous scale, but neglect has reduced them sadly till now they are most tawdry and decayed, and, were it not for the associations of the former ruler, hardly worth notice.

In the modern portion of the city are several ancient Pagodas, which daily attract thousands to worship, while the native priest may be seen at his best. Early in life these men have given up thoughts of worldly advancement, and with shaven heads and single folds of a peculiarly yellow tinted clothing, daily set out to collect food for themselves previous to studying their sacred book. What they learn, we, too, may learn by a visit to a group of four hundred and fifty Pagodas, the most unique in Burmah.

Built at the foot of Mandalay Hill, this group presents an appearance not unlike a great number of tombstones of similar design. About fifteen feet high, each forms a covering to protect the marble slabs on which is written in Buddhist characters the laws of Buddha. The slabs are about three feet six inches high, by two feet six inches wide, six inches thick and contain some two hundred closely-written lines, an interpretation of some of which may not be uninteresting. "Thou son of dewahs, to hear and see much in order to acquire a knowledge of propriety of behavior; to treat parents with tenderness and affection; to perform no action under the influence of sinful temptation; to avoid sin; to abstain from spirituous liquor; to re-

member always the principle of accumulation of merit; to be grateful for favors received; to listen to the preaching of the Sacred Law; these are blessed things, mark them well." Certainly these precepts have merit, but peculiarly enough, of all places of devotion visited in Burmah the fewest people were to be found here; while usually those offering opportunities of enjoyment, trading, or even chances of admiration amongst the fair sex, were noticeably crowded. There is a curious blending of worship and business in many of those Pagodas. At the entrances, exits and passages one must run the gamut of scores of importunate saleswomen and men. Flowers, beads, tinsel jewellery, hammers, leather, fruits of various kinds are to be bought at all hours. Even viewing the bathing pond, where turtles are kept, one is besieged by women to buy from them their turtle dainties. Buy from one and the others are offended, buy from none, all look glum. The latter gives more satisfaction. On a hot day these places are almost intolerable, and one is glad to get away from smells, dust and jostling.

There is no place like the hills to go to when real enjoyment is required. A run of twenty miles by rail brings us to the foot of the Shan Mountains, up which the train, a double header, zig-zags for two hours. One moment in looking out of the windows we can look down at the rails running parallel below. A curve, a steeper grade than usual and the train is now crossing the track fifty feet beneath. Away to the west is the plain recently traversed, Mandalay, with its ancient religion and modern service of electric cars and trains, the Irrawaddy winding down to the sea, and a background of the Ara-

can Hills, grim and bluff looking. Still ascending, the air becomes chilly, until at a height of 3,800 feet, coats are a necessity. Over plateaux, down steep inclines and up again till the hill station of Maymyo is reached. Here are the headquarters of the Government and military people in Upper Burmah, and certainly no healthier location could be found. The troops are some regiment of Ghurkas, great friends of the Highland Regiments. It was a surprise to hear the skirl of the pipes, clear and shrill, in this place, so far from home. But sheer amazement is the most appropriate term that can be applied, when first one, then another started playing, until eight sets of pipes, all on different tunes, were under manipulation. But the Ghurkas, too, are great fighters, so we must be lenient.

Near Maymyo is a gorge well worth a visit to see the huge trestle bridge, built over the chasm. After a climb down of eight hundred and fifty feet one can realize to the fullest extent the grandeur of the scene. Towering up on both sides are the jungle-covered mountains, showing cliffs in places hundreds of feet in height. At the bottom is a rushing stream hurrying over a rocky bottom

into a cave, where bats and snakes abound. Over rustic bridges one can follow the course of the rivulet almost to its exit from the cave. Huge stalactites and stalagmites have been formed by the constant dripping of water, some hanging eighty feet down from the roof, and many of the latter being twenty feet in diameter and a hundred feet high. The cave is formed by a natural arch of limestone five hundred feet in height, one hundred and fifty of which forms the entrance to the cavern. On top of this archway is built the bridge, which, from foundation columns to rails is three hundred and twenty feet, an excellent monument to the skill of modern engineers.

But at such altitudes and with no companions one wearies, despite the invigorating effects of the climate. The mornings are misty and the evenings chilly, and though fires are requisitioned, they make a poor substitute for the warmth of the tropics. A quick journey down by train to Rangoon, a hurried departure, and we are once again on a voyage, richer in experience and more enlightened as to how still another section of the peoples of the earth live from day to day.



Tennyson, as Revealed in His Memoirs.

Long have I known thee as thou art in
 song,
 And long enjoyed the perfume that
 exhales
 From thy pure soul and odour sweet
 entails,
 And permanence on thoughts that float
 along
 The stream of life to join the passive
 throng
 Of shades and echoes that are memory's
 being;
 Hearing, we hear not, and we see not,
 seeing,
 If passion, fancy, faith, move not among
 The never-present moments of reflection,
 Long have I viewed thee in the crystal
 sphere
 Of verse, that like the Beryl makes appear
 Visions of hope begot of recollection.
 Knowing thee now a real earth-treading
 man,
 Not less I love thee and no more I can.
 —Hartley Coleridge.

So sang the impressionable Hartley Coleridge after his first meeting with Tennyson. This meeting took place in 1835, when Tennyson was no more than twenty-six years of age, so that his works with which Coleridge was familiar could not have been very extensive. In fact, he had published only two small volumes, "Poems Chiefly Lyrical," in 1830, and "Poems by Alfred Tennyson," in 1832. However, Coleridge's discriminating taste had led him to see the inherent grace, beauty and purity of Tennyson's productions, and his poetic soul had been so appealed

to by their perusal, that his admiration, respect and love for Tennyson had been constrained to manifest themselves; and so, after coming in personal contact with the author who had so appealed to him, and realizing that the man was not inferior to his works in any quality which they possessed, Hartley Coleridge poured forth the above effusion—a glowing tribute to Tennyson's sterling qualities as a poet and as a man.

But how much Tennyson gave to the world after his twenty-sixth year! How much more have we to admire, respect, love, yea, reverence, in Tennyson's works, than had Hartley Coleridge at the time he penned his sonnet! We, however, have not the privilege of coming in personal contact with the object of our esteem, to realize, not only with Hartley Coleridge, but with all those who knew him, that his life was a nobler and a more sublime poem than any of his printed works. No, this privilege is not ours. The greatest poet of the Nineteenth Century has gone forever from our midst. But if we have not the man, we have that which, apart from his works, may be considered as the next best thing—a good memoir; and the heartfelt thanks of every lover of Tennyson is due to Hallam, the loving son and faithful attendant of the poet, for the completeness, faithfulness and truth with which he has presented his father's life. The presentment is such that we are reminded of Watts' idea of the true portrait painter which Tennyson has so beautifully expressed in the Idylls:

As when a painter, poring on a face,
Divinely, thro' all hindrance, finds the
man

Behind it, and so paints him that his
face,

The shape and color of a mind and life,
Lives for his children, ever at its best.

The memoir is not a mass of text written at first hand by the author about his father. In the preface he speaks of the work as being a representation of his father through the medium of a number of letters selected from a mass numbering upwards of 40,000; a number of hitherto unpublished poems; notes on his own life and work, written by the poet for publication after his death; private notes made by his most intimate friends; and last, but not least, extracts from the journal of their home-life kept by Mrs. Tennyson, which journal he describes as "a simple record of daily something nothings," but which, by no means forms the least attractive and instructive feature of the work; for it is by these "something nothings" that we are admitted to the very hearthstone of the man's social and family life—no mean privilege in this case.

The memoir forms a book that all lovers of Tennyson should possess. In it we get the key to the spirit, the full meaning, the underlying significance of many of his productions. A study of the circumstances which surround the birth of a poem often reveals much, which, though it may be expressed in the poem itself, we fail to perceive at first sight, and sometimes even after prolonged study. The letters contained in the volume were written to, or came from, such men as Carlyle, Thackeray, Emerson, Browning, Longfellow,

Whitman, Huxley, Darwin, Tyndall, Frederick, Denison, Maurice, Gladstone, Prince Albert, and a host of others, into the lives of whom we thus get the most delightful glimpses, which often reveal to us their characters in a light such as we have not seen them in before; glimpses that help to show us how beautifully simple, and withal, simply beautiful their lives often were in their noble sincerity and search after truth, and their strenuous endeavors to live their lives and do their work according to their highest ideals.

Tennyson did not regard with much favor the idea of having his biography published. He was, all through life, most extremely sensitive and reticent. If we turn to his poem "The Dead Prophet" we shall see something of the aversion he had for undue publicity.

He could not bear to think of the way that high-souled, spiritual-minded men were caluminated, ridiculed and contemptuously treated by those who did not understand them. Whilst thinking of this class of men he seemed to forget that there were others who could appreciate, admire, and revere high-souled and sincere endeavors to live and work according to the highest ideals, wherever these were met with. To the friends, therefore, who impertuned him for a record of his life, a record that would enable those who wished it, to make of him a companion, by giving them an insight into his daily life, we owe a debt of gratitude.

Though Tennyson was, in his home-life, blest as few men are, and although he had never to leave the track he had chosen to walk in, the sphere he had chosen to work in, for the purpose of working daily at something that was repugnant to him, his life was not al-

together a bed of roses. He had his days of darkness, when calamity appeared as if it would overwhelm him, when his very soul was lashed unmercifully, bringing him to the verge of despair, and it was while battling with these adverse circumstances that he produced much of his best work, most of his energy-instilling, soul-uplifting poetry. "In Memoriam" is the glorious result of one of the hardest mental and spiritual battles he ever fought, is the gem of light which he drew from the darkness of desolation into which he had been plunged, when, as he states in "Merlin and the Gleam":

"Clouds and darkness
Closed upon Camelot;
Arthur had vanished
I knew not whither,
The King who loved me
And cannot die."

"He came out of this affliction," to use the words of his son, "with a stronger faith his own, and a hope for himself, for all those in sorrow, and for universal humankind, that never forsook him in after years." It was such struggles that taught him:

"It becomes no man to nurse despair,
But in the teeth of clenched antagonisms
To follow up the worthiest till he die."

His earlier poems provoked much adverse criticism, and owing to his exceedingly sensitive nature he felt these attacks to a degree that well nigh stopped his pen. Said he: "A poet cannot live his true life without sympathy," and he fancied that England was an unsympathetic atmosphere. He was so far persuaded that the English people would never care for his poetry, that had it not been for the intervention of

his friends, he declared it not unlikely that after the death of Hallam he would not have continued to write. Speaking of this period, his son says: "My father pondered all that had been said, and, after a period of utter prostration from grief and many dark fits of blank despondency, his passionate love of truth, of nature, and humanity, drove him to work again with a deeper and a fuller insight into the requirements of the age." To quote from "Enoch Arden":

"His resolve
Upbore him, and firm faith—
And, beating up through all the bitter
world
Like fountains of sweet water in the
sea
Kept him a living soul."

Two lines written at this period are very suggestive:

"O leave not thou thy son forlorn,
Teach me great nature, make me live";
And so he ever battled to live up to the highest that was in him.

The first chapters of the "Memoir" gives us delightful glimpses into the early home-life of the poet. We see him as a boy in the old rectory of Somersby, among his brothers and sisters, the adored leader into the realms of romance and the regions of enchantment created by the poet's imagination. In front of a flickering fire, with the room in darkness, but for the ruddy glow cast from the old-fashioned fire grate, he, as a lad, with his younger brothers and sisters, some on his knee, some at his feet, and others hanging around his neck, would weave for them the fairy tales to which all children love to listen. As a boy, too, we learn he would reel off hundreds of lines, such as:—

"When winds are east and violets blow,
And slowly stalks the parson crow."

And—

"The quick wing'd gnat doth make a
boat

Of his old husk wherewith to float
To a new life! All low things range
To higher! but I cannot change."

Here's a faculty for nature observation in a boy of eight or nine years! and power also to apply the observations to the experiences of life! A faculty, a power, which Tennyson assiduously cultivated throughout life, many manifestations of which occur in all his works, even in the last sweet, sad song he sang where we see the "Sunset and Evening Star," and hear "The Moaning of the Bar," as he put out to sea.

At college, notwithstanding his super-sensitiveness, with his poetic nature and warmth of heart, he soon made his way. Fanny Kemble, who used to visit her brother John, said of him whilst at college: "Alfred Tennyson was our hero, the great hero of our day." Another friend describes him as "six feet high, broad chested, strong limbed, his face Shakesperian, with deep eyelids, his forehead ample, crowned with dark, wavy hair, his head finely poised, his hand the admiration of sculptors, long fingers with square tips, soft as a child's, but of great size and strength, What struck one most about him was the union of strength with refinement." On seeing him first come into the hall of Trinity, Thompson, afterward master of Trinity, said at once: "That man must be a poet!" Arthur Hallam looked up to him as a great poet and an elder brother.

He did not take his degree. The mortal illness of his father necessitated

his return home before the final examinations. After his father's death, he had to manage the family business, and here he showed his bent for practical affairs. An intimate acquaintance of his has said: "I have known the two greatest poets of the nineteenth century, Tennyson and Browning, and on occasion no man could be more practical than either."

In course of time, when the family affairs were all straightened out, we find him betaking himself to London. There, semi-Bohemian fashion, he spent a year or two, mixing with the literary celebrities of his time, writing an occasional poem, and realizing that a beef-steak, a potato, and a pot of port followed by a briar smoke, was all that could be desired in the way of dinner. In his "Will Waterproof's Lyrical Monologue," we get a good description of himself at this period:

"I grow in worth, and wit, and sense,
Unboding critic pen,
Or that eternal want of pence,
Which vexes public men,
Who hold their hand to all, and cry
For that which all deny them
Who sweep the crossings, wet or dry,
And all the world goes by them.

Ah yet, tho' all the world forsake,
Tho' fortune clip my wings,
I will not cramp my heart, nor take
Half views of men and things.
Let Whig and Tory stir their blood;
There must be stormy weather;
But for some true result of good,
All parties work together.

Let there be thistles, there are grapes;
If old things, there are new;
Ten thousand broken lights and shapes,
Yet glimpses of the true.

Let riffs be rife in prose and rhyme,
 We lack not rhymes and reasons,
 As on this whirligig of Time
 We circle with the seasons.

This earth is rich in man and maid;
 With fair horizons bound;
 This whole wide earth of light and
 shade

Comes out a perfect round.
 High over roaring Temple Bar,
 And set in Heaven's third story,
 I look at all things as they are,
 But through a kind of glory."

This healthy, sturdy optimism was all necessary to him at this time, for his life was a hard struggle against adverse conditions. Owing to his poverty, the father of Emily Selwood, his betrothed, had broken off their engagement and correspondence was denied them. His writings were not appreciated by the reading world in general; then came the death of Arthur Hallam, which, as before stated, almost crushed the life out of him. But still he battled on, and in time the sun of prosperity shed its beams upon and around him; so that at forty-one we find him a married man, Poet Laureate, and his works obtaining a steady sale. From this time on his life was lived amid ideal conditions for the production of his poetry. His homes at Farringford and Aldworth were all that a poet could desire. Aubrey de Vere, writing of these homes after Tennyson had left Farringford for Aldworth, says: "Farringford he never forsook, though he added another home to it; and assuredly no poet has ever before called two such residences his own. Both of them were sweetened by the presence there, so graciously prolonged, of her to whom the lovers of song owe so deep a debt of gratitude.

The second home was as well chosen as the first. It lifted England's great poet to a height from which he could gaze on a large portion of that English land which he loved so well, see it basking in its most affluent summer beauty, and only bounded by "the inviolate sea." Year after year he trod its two stately terraces with men the most noted of their time, statesmen, warriors, men of letters, science and art, some of royal race, some famous in far lands, but none more welcome to him than the friends of his youth. The days which I passed there yearly with him and his were the happiest days of each year. They will retain a happy place in my memory during whatever short period my life may last; and the sea-murmurs of Freshwater will blend with the sighing of the woods around Aldworth, for me, as for many more worthy, a music, if mournful, yet full of consolation."

With reference to the personal characteristics of Tennyson, the Duke of Argyll, writing to Hallam, says:

"Having known your father and enjoyed his friendship for forty years, I may be allowed to say a few words about him.

"The first words I heard him utter remain indelibly impressed upon my memory. On being introduced to him one evening at the house of Lord John Russel, I said, perhaps with emotion, 'I am so glad to know you.' Not in the tone or voice of a mere conventional reply, but in the accents of sincere humility, he answered, 'You won't find much in me—after all.' The effect which these words produced upon me at the moment was deepened every time I saw him. Your father was a man of the noblest humility I have ever

known. It was not that he was unconscious of his own powers, it was not that he was indifferent to the appreciation of them by others. But it was that he was far more continually conscious of the limitations upon them in face of those problems of the universe with which, in thought, he was habitually dealing. In his inner spirit he seemed to me to be always feeling his own later words:

"But what am I?
An infant crying in the night;
An infant crying for the light;
And with no language but a cry."

In close connection with this frame of mind was the profound reverence of his character. In speculation he was often bold—in a sense he was some-

times even daring. But he was always reverent—hating all levity or flippancy in thought or language about divine things. He was full of a kind of awful wonder—of a silent worship. His direct theological utterances were few. But he said enough to show that he clung to the divine truths of the "creed of creeds." Here we will take for the time our leave of him, thankful for his nobly lived life and its record.

"Rich in the riches of a poet's years,
Steeped in all colors of man's destiny,
So Tennyson thy widening river nears
The misty main, and taking now the
sea
Makes rich with human smiles and
tears

The ashen billows of eternity."

—Dan H. Jones.



If we could push ajar the gates of life,
And stand within and all God's workings see,
We could interpret all this doubt and strife,
And for each mystery could find a key.

But not to-day. Then be content poor heart,
God's plans, like lilies, pure and white unfold;
We must not tear the close-shut leaves apart,
Time will reveal the calyxes of gold.

And if through patient toil we reach the land
Where tired feet with sandals loosed may rest,
When we shall clearly know and understand,
I think that we shall say, "God knew the best."
—Unidentified.

Agriculture.

The Principle of Selection.

THE art of breeding may be epitomized in the word "Selection." This is manifestly true in breeding animals, and is almost as striking in plant breeding. Among all the laws which are connected with plant and animal breeding, "selection" is perhaps the most important. Breeders of live stock have paid close attention to it for very many years, and without it perfection would be an impossibility. Lord Edmunds, a noted sheep breeder, is reported as making use of only about one ram in every three hundred he bred. And Lord Rives, noted for his hound kennel, said "I breed many, but I hang many." Nearly everyone these days is familiar with such names as Bakewell, the Collins Bros., Cruikshank, etc., and knows how carefully these men made their selections. While "selection" is not everything, yet the man who knows how to select well is usually the man who will note all the other laws in breeding and make them subservient to his ideal.

It is important to have an ideal in mind in order to be able to make wise selections, and strive continually to build to that ideal. In animal life one aim of the breeder is to note the points in which the females of his herd are weak and try through the particular strength of the male in these points to eliminate them in the progeny. Once a defect has been remedied, then the improvement should be followed up until it becomes fixed in character, and eventually it will be transmitted through the

prepotency of the individual possessing it.

It is true that very many are quite familiar with the laws of breeding when applied to animals. However, judging from the number of inferior animals to be seen in nearly every locality, it would appear that there is room for pressing the laws home with greater energy than ever before. When the same laws are applied to plant growth and development, it is only the few who are really familiar with them, or at least who make very much use of them. It is found, however, that the same laws which have led to stock improvement are quite as applicable when applied to plant improvement.

Most farmers are familiar with the fanning mill process of selection. If this is followed up carefully by putting the seed through two or three times, fanning and screening out all the light and shrunken seeds with the impurities, good, plump, whole seed will be the result. Then, if after this, the seed were hand-picked, one would think it would be almost perfection. Good as all this is, this excellent system fails in one point at least, that many, perhaps half, of the large, plump seeds have been produced from short heads of grain. In order to make this selection, then, more perfect, would it not be better to select a certain amount of the grain in the head, which would ensure large or medium-sized heads and which could have been noted to have grown on strong, vigorous stools and straw. This



Plot of Sweet Corn, 1906—Breeder, J. McKee, Norwich, Ont.

seed, when properly prepared and sown on a small plot, also carefully prepared, to give the best environment for plants, must of necessity yield better than that from the fanning mill selection, no matter how plump the seeds may be. By following up this method of selecting the best each year from the breeding plot to sow the breeding plot of the succeeding year, the various characteristics of the grain, such as prolificness and hardiness, become fixed, and will be transmitted with the same degree of certainty as in the case of live stock. This is the method of the C. S. G. Association. All those graduates of the college who are aspiring to contribute their quota to improving the methods of agriculture and make mother earth

more productive, should join this association and leave the world the richer by their having improved some kind of stock or grain, or at least kept it up to a high standard.

The corn plant, in the hands of skillful breeders, is being moulded and fashioned these days, almost to their liking. The ears, by selection, are becoming more symmetrical, the cobs reduced in size, and the kernel made to grow deeper and even richer in protein. The corn can be made to mature early or late, grow high or low on the stalk, be well covered at the butts and tips, all through the wise direction of the grower who knows how to select well.

The writer this summer had good opportunity to note the improvement

which has been made by a number of the members of the C. S. G. A. in the kinds of grain they were endeavoring to improve. Perhaps the most lessons were found in the corn plots. In the accompanying cut, which is a photograph of the sweet corn plot of John McKee, of Norwich, you may observe the wealth of ears in size and number. There was scarcely a barren stalk, and four to six well-balanced ears were obtained on each hill of three to four stalks.

Mr. McKee said he could note the improvement over former years. He in-

tion of the soil, at the time of planting, affected the crop. Mr. John Clark, of Cainsville had planted about half his plot when it was ready and in good condition. A rain came and prevented them planting the other half for a few days. The result was a difference in the crop from the start to the finish in favor of the first-planted corn.

Then Mr. Van Sickle, of Onondaga, who grows a large quantity of corn for the silo, had a very fine plot on loamy soil, rather light, and it was badly affected with smut or bunt. The product of the same seed was growing on



Field of Oats from Selected Seed.

tends to show some of this corn at the Winter Fair this December, at Geulph.

In another field, where the operator had planted eight rows from the very best selected ears he had kept for seed, he had noticed that these eight rows had kept ahead of the rest of the field from start to finish, and at the time of my visit they were still the best. It needed only some rain to make it an excellent crop. There was no advantage of soil, manure or cultivation here, as the proprietor, Mr. Wm. Trinder, of Simcoe, observed, "I had no idea there was so much in selection."

Another plot showed how the condi-

tion of the soil near by and was very slightly smutted. Here was an object lesson on the influence of soil as affecting the crop.

One more observation in corn-growing will suffice. A market gardener, Mr. J. G. Thompson, living near Ottawa, had kept his own sweet corn seed last year. He grew this on a piece of ground alongside of corn of the same variety, only this seed came from the south, near Rochester or Oswego, I believe. While his own seed was planted on the poorer part of the piece of ground, yet it grew ranker, faster and in every way promised a much better

crop than the other under the same methods of cultivation. This would enforce the lesson of saving properly your own seed corn. I will not be able in this article to point out many other advantages in selection, but they were observed in oat, wheat and barley plots. The cut here shows a field of oats

ber of the C. S. G. A., is improving Dawson's Golden Chaff wheat. The illustration shows his breeding plot, sown with alternate drills, where he will select the heads for the seed he will grow on his breeding plot another year. As will be seen, Mr. Gies had an excellent crop of wheat this year. It



Breeding Plot of Dawson's Golden Chaff.

which was remarkably even and fine, and which was the product of hand-selected seed, and this year would be the improved seed crop. The field of about four acres is sown with Banner oats, and is the property of Mr. George Boyce, of Merrivale, near Ottawa.

Mr. C. R. Gies, of Hiedleburg, a mem-

requires select men to grow select seed, and we are anxious that they become members of the C. S. G. Association and participate in all its benefits.

T. G. Raynor.

Ontario Representative of the Seed Branch, Ottawa.

"The long day of the year is almost done
And Nature in the sunset musing stands,
Grey-robed and violet-hooded like a nun
Looking abroad o'er yellow harvest lands.

"Empty and folded are her busy hands;
Her corn and wine and oil are safely stored,
As in the twilight of the year she stands,
And in her gladness seems to thank the Lord."
—Kate Seymour Maclean.

Experimental.

Summer Fallow—Its Influence Upon Soil Fertility.

IT has become a practice in some localities, where wheat lands fail to give satisfactory returns, to occasionally fallow the land, and where soils have become much worn through long periods of cultivation, to practice following alternate years. A larger yield of wheat is always secured after a year of fallow; because of this many have looked upon fallowing as a desirable practice to improve the quality of the soil, so as to secure larger yields of grain. Investigations that have been made upon this point show that the benefits from fallowing are only temporary, and that, if the practice is long continued, the soils are eventually reduced in fertility to such an extent that they fail to respond to this system of treatment.

When land is fallowed, the vegetable matter in the form of humus rapidly decays, and there is a liberation of the element nitrogen. The liberation of nitrogen in moderate amounts is desirable, but unfortunately there is more liberated than can be utilized by the crop. The nitrogen which is made available through processes of decay does not accumulate in the soil, but is leached out in the drain waters and escapes into the air in the form of volatile gases. Experiments show that when summer fallowing is practiced, for every pound of nitrogen utilized by the crop from five to six pounds are lost through drainage and volatilizing of the gaseous nitrogen products. This is a heavier drain than any soil is capable of

sustaining. In European countries, particularly in England, where the practice has been thoroughly investigated, it has been found that, if long continued, fallowing eventually reduces the soil to a lower state of fertility than when a crop is raised continually upon the land. Fallowing occasionally, to destroy weeds or to avoid insect pests, is desirable, but it is not an economical practice.

During recent years lands have so increased in price that it has become unprofitable to allow the land to be idle for an entire year of fallow. In place of fallowing, a good rotation should be substituted. Land should be given an opportunity to acquire new stores of vegetable matter and nitrogen. When of fallowing, a good rotation should be both the humus and nitrogen of the soil occurs and the temporary benefits are soon lost in the reduced condition of the crop-producing power of the soil. In some localities, particularly in arid regions, fallowing is advantageously practiced where the rainfall is not sufficient to allow a crop to be produced every year. Under such conditions the decay of the humus and loss of the nitrogen is probably not as great as in regions of heavier rainfall.

The practice of summer fallowing of rich lands should be discontinued, as it results in an unnecessary loss of large amounts of plant food. Some of the prairie soils originally contained as high as .4 of a per cent of nitrogen; approximately 12,000 pounds per acre to

a depth of one foot. A wheat crop removes about forty pounds of nitrogen per year. It has been found that when such soils have been heavily cropped to grains, and summer fallowing has been practiced, the nitrogen content was reduced in thirty years to .25 and even to .2 of a per cent. Nearly half of the original store of nitrogen in these soils has been lost through injudicious

methods of cultivation during a comparatively short time. When a soil is brought under a good system of rotation and a grass crop is grown, this loss of nitrogen is checked and new stores are added to the soil. Summer fallowing, if long continued, unnecessarily reduces the fertility of the soil.

Harry Snyder,
Minnesota Agricultural College.

Western Problems.

I have been in charge of the Dominion Experimental Farm at Brandon for too short a time to justify any statements that might be deemed *ex cathedra*, yet, I have been a farmer in Manitoba long enough to have observed much and learned a little.

One of the first lessons the farmer from Ontario has to learn, often by sad experience, is that in many respects, farming here differs fundamentally from farming there. For example, in many parts of Ontario the problem is to get rid of the surplus moisture; while here every effort must be made to conserve the moisture. This single fact changes almost the whole system. There the plowman sets his furrows up that each may have a drain under it; here the furrow is not only turned flat, but pressed down by hoof, harrow and packer. There the summer fallow is largely to clean the land and to give time for the contained materials to become prepared for ready assimilation; here the most important consideration is to retain the year's moisture and carry it over for the next year's crop.

The annual precipitation of Manitoba is about twenty inches; or on the line which borders the arid region, as you

go west, moisture becomes yet more precious. Hence, "dry farming," whether known by that name or not, becomes a consideration of the utmost importance. That there is very much in dry farming is clearly shown by the fact that wheat is gradually driving the cattle ranches westward, and soon they will be crushed between the nether and upper mill-stones of wheat and the Rockies. Immense tracts of country which even ten years ago were considered to be fit for grazing only, are now covered with wheat fields, which seem almost as vast as the ocean. "Dry farming," far more than irrigation, is doing it.

Is the climate of the west changing? I have not the meteorological data at hand to discuss this question scientifically; yet you cannot find a man, woman or child who has been here from ten to twenty years who is not positively sure that there are milder winters, with fewer blizzards, fewer dry years, and later fall frosts. Certain it is that crops are surer and frozen wheat becoming almost unknown. Doubtless much of this is due to the fact that we now know how to avoid dangers better than we did. Tree-

planting, though yet very little, certainly has an appreciable effect in modifying the winds, and doubtless in conserving moisture. The cultivated land holds the rainfall that formerly flowed more freely off the surface of the exceedingly compact prairie sod. More and more farmers are learning the value of the dust mulch. Wheat sowing begins in the spring the very moment the drill can get on the land; and that is when not more than three inches of the surface is thawed. We do not wait till the frost is out of the ground. If we did we would not begin our spring work before July 1st. Thus, every effort is made to bring on the harvest as quickly as possible. And yet, when all has been considered, we are just as sure that the climate is changing.

Can apples be grown in Manitoba? Many have said, after repeated failures, "Small fruits, yes; but apples, never." Yet Mr. Stephenson, of Southern Manitoba, gathered seventy bushels of standard apples last year. He once told the writer that his first bushel of apples cost him over \$3,000. Still it is a fact that he is now growing and selling standard apples.

Mr. Bedford, late Superintendent of this farm, states that the Transcendent

crab apple trees, planted here eighteen years ago, were regularly winter killed. Finally one struggled on, though killed back again and again, and finally seemed to adjust itself to the climate, and has borne well ever since. Not only has it become hardy, but all scions from it when grafted on *Pyrus boccata* roots, are perfectly hardy. The same is true in the main with the Martha crab.

Out of hundreds of standard apple trees planted here only two have fruited. A Duchess of Oldenburg and a Hybernal seem to have obeyed the broad law of nature, and have adjusted themselves to their environments. Have they really become sufficiently hardy? The history of many scions from them, now growing, will tell the tale.

A thousand cross-bred apple trees are growing here. About one hundred have fruited. Ninety-nine are no good as producers of commercial apples. But a single one is bearing good apples, five ounce apples of good quality, and is, so far, perfectly hardy. Not a very big apple, but a big thing for an appleless country. Something better may come from the nine hundred which have not yet fruited. Let no man say that this country can never grow apples.

N. Wolverton,

Brandon Experimental Farm.

An International Experiment With Alfalfa.

It is very well known that the introduction of the Alfalfa plant into North America has proven a great boon to agriculturists in many extended sections of the country, especially in the semi-arid regions of the west; and it is true that during the past ten or fifteen years no farm crop has been more generally discussed nor more widely experimented with, and yet it seems that our

knowledge of this exceedingly valuable plant is by no means complete. Alfalfa is a crop which, to be fully appreciated, must be thoroughly understood, and the reason why many farmers have discarded it after giving it a half-hearted test is simply because they have not taken the trouble to study its soil requirements and the proper methods of sowing, cutting, curing and feeding the

crop. Owing to its real merit, however, this crop is gradually forcing its way into new districts where it was formerly supposed that it could not be grown, and is receiving the attention of farmers who have not heretofore seen fit to give it a thorough test.

The National Department of Agriculture at Washington has been largely instrumental in the distribution of seed and in the dissemination of literature regarding Alfalfa, and has recently inaugurated an experiment which is international in its extent, and should be the means of bringing together some most valuable data.

In the early part of the year 1905, supplies of Alfalfa seed were obtained from various parts of Russia, France, Italy, Germany, Arabia and South America, as well as from several important Alfalfa-growing districts in North America, and samples of all of these stocks were sent to a number of experiment stations in the United States and Canada for plot tests.

At Guelph these seeds were sown in the spring of 1905, and the plots have been one of the most attractive features in the experiment grounds, not only to students, but also to the thousands of farmers who have visited the college during the past two seasons. There are twenty-four lots in all, and the test is being conducted in duplicate, making forty-eight plots; one set being sown on rather dry, light soil, and the other on richer and damper ground.

For the first season most of the plots made a good, vigorous growth, while a few did not thrive quite so well. The plots were much alike in appearance with the exception of those grown from seed obtained from Arabia and Peru. On these two plots the plants had a blueish-green color, and were not so vigorous as those of most of the other strains. The following winter, though by no means a rigorous one, proved too severe for the strains imported from these warm climates, and they were almost completely winter killed, while those obtained from Northern latitudes came through the winter without injury and made a good growth during the past season. The first plants to bloom in 1906 were grown from seed obtained in New York State, and the earliest blossoms appeared on June 10th. The latest maturing strain was that obtained from Peru; on this, the first blossoms were noticed on June 26th. Three cuttings were taken from each of the plots during the season of 1906. The total yields, however, have not yet been estimated.

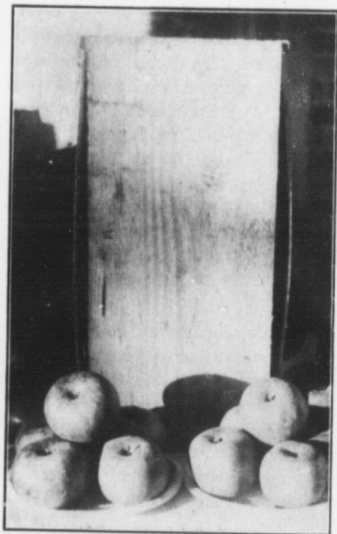
Not only will the test being made at Guelph be watched with interest by our own farmers, but a full report of the crops grown on these plots will be sent to Washington, and the final summary of the results obtained from all the experiment stations where the test is being conducted should be of much value to all farmers interested in the growing of Alfalfa.

J. Buchanan.

Horticulture.

Apple Packing in Boxes.

THE accompanying cut brings out clearly a very essential feature of apple packing in boxes. Eastern packers have been so long accustomed to the barrel, a rigid package, that it is difficult for them to conceive that the essential difference between box packing and barrel packing lies in



Proper Style of Package.

the fact that the box is an elastic package. The secret of rapid and good packing is largely in a recognition of the elasticity of the top and bottom, and, to a less extent, of the sides of the box.

In box packing there is every inducement to uniformity in size. In each

particular package the skillful packer has ten, fifteen, twenty and some say as high as sixty different devices or modifications of this simple layering of the fruit by which he can accommodate the size of the apple to the unvarying dimensions of the box. It is understood, of course, that the box remains always the same dimensions, but the apples to be packed are constantly varying in size, and yet the experienced packer has no difficulty in securing an arrangement of the tiers so that after a certain number of tiers are placed in the box, the box is properly filled without the aid of any extraneous packing such as paper shavings, excelsior or pulp pads.

Nevertheless, even the most skillful packer requires for the best packing slight difference in the size and shape of the specimens, differences, however, so slight that they would escape the attention of all but the practiced eye. Small as the difference may be between the specimens of any particular package this difference in size and shape is very important, and is taken advantage of by the packer to secure the swell in the center of the top and bottom, so noticeable in the accompanying engraving.

This swell serves two purposes. It enables the packer to find a place for the apples slightly larger or smaller than the main run in one or both diameters. There is a careful grading as to size by the eye so that the smaller

specimens are placed at both ends on each tier and the slightly larger ones towards the center. This must be done by selecting the proper-shaped fruit, because it is not desirable to break the plan of any particular tier; that is, if the packing is begun with the apple stems down, it is desirable that the whole tier should be packed stems down. In that case the flatter apples would be placed near the ends of the box, while the apples that were equal in transverse diameter, but not longer through the axis, would be placed towards the middle. Where this is done consistently it will be found that when the box is packed ready for covering, the apples at the ends of the box project probably somewhat less than half an inch above the box, while at the middle they would rise three-quarters of an inch above the sides of the box. This selection and placing of the apples becomes, in the skillful packer, automatic, and he scarcely feels that he is making the selection, so rapidly is it done. Yet if a selection of this sort is not made there is no possibility of securing a box that will not go slack.

To nail the cover upon such a box the box should be placed upon a nailing jack, which will support both ends, but the bottom will be free to give when the pressure is put upon the top. The thin cover is pressed upon the top of the apples, and the pressure brought down upon the ends of this to force the cover to the box. The nails and cleats are now driven in, and the box appears as in the engraving.

All fruit will evaporate somewhat after being packed. If the package is rigid a very slight evaporation will, by lessening the size of the specimens, render the whole package slack or lose.

In the case of the barrel there is so much fruit in it and so much pressure is put upon the package that we have some elasticity in the apple itself that prevents slackness for some time. Yet nearly one-third of the fruit sold on the Liverpool markets is classed as slack to a greater or less extent. In the case of the box with rigid sides and top and bottom there is not sufficient fruit to get much advantage from the elasticity of the fruit itself, and therefore, a few with rigid sides and top and bottom is almost certain to go slack in a very short time; but packed with the bulge on the top and bottom, we take advantage of the elasticity of the wood in the top and bottom, so that as the evaporation and shrinking of the fruit goes on the elasticity of the top and bottom draws the package together and holds the fruit tight.

We have, then, two good reasons for insisting upon the thin top and bottom, without which we could not give this swell to the finished package. First, that it enables the packing to be done more readily; and second, it enables us to pack a box that will not go slack. Particular attention is drawn to this because only two of the packers in the very large exhibit at the Industrial Exhibition at Toronto, in September, took advantage of this feature of packing. Indeed, the great majority of the exhibitors showed their utter want of appreciation of this very essential element by putting nails through the top and bottom covering into the sides of the box, which would effectually prevent any advantage being taken of the elasticity of the wood.

A. McNeil,
Chief of Fruit Division, Ottawa.

The Gypsy and Brown Tail Moths.

The destructive character of the Gypsy and Brown Tail Moths, and the extent of the infestation of those pests upon the North American Continent, make them a public menace, which should engage the most studious attention of the delegated authorities, to not only prevent their further spread, but to vigorously pursue the best known methods for their suppression in the present infested area.

The Gypsy and Brown Tail Moths are New England's greatest blight today. They not only attack fruit, shade and ornamental trees, but all forms of vegetable life, and make life most miserable for the inhabitants of the infested communities.

Coniferous trees, defoliated by the caterpillars, will die the first season. I have seen a forest of white pine timber, running eighteen to twenty-four inches across the stump, succumb to the attack of the worms the first season. The deciduous trees will withstand the ravages of the pests for two and sometimes three years, but will finally yield and die. Fruit trees and shrubbery usually die the second year after the attack.

The extent of the loss from these pests in the State of Massachusetts, where the first infestations occurred in 1868, can never be estimated. The State has already expended over a million dollars in extermination, and private individuals as much more, and yet the infestations extend each year over larger areas, and the work of extermination is becoming more difficult. Infestations are now located in one hundred and thirty-four cities of the States, and the pests have crossed the

border into Vermont, Maine, New Hampshire, Rhode Island and Connecticut, and within the last fortnight they have been reported west of the Hudson River, having been found at Albany, N. Y., Hoboken, Jersey City, Hackensack, N. Y., so that the control of the moths is one of national importance.

The native home of both the Gypsy and Brown Tail moths is in the old world, mostly in the forests of Germany, where there are natural enemies which keep them in check. Dr. Howard, the entomologist of the United States, acting with the Massachusetts authorities, has collected these natural parasites of the Gypsy and Brown Tail moths, and has distributed them in the infested regions, in the hope that they will survive the climate and be beneficial. The Gypsy moth was introduced into Massachusetts by a French scientist, Prof. Leopold Trouvelot, an eminent naturalist, who was endeavoring to breed a new silk worm. The moths were confined upon some shrubbery on the Professor's lawn, which were covered with some netting. During a severe windstorm the netting was broken and the moths escaped. He did everything possible to recover them, but failed. Knowing their dangerous character, he at once notified the public, but as usual in such matters the public were very slow to see the danger until twenty years later, when the moths had accumulated in the vicinity of Boston to such an extent as to blight all the foliage of the ornamental shade trees and shrubs; and to make life most miserable to the citizens.

Work of extermination began in 1890. Over a million dollars was ap-

propriated by the State of Massachusetts, and a campaign of education and extermination inaugurated so that in ten years the pest was brought under control, and all efforts at extermination then ceased. In 1905 the pest had spread over so large a territory and become so destructive that the authorities again took up the work of extermination. The legislature created a commission and appropriated \$300,000, available in three annual installments, and appealed to Congress for help.

The life of the Gypsy is marked by four stages, the egg cluster, the caterpillar, the pupa, and the full-grown moth. The egg cluster contains life from late summer till early spring. These egg clusters have a yellow-brown appearance; the covering of these clusters is spun by the female, and has a hairy external; the clusters are two to four inches long, and one-half to one inch in width and contain from 300 to 600 eggs in each. The covering of these eggs will survive an ordinary flame, is secure from cold, and is protected from predatory insects and animals. These egg clusters are laid by the female moth in July and August. One part creosote and four parts crude petroleum, applied with a common paint brush upon the egg clusters is the best known method to destroy them. In April and May the caterpillars begin to hatch and at once begin their campaign of destruction. The voracity and filthiness of these caterpillars beggars description. They cover streets and walks so that it is impossible to step without crushing them, giving the street a filthy appearance, which is nauseating in the extreme. They are perfect gluttons, devouring voraciously everything in sight. Early in July they go into

their pupa state, from which they soon emerge a full-grown moth, to renew their life history. The female moth has a heavy body, so heavily charged with eggs that she is very sluggish and does not move readily from place to place. This is fortunate, else their distribution would be much more rapid. They spread in the caterpillar form more than in any other, being carried by pedestrians, trolley and steam cars, automobiles and other forms of conveyance. When feeding they can be destroyed most effectively by spraying the trees with an arsenite, five pounds of arsenite of lead to one hundred gallons of water.

To gain some idea of their destructive character, in 1905, on a certain street in Medford, Massachusetts, 2,557 trees were striped of their leaves, two-thirds of which will die this year or next.

The Brown Tail moth is not much unlike the Gypsy, yet it is easily distinguishable from the Gypsy. It is supposed to be an accidental introduction, and was first discovered in Somerville, Mass. The Brown Tail has its four stages of development, similar to the Gypsy, differing in that the moths lay their eggs in a cocoon, on the under side of leaves, at the highest and outermost branches of the tallest trees, because the Brown Tail moth is a rapid and direct flyer. These cocoons contain about 300 eggs each. They are laid the last of June and first of July, and hatch during September; and these hibernating over winter in caterpillar form till the first warm sun in spring, when they emerge and at once go to eating everything in the form of vegetation, but are more destructive to fruit buds than to other forms of vegetation.

They grow rapidly, and when they are full grown go into the pupa, from which they emerge in two weeks full grown moths to fill out and continue their life history. The caterpillar of the Brown Tail moth is two and a half inches long, dark brown with a white stripe on each side and two large red dots on the back. They are covered with long hairs, which are brittle and break off, and are very irritating when they come in contact with the human skin, and frequently cause serious illness. The moths themselves are pure white except for a small tuft of brown hairs at the end of the abdomen, whence they derive the name "Brown Tail Moths."

The same means is used in killing the Brown Tail caterpillars as is employed with the Gypsies—spraying with arsenical poisons; but to destroy the nests they must be cut off, gathered up, placed on piles, saturated with coal oil and burned. The caterpillar of the Gypsy moth is from two to three inches long with two rows of red spots and two rows of blue spots along the back and a thick mass of long hairs.

This is a very brief history of the most dangerous insect pests in American territory.

A. N. Brown,
Wyoming, Delaware.

The Old Bell of St. Jude's Soliloquizes.

Ah, well,
So I
Must die—
Not die perhaps
But just cease
My ringing,
And singing,
Clinging to my favorite spot,
For me it matters not
Whether marriage, death or birth,
I told the story here on earth,
And heaven heard me,
The choir invisible.
I thought perhaps a kindlier fate
Than this would wait,
But now, I lay upon the sod,
The stars above, above them God.
So let me rest a while.

The people smile
To see me,
And why?
I've searched
From eye to eye,
And not a tear
Doth greet me,
Just curiosity
Doth meet me.
How many a time I've called
Men and maidens fair,
From here, from everywhere
To worship,
But now the world has said
That I won't do;
So, old and rusty,
Let me lie upon the sod,
The stars above, above them God.

—Selected.

The O. A. C. Review

EDITORIAL STAFF.

R. S. HAMER, '07	- -	Editor
D. M. ROSE, '08	-	Associate Editor
H. BARTON, '07, Agricultural.		MISS KATE MacLENNAN, Macdonald.
A. E. SLATER, '08, Experimental.		W. S. JACOBS, '07, Alumni
T. G. BUNTING, '07, Horticultural		G. M. FRIER, '08, College
G. B. CURRAN, '08, Athletics		A. McLAREN, '09, Locals
H. H. LeDREW, B. S. A.,	-	Manager
P. E. ANGLE, '09	- -	Assistant

SUBSCRIPTION RATES.

Annual Subscription—Students, \$1.00; ex-Students, 50 cents. Single copies, 15 cents. Advertising Rates on application.

Editorial.

The news that McLaughlin Bros., of Ohio, are distributing three hundred dollars among the leaders in the judging competition in Chicago is good news to all aspirants for the team. Last year, for the first time, no money prizes were given. The teams from various colleges scattered all over the American continent, journeyed to Chicago to struggle for the trophy, to establish the fame of their college and incidentally to enhance their individual reputations. The boys from the O. A. C. are justly proud of their record in that contest. When they returned to Canada the trophy came with them. Moreover, each member of the team had the satisfaction of knowing that he had fully demonstrated his right to go in the first place. We venture to assert, however, that

many who competed in Chicago last year have since wondered whether their efforts and success received proper acknowledgement. To be sure, anyone standing high in such a contest is for some time after elated by the consciousness of achievement. For many days his vanity is tickled by congratulatory letters from friends. He has, without doubt, been benefitted by the experience, and may gain a position by reason of his success. Also he may not, and as a rule, does not. His feeling of elation soon fades away, and by all, save his immediate friends, his name as a winner is soon forgotten. The expenses of the trip are heavy, and the twenty-five dollars advanced by the Department by no means covers them. In short, he begins to wonder whether the game is worth the candle. But if to stand high

means a substantial acknowledgement of his achievement in the form of money it is surprising how differently he views the matter. A very lasting and comfortable feeling accompanies the unexpected acquisition of fifty dollars or more.

We do not advocate money prizes in order to furnish a stimulus to the men to work harder in this contest. The competition to make the team in the first place, and afterwards to beat other colleges, furnishes all the stimulus necessary. In this connection it may be well, however, to refer to a case where much good could be done by furnishing such a stimulus. Two years ago the Massey fund, which formerly financed the competitions at Toronto, Ottawa and London, was withdrawn. It was in these contests that many young men throughout the country received encouragement to perfect themselves in the art of judging, and it was also in these contests that some of the best men we have ever sent to Chicago received the most valuable part of their preliminary training. It was unquestionably the money prizes which brought out the contestants in these events. As a College deeply interested in such matters, we cannot but deplore the mismanagement or other causes which brought about the withdrawal of the Massey money, and we also believe that the live stock interests of the country would be materially benefitted if some means could be devised for the re-establishment of these contests on the old basis.

Meanwhile McLaughlin Bros. are to be congratulated upon the public spirit they have displayed in coming forward with the funds for the International, and it is to be hoped that they, or some

equally generous firm, will see to it from year to year that students at the head of the list receive a much more substantial recognition of merit than an imaginary laurel wreath.

Agriculture must be restored to its due position in the nation. Such, says

**Who's to
Preside Over
the Destiny of
Our Future?**

James J. Hill, is the only solution to the problem which confronts the United States to-day. The farmer, he says, is the only real master of his destiny; the only self-supporting entity in our national life. Mineral wealth will soon be exhausted, forests are being stripped far more rapidly than new woods can be grown. His answer to the question as to how a great population is to be supported is as follows:

"A clear recognition on the part of the whole people, from the highest down to the lowest, that the tillage of the soil is the natural and most desirable occupation for man, to which every other is subsidiary and to which all else must in the end yield, is the first requisite. Then there will be a check administered to the city movement that lowered the percentage of agricultural labor to the whole body of persons engaged in gainful occupations in the United States, from 44.3 in 1880 to 37.7 in 1890 and to 35.7 in 1900.

"With public interest firmly fixed upon the future, the country, in mere self-preservation, must give serious attention to the practical occupation of restoring agriculture to its due position in the nation.

"The Government should establish a small model farm on its own land in every rural Congressional district, later

perhaps in every county in the agricultural States. Let the Department of Agriculture show exactly what can be done on a small tract of land by proper cultivation, moderate fertilizing, and due rotation of crops. The sight of the fields and their contrast with those of neighbors, the knowledge of yields secured and profits possible, would be worth more than all the pamphlets poured out from the Government printing office in years.

"The Government ought not to hesitate before the comparatively small expense and labor involved, in such a practical encouragement of what is the most important industry of our present and the stay and promise of our future.

"Disseminate knowledge of farming as it should and must be, instead of maintaining the pitiful bribe of a few free seeds. Declare everywhere, from the executive chamber, from the editorial office, from the platform, and above all from every college classroom and from every little schoolhouse in the land, the new crusade. Let the zeal for discovery, for experiment, for scientific advancement that has made the last century one of multiplied wonders, focus itself upon the problems of the oldest of sciences and arts, the cornerstone of all civilization, the improvement of tillage and making to grow two grains where only one grew before.

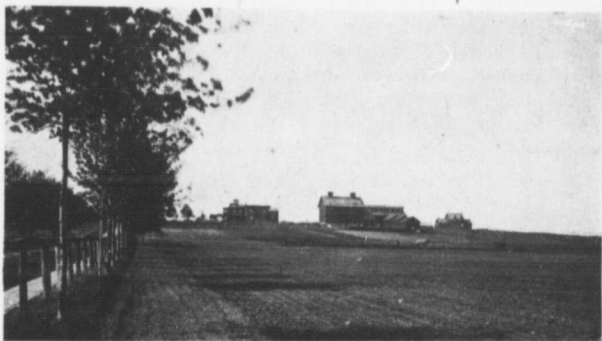
"Only thus may a multiplying population secure its permanent maintenance. Only thus may the struggle for existence that has power to either curse or bless be brought to any other termination than the peace of death."

Is not the same reasoning just as applicable to the Provinces of the Dominion as to those south of the Lakes?

Although the Annual Field Day for 1906 has passed into history, yet it is not so far distant but that we may return to it for a moment.

Field Day. Sports Day is always a success, and that just passed was no exception to this rule. In fact the prevalent opinion is that it was one of the most successful gatherings ever held on the campus. This year there was very little cheering during the afternoon. This lack was amply filled during the distribution of ribbons in the gymnasium at the conclusion of the sports. During the presentation of the ribbons it is usual for the various classes to occupy separate corners of the gymnasium, and from that particular corner to greet each winner from the class, as he receives his ribbon, with the class yell and with sundry other cries calculated to emphasize the fact that a member of the class has been successful upon the field. It is, of course, only to be expected that each class should welcome its winning members in this way, but the way is not without its disadvantages. At the same time it must be admitted that these disadvantages arise principally from carrying the yelling to an extreme. This excess of noise makes the presentation a most tedious ceremony, and this year it had the effect of driving away our visitors long before the winners had all received their ribbons. It is a great pity that this should happen. If the Athletic Executive next year would take some steps to regulate the yelling, the presentation of the ribbons to the fellows who have so worthily won them would be made not the least enjoyable part of Field Day. A word from the Executive is all that is needed, and we hope that it will be given.

Our Old Boys.



RATHBUN FARM, DESERONTO—A. LEITCH, '05, SUPERINTENDENT.

During his college course, A. Leitch, B.S.A., '05, gained an enviable reputation as a student, "worker" and sport. Always active in athletic circles, and an excellent judge of live stock, "Archie" gave promise of having an exceeding brilliant future. The expectations of his friends and classmates have been fully justified. For a year he was Farm Superintendent in the Mimico Industrial School, leaving at the end of that time to take the position of Superintendent of the Rathbun Company's large 700-acre stock farm at Deseronto. His tenure of office has occasioned no regrets, either from his employers or himself.

Robt. G. Baker, B.S.A., is another successful member of that class who has been doing things since leaving our midst. Soon after the completion of his course, he took charge of the large market garden of the Rathbun Lumber

Company, of Deseronto. Here the wide, practical knowledge of his profession, combined with exceptionable executive ability, enabled him to raise what was a forlorn hope into a proposition of much profit to his employers. "Bob's" friends will be pleased to hear of his securing a very remunerative position as superintendent of a large estate in British Honduras.

It is with much pleasure that we note the appointment of F. W. Broderick, B.S.A., '03, to the position of Professor of Horticulture and Forestry in the New Manitoba Agricultural College. "Brod." is a native of Lincoln County, Ontario, where he received a thorough, practical training on his father's fruit farm. He entered the college in 1899, where he took the four years' course, specializing in horticulture, graduating with honors. Since graduation, he has been engaged in

educational work in connection with the Dominion Seed Department, in the Maritime Provinces.

J. M. Reade, B.S.A., called on us recently on his way to Cornell University. He graduated from the Ontario Agricultural College in 1900, then went to the Michigan Agricultural College, and, in 1901, was sent to the Phillipines by the United States Government to help organize schools. After spending nearly four years there, he studied at Munich, in Europe. At present he is completing his course for Ph. D. degree at Cornell University.

G. R. Bradley, '85, after spending a short time at the college, was obliged to return home and manage the homestead, which is situated in Carleton County. He is now engaged in mixed farming and the breeding of Clydesdale horses, Shorthorn cattle and Yorkshire swine. Mr. Bradley has occupied many public offices of trust, and each year he acts as expert judge at the fall fairs. He regrets very much that he is unable to send a George II. to the O. A. C., as his boys are all girls.

T.B. Willians., '88, of the Neepawa District, Manitoba, is now engaged in emigration work for the Dominion Government. During the past summer he took a trip to the Old Country in connection with this work, and succeeded in obtaining a large number of good settlers for our Canadian West.

Our old friend from Japan, B. R. Nagtany, is making himself felt in the far west. "Nag," was always given considerable credit for having ideas, and the scheme he is at present promoting is likely to prove a very important factor in the development of the west.

His present intention is to form a company of Japanese capitalists, buy up a large area of land in the west, and form a Japanese colony. The project has all the appearances of being a successful one, and with a few hundred men such as "Nag." in the country, its future is assured.

Those who attended college from '02 to '05 will not soon forget the inimitable humor, the bright sayings, and the winning ways of "Ab." Hand. J. Albert Hand entered the O. A. C. in the fall of '02, successfully combining the first two years' work. He was probably one of the best-known men of his class, and one of the most popular, and deservedly so. His ability as a journalist was recognized during his term of office as Horticultural Editor of *The Review*. As editor of the *Canadian Horticulturist*, he made a decided hit, but upon receiving an opportunity to enter commercial life, he took it. For some time he served as manager of Mr. E. D. Smith's fruit business at Winona, but is now engaged in journalistic work in the west.

Miss Christie Ferguson, for more than twenty years connected with Dr. Mills' family, has left, and gone to live with her brother, Mr. Peter Ferguson, a prominent resident of Grenock, Scotland.

E. D. Eddy, B.S.A., by his quiet, unassuming ways, and industrious habits, endeared himself to the whole student body. His first position, that of Associate Editor of the *Farmers' Sun*, proved but a stepping-stone to higher things. Early last spring he severed his connection with the *Sun*, and is now engaged in editorial work on the *Nor'west Farmer*. Much as we would have de-

sired to have retained Edgar's services for Ontario, we feel that his efforts will not be unappreciated in the Province of his adoption, the broad and glorious west, the land of unending possibilities.

Robert Wade, B.S.A., '05, while a student, gained an enviable reputation for industry, ability and tireless unselfish labor for the year of which he was president, which won for him the love and admiration of all his classmates. Withal his ready wit, his keen



R. W. WADE.

perception and his readiness with the helping hand to all students in difficulty, made him the most popular man of his time at the O. A. C. Upon graduating, he accepted the position of Assistant Agriculturist in the Arkansas State University, at Lafayette. His many sterling qualities commended themselves to the authorities of that institution, and in less than a year he was au-

vanced to the position of Professor of Agriculture, which position he has since filled eminently satisfactorily.

C. W. Esmond, B.S.A., '05, is a student who is making his mark in the world. While at college he was in every respect an ideal student. Industrious to a fault and an active worker in all the student organizations, he made many friends. His ability was early recognized, and after obtaining his degree, accepted the position of Editor of the Maritime Farmer. The west offered many allurements to him, insomuch that after a year's service on that journal, he resigned, and is now associated with Eddy on the Nor'west Farmer. In his new position he is forging ahead, and our best wishes go with him.

The following notice recently appeared in one of the Kingston papers:

"Married—Merideth—Mills—At the home of the bride's parents, Kingston. Mildred, daughter of Mr. E. G. Merideth, M.P., to Edgar Mills, of the Royal Canadian Artillery, and son of Dr. James Mills, of the Railway Commission, Ottawa."

The above notice will prove of interest to many of our old boys. "Ed." was a general favorite with all the students because of the active part which he took in the different branches of college life, especially athletics. When quite young, he left his father's home and entered the Military College at Kingston. He has been steadily advanced until now he holds the position of Captain of the Artillery. Immediately after the marriage, Mr. and Mrs. Mills sailed for England, where "Ed." will take a course in the Royal Military College at Woolwich.

The boys of the class of '00 no doubt will remember their classmate, J. R. Hutchison. "Hutchy" is now located at Slate River, near Fort William. After having taken his degree in the Dairy Option, Jim went right into the dairy business, becoming in two years manager of a very important creamery in Western Ontario. Not content with this, and finding at Slate River, in the fall of 1905, a broader field for the exercising of his various faculties and capabilities, he "hit the trail" for the head of Lake Superior, and settled down upon a thousand-acre ranch, where he is now bringing into practice the varied and various principles instilled into him while at the O. A. C. Just one thing he lacketh! But knowing as we do "Hutchy's" weakness for the "fairer sex," we entertain no fear that this gap in his temporal happiness will be bridged suitably in the near future. The Review joins with his classmates in wishing him every success in his new field of labor.

Old Boys' Contingent in British Columbia.

British Columbia, like nearly every other country, can claim as citizens some who have received both information and inspiration at the old shrine of agriculture.

Probably one of the busiest graduates of the college at the present time is Mr. F. M. Logan. Since connecting himself with the Department of Agriculture in British Columbia and taking up his office in the Parliament Buildings at Victoria, there has occurred scarcely any event in the agricultural operations of the Province in which Mr. Logan has not figured as a prime mover. His excellent judgment and congenial

nature, which won for him the esteem of the student body, and especially of his classmates of '05, has also been recognized in the West, and within his short term of service has placed him in many prominent positions of trust. For several weeks during the past season he acted as Deputy Minister of Agriculture; he is Deputy Live Stock Commissioner under the Dominion Government; Dairy Inspector for British Columbia; Representative from British Columbia on Inter-Provincial Live Stock Investigation; Secretary-Treasurer Stock Breeders' Association; Secretary-Treasurer Dairymen's Association, which he has reorganized and brought from chaos up to good working order. He has been instrumental in establishing a Stallion Show and Auction Sale, and in organizing a Creamery Association for the better co-operation of the different creameries. In institute work, too, he has taken an active part; and at the present time is arranging for a Winter Fair, similar to that annually held at Guelph.

But perhaps the most important part of his work is his bulletin on Model Farm Buildings, which appeared this summer. Judging from the manner in which his ideas have been accepted, it would seem that Mr. Logan has been successful in solving a few of the most complex problems in the construction of the common farm buildings. The frame of his main barn, for instance, is made in such a way that \$25.00 will pay for the labor of framing and raising a large barn, or about one-tenth the cost incurred in framing in the usual way. Besides being less expensive, it overcomes the need of any cross beams or ties, which interfere with the storing of hay, etc., and makes a stronger frame.

The horse and cow stables are so arranged that all parts of the stables can be properly lighted and ventilated, conditions which are extremely rare in the different farm buildings in Canada.

The cow stall is pronounced by many authorities as the best of its kind yet produced. This stall compels the cow to keep clean, at the same time giving her more liberty than the ordinary method of fastening.

It is a tribute to Mr. Logan's ideas that the leading men are adopting them in the construction of new buildings. Sir Arthur Stepney is having a barn built according to this plan on his farm in England, and also one in British Columbia, and a great many other barns now being erected in the Province have incorporated in them the main features of Mr. Logan's improvements.

Among those of the older regiments now living in B. C. we might mention Mr. Martin Burrell. Mr. Burrell moved from Ontario to Grand Forks, B. C., some years ago, and is now the leading citizen of that town. He is editor of an influential paper as well as an orchardist of Provincial reputation. At the last Dominion election he was the candidate of the riding of Yale-Cariboo, and escaped election only by a narrow majority. He is an eloquent and convincing speaker, and some time in the near future will be heard from.

J. L. Webster, '82, is another of the old boys of horticultural tendencies. He has a large nursery and orchard near Vernon, in the famous Okanagan Valley.

Still another fruit man is J. D. Honsburger, '92, now located at Grand Forks. He has a large, well-kept orchard, and is doing all right.

Among the more recent additions, we must mention Mr. S. Middleton, of the class of '06. Middleton spent two years at the college, and then went back to the farm at Vernon. His farm joins the famous orchard of Lord Aberdeen, so he is in good company. He takes great interest in horticultural matters. When he gets up an exhibit for the fall fairs he makes his competitors hustle if they want to get inside the money. He is a director of the Agricultural Society, and takes an interest in everything tending to benefit the Okanagan Valley.

Edward Wells, '90, is now located at Chilliwack, and has one of his best farms in the Province. He takes a great interest in live stock, and is the possessor of the leading head of Ayrshires in that Province. His farm of 300 acres is valued at about two hundred dollars per acre, so it would look as if he would never have to fill out a blank for the poor house.

Three more of the "clan" now farming in the Chilliwack Valley are the Higginson Bros., of '04 and '05, and George Knight, of '07 Class. They are all practicing up-to-date farming, setting good examples to their neighbors, who have not had the good fortune to attend the O. A. C.

T. F. Patterson, '96, is managing a large lumber business in Vancouver. Although his attention has been somewhat divorced from agriculture, he still maintains an interest in entomology and botany, and occasionally contributes valuable papers on these subjects.

Two of those who studied for two years with the boys of '05 have formed a partnership, and are now doing business under the name of McRae & Bowden.

The boys of those years well remember Archie McRae's quiet ways, and will be glad to know that he is getting along well. Bowden being a special student, was not known so well, but he made many friends just the same. They are now located near New Westminster, B. C., and are making a specialty of small fruits and poultry.

Harris McFayden entered the O. A. C. fresh from the halls of St. Andrew's College. Whether his remarkable suc-

cess was of such a character as to attract the attention of the Dominion Seed Commissioner at Ottawa, who at once took steps to secure his services. At present he is Seed Commissioner for the Province of Saskatchewan, with headquarters at Regina. As he is essentially a man of the world, and one who can do things, we have no fears for "Doc.'s" future.

Notice.—We are always glad to hear from ex-students at any time. Each



H. MCFAYDEN.

cess is due to the early training received in that institution or entirely to his natural ability, we are not prepared to say, but still the fact remains that he has made phenomenal headway since leaving our midst. His first position was that of Agricultural Editor of the Toronto Mail and Empire, and in that capacity demonstrated his natural talents to a marked extent. His work

number contains a different list of students, along with a report of their progress. It is always a source of much pleasure to hear from our graduates and associates, with a report of how they are finding life. We would ask our ex-students not to be bashful in this matter, and to try and assist us in making our Old Boys' page a special feature of each issue.

College.

HOW utterly irresistible Time is! He bears us forward regardless as to what we accomplish of good or ill, by the way. At any rate, we are penetrating deeper into the mysteries of life. We may make the best of Time or we may not, as we choose. It is difficult to realize that more than half the term has gone, and this is our second issue for the current year. Another Thanksgiving Day has come, bringing with it leisure, good cheer, and recollections of another year of prosperity. Probably the month and a half that we have been here seemed short because the "weather man," one of Time's retinue, has favored us so noticeably this fall, and because everything seems to go on so smoothly in and about our college home. Football and basketball are very much in evidence these days. Our college teams mean business, and they are certainly accomplishing something. The end is not yet. No one as yet seems to worry over-much regarding studies. Judging, however, from the tranquility prevailing in the corridors, during study hour, the boys have the golden thread of the course well in hand.

Since our last issue the Literary Societies have been organized for the year as follows:

Maple Leaf—

President—G. LeLacheur.

Vice-President—S. Kennedy.

Secretary—A. M. Shaw.

Programme Committee—O. C. White, G. C. Chaunon, H. W. F. Newhall.

Alpha—

President—W. H. Scott.

Vice-President—C. F. McEwen.

Secretary—C. M. Murray.

Programme Committee—W. A. Brown, R. N. Bray, G. E. Sanders.

Delphic—

President—H. Wheeler.

Vice-President—R. M. Winslow.

Secretary—A. E. Slater.

Programme Committee—H. W. Siret, M. S. Coglan, D. A. McKenzie.

It is with a measure of regret that we announce the departure from our midst of Miss A. Springer, to fill a high position in the musical world of Toronto. We miss her greatly, holding, as she did, a high place in the social and musical circles of College Heights. Her rich, clear, well controlled voice, has delighted many an audience in our assembly halls. What is our loss, is a decided gain to the community to which she has gone. Our sincerest good wishes go with her to her new and larger sphere.

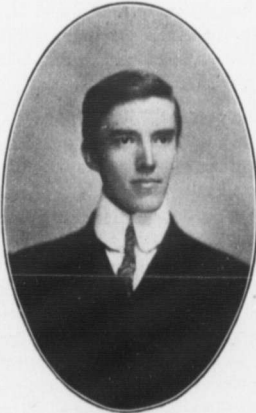
The Forty-Third Annual meeting of the Entomological Society of Ontario was held at the College on Oct. 10th and 11th. The morning and afternoon meetings were held in the Entomological Laboratory and the Biological Classroom, and the evening meeting in Massey Hall.

The student body was given the opportunity of hearing the important discussions and addresses on the programme.

Among the important items on the programme were: "Discussion on Cod-

lin Worm," with papers and addresses by Dr. Brodie, Toronto, Dr. Fletcher, Ottawa, and others; "What the Entomological Society Can Do for the Ontario Agricultural College," by Professor Lochead, of Macdonald College, St. Anne de Bellevue; "A Canoe Trip for Entomological Purposes in Algonquin Park," by Mr. Paul Hahn, Toronto; "Insects Injurious to Crops," by Dr. Fletcher, Dominion Entomologist, Ottawa; "Gall Insects," by T. D. Jarvis,

recently been made to the equipment of the Biological Department. On the recommendation of Mr. T. D. Jarvis, Lecturer in Entomology and Zoology, there has been purchased from Bausch & Lomb, one of America's leading optical instrument firms, a piece of apparatus exceedingly useful in magnifying, projecting, photographing and studying minute biological specimens, especially minute gall mites, fungus products, botanical cross-sections, minute life in the hanging drop, and the like. This instrument, or rather combination of instruments, is being installed for use in the large classroom on the third floor of the building, and will, no doubt, prove to be a vast improvement over the old method of studying minute forms of life, and manufacturing and projecting slides illustrating these minute forms. The expense of installing the instruments, moreover, is exceedingly small, compared with the good results that may reasonably be expected to follow the investment made by the Biological Department.



J. W. EASTMAN, B. S.
Demonstrator in Botany.

O. A. College; "A Snout Beetle," by Dr. Brodie, Toronto; "Notes On Forest Insects," by Professor E. J. Zavitz, O. A. College; "Insects of the Season," by Professor Bethune, O. A. College.

Something of the importance of the work of our Entomologists to the Province of Ontario, will be seen when we begin to comprehend the fact that in Ontario alone, damage to the extent of \$25,000,000 per year is done by insects.

A very important addition has re-

The first meeting of the Union Literary Society for this year, was held in Massey Hall, on Saturday, Oct. 13th. The attendance was good, considering the fact that a large number of the students were attending a football match in Berlin, and did not all return in time to attend the Literary Society's meeting.

An excellent programme was rendered. Miss Palmer, of the Macdonald Institute, quite captivated her audience by her skilful performance with the violin. Principal Howes, of the Consolidated School, read a selection from Drummond in a very pleasing manner.

The debate was a fairly strong one.

The resolution was "That the Introduction of Phonetic Spelling Would Aid in the Material Advancement of the Race." The affirmative was upheld by Messrs. R. M. Winslow and R. R. Wheaton; the negative by Messrs. A. R. Atkin and M. Campbell. The debate was won by the affirmative.

Y. M. C. A.

Many ex-students will remember, with pleasure, the Sunday afternoon Bible Classes, conducted by Professor J. B. Reynolds, in the old Y. M. C. A. room. Since the inception of the Sunday afternoon services in Massey Hall, a couple of years ago, the classes have been discontinued. This year, however, Professor Reynold's characteristic willingness to assist in Y. M. C. A. work, is bringing him once more into touch with the religious life of the college. A series of addresses, to be given this term, on "Some of the Methods and Results of Modern Bible Criticism," was begun on Thursday evening, Sept. 27th. A second series will be presented in the winter term, on "Character Studies from the Old Testament: Abraham, Jacob, Joseph, Moses." Two addresses have already been given, and have been highly appreciated by large audiences of young men and young women.

On Thursday, Oct. 11th, more than two hundred and thirty persons passed an enjoyable evening in the O. A. C. gymnasium, the guests of the Young Men's and Young Women's Christian Associations. With a few simple touches of the art in which femininity excels, the young ladies made the large room look almost cozy. The evening passed most pleasantly, and all joined in voting the innovation a decided success.

Mr. J. N. Farquhar, who has been for some years the popular and efficient Secretary of the Young Men's Christian Association of Calcutta, India, visited us on Friday, Oct. 19th. He and Mrs. Farquhar enjoyed a brief look round the college, and in the evening Mr. Farquhar addressed a large number of young men. He spoke very interestingly of the several branches of work among Calcutta's large student population, and pointed out the splendid opportunities for usefulness which are open to young men. Mr. Farquhar is returning to the east as Secretary for India, of Student Department work, and our good wishes follow him.

The week of Nov. 11th to 17th, is appointed by the International Committee as a week of special prayer for young men all over the world. The young man is the hope of the future, and while we ourselves hope to discharge faithfully the responsibility that our unprecedented opportunities have placed upon us, let us extend our sympathies to young men everywhere. It is hoped that this week of prayer may be largely observed in the college, to the end that the developing manhood of all nations may be won to Christ.

Our thanks are due Rev. R. W. Ross and Professor W. H. Day for excellent addresses delivered at Thursday evening meetings.

It is gratifying to note, that the excellent course, now being followed in Bible Study, is creating a deep interest throughout the college. Questions of interest to all men come up for discussion, and the ideal Bible Class would be one in which all kinds of men would meet to think out these problems for themselves.

Athletics.

OUR ANNUAL FIELD DAY.

IN the annual cycle of events Field Day has come and gone, but not without leaving behind an impression that will long remain fresh in the minds of all. Tuesday, Oct. 2, was the day selected by the Athletic Association for the holding of the sports, and right well they made their selection. The weather man was never more kind, and provided a day that left nothing to be desired. Never before has there been weather more spring-like and balmy, nor air more exhilarating in its nature; never before has there been such close competition and large entry lists in the various events; and never were there larger crowds to cheer their favorite contestants on, students, Macdonald girls, and outsiders vying with each other in stimulating them to greater efforts. Seldom has a man received a greater ovation than did E. Lewis, when he did himself proud and broke the college record for pole-vaulting by making a new mark of 9 feet 3 inches; this event allowing all to let off some of the superfluous energy with which they were filled ready to bursting. Fully 1,500 people were lined up to view the sports, the fair sex largely predominating, and from the laughter and enthusiasm which, wave-like, kept sweeping over them, they thoroughly enjoyed themselves. It was a gala day for all.

A word of congratulation to the Athletic Association for the remarkable smoothness and precision that characterized the carrying out of the day's

sports. Everybody seemed to know just what to do and when to do it, and the result was that the events were carried out strictly on schedule time, thus obviating all annoying and irritating delays, and making the day one of enjoyment and pleasure to all.

A very pleasing feature of this year's sports was the unprecedented number of entries, there not being a single event with less than a dozen entries. Athletics surely must be flourishing. Numberless freshmen, and even sophomores, juniors and seniors, who thought they could run, or jump, or do something better than somebody else could do it, entered; and it is too bad that more of them did not keep up enough courage to contest their events on Field Day. To give you an idea of the large entry list, a glance at the sheets shows seventeen entered for the half mile run, nineteen in the quarter, eighteen in the one mile walk, and fifteen in the 100 yard dash, nearly one-third of the entries being from freshmen. Perhaps the fact that more did not compete was due to the timely, but totally unexpected, arrival of W. A. Kerr, our crack runner and all-round champion of two former field days. He was the dark horse all right. Gladness reigned in the camp of the third year upon news of Walter's arrival; and to the honor of every man in the other years, all gave him the glad hand and wished him success in his encounter with the unknown first year cracks.

Sharp on time, according to schedule, the judges started the day's events

with the standing broad jump. No less than four competitors were tied for first place, and in the jump off, Manton and Kerr were again tied. Another jump, and Kerr won first with 8 ft. 8½ in., Manton second, and Moore in third place. Next in order was the half mile run, and six aspirants faced the line. Kerr won easily in the time of 2 min. 17 3-5 sec., with Hartman the only close competitor. In the pole vault a pleasant surprise was in store for all. From the form shown by all five entries, it

premium, and our husky friend Coglan, he of the red hair, easily won first, with Kerr and Hoy somewhere behind in the order named. As expected, Kerr took first in the running hop, step and jump, with 39 ft. 10 in.; Curtiss came second, three feet behind Kerr, and Moore had a cinch on his favorite place, third. To encourage better kicking on the football team, a prize was offered for kicking the football, and it is significant that no member of the college team won a place in this event. Barton, with his



W. A. Kerr, '08, thrice champion on Field Day, winning the half-mile.

was soon seen that the old record must of necessity be broken. E. Lewis, a Nova Scotia man, with a record in this event, was easily first, but did not try for the record until afternoon, when he easily raised it by a beautiful vault of 9 ft. 3 in. Curtiss, alias Egypt, much amused the crowd by his close calls in clearing the bar while low down, but the higher it was raised the better he seemed to jump; he won second, with Shaw a close third. For putting the 21-pound shot, strength was at a

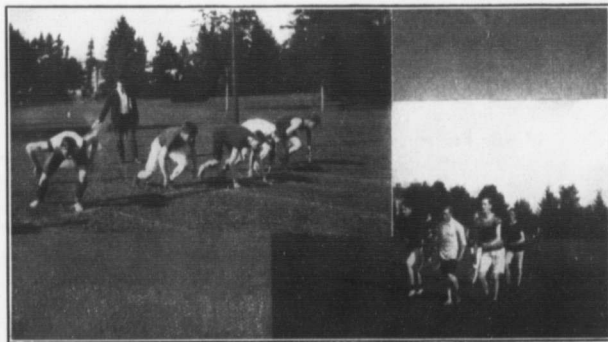
Association training, won first, while the Irish took second and third, with Ryan and Twigg. In the lightweight 16-pound shot-put (under 140 pounds), Walker captured first, with his initial heave of 26 feet; Moore nailed second, and Cooley took what was left. The final event before dinner was the running broad, E. Lewis jumping farthest, while Kerr squeezed Moore out of second place by a final effort.

At this period, one could almost with certainty predict that W. A. Kerr

would once more be our out-door champion. He was overwhelmingly in the lead, with a total of twenty-one points; E. Lewis was second, with ten points, and Moore and Curtiss both had six.

After a light luncheon and well-earned rest, the competitors prepared to show off their high jumping abilities. J. M. Lewis won first on a clear jump of 4 ft. 11½ in.; Kerr came second, while Curtiss won the tie from Shaw. In the 100 yard dash, E. Lewis showed that he could sprint as well as vault,

was the best ever. For the last 100 yards these two see-sawed for the lead, one now leading, then the other. However Kerr won out by a bare breast, with a game spurt at the finish; time, 59¼ seconds. The jockey race tested the carrying powers of a good many pairs of legs. Coke and Angle struggled in ahead of the bunch, with Gilmour and Weaver right on their heels. Half a dozen started in the one mile walk. There was little to choose from the bunch at the start, they keeping well together until Twigg made a game spurt



Extremes meet. The start of hundred yard dash and the finish of mile walk.

when he came in first, after a hot struggle with Wheeler. Tom Savage, our former champion sprinter, fell by the wayside through lack of training, but was plenty good enough to beat out Curtiss for third. Most amusing was the three-legged race. Middleton and French romped in first with little difficulty. Most of the other competitors seemed to have considerable difficulty in negotiating on three legs. The quarter mile run produced the best race of the day. Kerr and Hartman were in a class by themselves and the finish

at the finish, barely beating out Millen, while Coke cut off Laughland from third place. Iwanami showed himself to be a regular jack-in-the-box in the sack race, his regular bob-like jumps distancing both Moore and Weaver, second and third respectively. In the 220, E. Lewis came mighty near breaking another record, he tying the old one. Wheeler chased him hard from the start, and it was any man's race until the finish. Curtiss warmed third place. The most laughable and mirth-provoking race of the day was the obstacle.

As a Mac. girl said, "For sport, the obstacle race for mine"; and this well expresses the opinion of all. Some of the difficulties encountered were those of jumping a wagon, fishing their shoes out of a mixture in a barrel, and eating buns suspended from a string and smeared with molasses. Unluckily for some, their buns fell on the grass and the competitors were obliged to get down and eat a mixture of grass and bun, flavored with molasses. Treherne, Owen and Ryan were the lucky ones. Hartman and Kerr had another tussel in the one mile run, and Hartman surprised the talent by defeating Kerr. In the 16-pound shot, Coglon again beat Kerr, while Jacobs looked after the rest. Jacobs threw the 16-pound hammer one-half an inch further than J. M. Lewis, thus not only depriving him of first place, but also cutting off his chance of winning an emblem, and also the first year championship. Moore led the field quite easily, and romped in first in the 120 yard hurdle race, while Curtiss and J. M. Lewis divided the other honors.

The hose and reel contest was won by the fourth year in the fast time of 1 min. 35 sec., breaking the record of 1 min. 50 sec., made by the first year last year. Fourth year also won the team race, time 4 min. 3½ sec.; second and third years fought gamely for second place, and it was only at the last moment that E. Lewis forged ahead and won for the sophomores. As expected, third and fourth years won their preliminaries in the tug-of-war, and clashed for the premier honors, which fell to the seniors after two very even pulls. Fourth year were very fortunate in winning all three team events, and were amply compensated for the

long, careful, systematic training which they underwent and which is essential to success in these events.

The official list of winners is as follows:

Long Runs.

Half-mile run—Kerr, Hartman, Bray; 2 min. 17 3-5 sec.

Quarter-mile run—Kerr, Hartman, Bray; 59¼ sec.

One-mile run—Hartman, Kerr, Bray; 5 min. 57 sec.

Short Runs.

100-yard dash—E. Lewis, Wheeler, Savage; 11 sec.

220-yard dash—E. Lewis, Wheeler, Curtiss; 24½ sec.

120-yard hurdles—Moore, Curtiss, J. M. Lewis; 19 1-5 sec.

Jumps.

Standing broad—Kerr, Manton, Moore; 8 ft, 9 in.

Running broad—E. Lewis, Kerr, Moore; 17 ft. 10 in.

Running high—J. M. Lewis, Kerr, Curtiss; 4 ft. 11½ in.

Running hop-step-and-jump—Kerr, Curtiss, Moore; 39 ft. 10 in.

Pole vault—E. Lewis, Curtiss, Shaw; 9 ft. 3 in.

Weights.

Putting 21-pound shot—Coglon, Kerr, Hoy; 26 ft. 2¼ in.

Putting 16-pound shot—Coglon, Kerr, Jacobs; 28 ft. 8½ in.

Throwing 16-pound hammer—Jacobs, J. M. Lewis, Baker; 54 ft. 8½ in.

Non-Championship Events.

Putting 16-pound shot (under 140 pounds)—Walker, Moore, Cooley; 26 ft.

One-mile walk—Twigg, Millen, Coke; 9 min. 42 sec.

Kicking football—Barton, Ryan, Twigg.

Three-legged race—M Middleton and French, Owen and Jull, Curran and Weaver.

Jockey race—Angle and Coke, Gilmour and Weaver, Newhall and Millen.

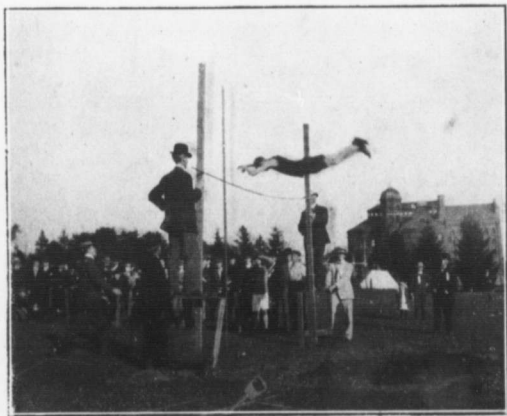
Sack race—Iwanami, Moore, Weaver.

Obstacle race—Treherne, Owen, Ryan.

Frog race—Lewis and Campbell, Weaver and Gilmour.

lantine; second, second year, James, Bray, Turney, E. Lewis; third, third year, D. A. MacKenzie, Curran, Kerr, Johnson. Time, 4 min. 3½ sec.

At the conclusion of the tug-of-war, all congregated in the gymnasium for the presentation of prizes. President R. W. Mills presided, and Mrs. Harcourt kindly presented the badges to the winners. Each year gathered in its particular corner and warmly cheered all its fortunate competitors. The grand champion of the day was W. A.



Lewis raising college record to 9 feet 3 inches.

Hose and reel contest—Fourth year, second year, third year.

Winning team—Barton, Coglon, Sanders, Wheeler, Hartman, Ballantine, Crow, Scott. Captain, Hudson.

Time, 1 min. 35 sec.

Tug-of-war—Fourth year, third year.

Winning team—Coglon, Jacobs, Crow, Twigg, Hudson, Prettie, Barton, Scott. Captain, Diaz.

Team race, one mile—First, fourth year, Hartman, Wheeler, Hudson, Bal-

Kerr, of the third year, who won Mayor Sleeman's medal with a grand total of 35 points, nearly double that of his nearest competitor, E. Lewis. The latter came second with 20 points, the result of four firsts from four entries, and presented an impressive appearance with four red badges on his breast. W. A. Kerr won the medals for the long runs and the jumps; E. Lewis won the short run medal; and Coglon captured the medal for the weight events. To

Curtiss fell the honor of first year champion, and Moore and Hartman, in addition to all those mentioned above, received an emblem each. E. Lewis was awarded one bar with his emblem for breaking the only record broken that day. This ended the strenuous part of the day's sport, and all adjourned to the college dining-room, where a sumptuous repast awaited them.

Here all did ample justice to the multitude of good things provided, all

early days of the college when athletics were not the large and important factor in college life they are now. The evening closed with the national anthem. All departed well filled and satisfied with the day's events.

FOOTBALL.

O. A. C. Downs Woodstock.

O. A. C. and Woodstock played the first scheduled game of the new Football League on Saturday, Oct 6, on the O. A. C. campus. The home team



The above illustration represents an unsuccessful attempt to pull the '07 tug-of-war team out of their holes. This photo was taken at an exhibition test, and naturally does not appear as strenuous as did the real struggles previous to Field Day, when even a liberal application of rawhide failed to do the trick.

relaxing after the exciting day's sport, and passing the evening with merry words and jests. All enjoyed the excellent programme provided, Mr. Semon making quite a hit with his parody on "Travelling," while Miss Palmer's violin solo was much appreciated. J. P. Downey, M.P.P., made a humorous speech, which kept all in continuous roars of laughter, while Professor R. Harcourt, in his own inimitable style, carried all back reminiscently to the

finally won in rather easy fashion by the score of 23 to 11, but at that the men from the Baby City gave our boys quite a scare in the first quarter, and it was anybody's game until half time. After that it was all O. A. C. A continual drizzle fell throughout the day, rendering the ground very unsuitable for football, and did not stop until the match was nearly half over.

The teams lined out in the rain at 3 o'clock, and it was at once seen that

college had the advantage in weight and size. Woodstock kicked off well, and fast following up and snappy playing all along their line were rewarded by a rouge. Woodstock kept feeding McCrimmon for long kicks, and finally Treherne, who had considerable difficulty in handling the slippery ball, missed a long punt, and Woodstock securing, scored the first touchdown, which was not converted. The quarter ended with the score 6-0 for Woodstock.

College now woke up and pressed fiercely. Hoy kept bucking for long gains, and finally scored a touchdown, which Treherne converted. Woodstock braced up and were lucky in forcing another rouge, the half time score being 7-6 for Woodstock.

College went in to win or die. They adopted a running and bucking game entirely, and Woodstock saw but little of the ball. Both sides scored a rouge, and then Foster and Murray, by fast following up, secured the ball, Murray carrying it over the line on Foster's pass. Score now 8-12 for O. A. C.

In the last quarter Woodstock secured two more rouges on McCrimmon's fine kicking. Hoy kept hitting the line hard, ploughing through almost at will for long gains. Curtiss, by a pretty run, secured another touchdown, which was converted. More hard bucking brought the last touchdown of the game, Hoy going over from the half-way line on bucks alone. College could not convert. Another rouge for Woodstock ended the game, with the score O. A. C. 23, Woodstock 11.

The O. A. C. line-up was as follows: Full back, Treherne; halves, Curtiss, Hoy, Hodson; quarter, Foster; snap, Voorhees; guards, Cutler, Jacobs;

tackles, Ballantine, Sirrett; wing, Murray, Scott.

O. A. C. at Berlin.

The O.A.C. team journeyed up to Berlin on Oct. 13 and struck a snag in their match with St. Jerome's that put quite a kink in their championship aspirations. The day was bright and clear, ideal football weather. The Berlin line-up was, as expected, quite light, but they more than made up for this deficiency by their speed and form. Every man on the team was full of ginger, and their fast following up, quick passing, hard low tackling, and general team play was an eye-opener to all present. They hit the line like a cannon-ball, and it was all the heavy college line could do to hold them.

Play started with Berlin rushing college for all they were worth, and before O. A. C. woke up had crossed our line for the first touchdown. This was easily converted. Berlin still kept pressing and forced college back foot by foot. In a scramble, they scored a lucky touchdown, the ball being pushed over the line just as the whistle blew for a down. They did not convert. Thus, at the end of the first ten minutes, Berlin was leading 11-0, but now O. A. C. woke up and more than held their own. Every man on the O. A. C. team worked hard, and the tackling was so heavy that several men were laid out temporarily. Murray worked like a horse, following up fast and tackling hard, but all the others were not far behind him. Time was called with the ball in Berlin territory, and college should have scored but for hard luck.

In the second half, college kept up their good work, but were unable to cross the line. Berlin scored two rouges through the inability of the college

backs to comb the ball out of the long hay on the hillside back of our line. O. A. C. kept pegging away, but could not break away for a good run, and it looked as if Berlin could hold our line safe. However, just before time was called, Foster wiggled through their line and passed the ball over to Treherne, who crossed for the much-needed score. Treherne converted, and the match ended in Berlin's favor 13-6.

O. A. C., although defeated, are still undaunted, and promise ample revenge when St. Jerome's visit Guelph. Every man on the college team played a good game, their poor work at the beginning being due to the many changes in our line-up. Hoy and Curtiss were the mainstay of the back division, and Zavitz gave a pretty exhibition of high long kicking. College lined up in the following order:

O. A. C. team—Full, Hodson; halves, Hoy, Zavitz, Curtiss; quarter, Foster;

snap, Cogton; guards, Cutler, Treherne; tackles, Sirrett, Lewis; wings, Murray, Scott; spares, Jacobs and D. Johnson.

Guelph Thanksgiving Race.

Walter Kerr, our champion college runner, entered in the Guelph road races on Thanksgiving Day, to see what he could do against such cracks as Meadows, the Canadian five-mile champion, and other such notables. With only three weeks' training, Walter ran a fine race over what is everywhere admitted to be a very hard course, covering the five miles in 26 minutes flat, thereby gaining seventh place. The time made by the winner, 25 minutes and 12 seconds, is the fastest time ever made over this course, the best previous record being a few seconds slower than Kerr's time this year. With the experience he has gained this year, we all know Kerr will next year again train for this race, when we do not hesitate to say he will give a very much better account of himself.



"Silently as twilight shades the woodland leaves are dropping;
Each through stilly Autumn air a winding path is taking;
Each through yielding golden air a path of beauty making,
Loosening and wavering and exquisitely stopping.

"Little fellow-travellers, gentle, frail and flaming,
Near of kin you are to me as brother is to brother;
I, like you, am journeying unto the self-same Mother
On a path of mystery and beauty past my naming."

Macdonald.

The Autumn Walk.

TO the woods and the open fields we turn our faces, and set out with larger step to enjoy and breathe in Nature's beauty, as shown forth on a bright autumn day.

With heads uplifted to feel the cool, strong breeze and see the glory of earth, air and sky, on we go, and after the weariness of hours spent in-doors, feel our hearts and minds open up in response to Nature's wonders around us. What exultation, liberty of motive arouses in us; and how our senses awaken! In these days which follow the first frosts there is something in the air never felt in summer—a keen clearness which refreshes us mentally as nothing else can do.

On every hand we see that the good old earth has again yielded to man a rich harvest, and is now almost ready for the long sleep of winter. We note the fields cleaned of grain, the root crops being taken in, and the picturesque apple harvest.

What pleasure to come upon an apple orchard on our walk, and find the apples not yet gathered in! We thank bountiful nature for the gift of apples. What would we do without "that winter necessity and source of cheer?" How well they look, bright-colored, round and ripe! How they please all the senses! Feel, smell or taste them; and notice how good it is to hear them fall "with mellow thump" to the ground! Very beautifully do the qualities of these apples fit the season—in color like the leaves, in taste cool and pungent as

the air, in odor faint and mellow, and in development complete and ready to drop to earth and convey thither their seeds.

The wood, seen first as a blur of color in the misty blue distance, stands out in clear gold and russet as we come near. Touches of crimson here and there on maple or oak, and the constant green of the pines complete the study in color which the trees present.

By leafy pathways we make our way into the depths of the wood, and feel the touch of beauty and sadness about us, for summer's glory is dying, and the birds and flowers have disappeared. The leaves are falling with soft, gentle motion, and all things quietly turning to their earthly resting place. But we know that spring will come again; that woodland life is only sleeping to re-awaken in abounding strength next year. So, we rustle the leaves with our feet and feel like happy children, breathe in the fresh spring-like odor of the firs, and gather our share of the nuts which the little squirrel scolds us for taking.

How suggestive of the old Indian are these autumn words. Red and dusky like his color, misty like the smoke of his camp-fire, and containing ripe fruit for his easy gathering! And when we consider also that this was his best time for hunting and his special season in every way, we do not wonder that it has been named in memory of him.

Homeward turned, we face the clear, glowing sunset light, promise of a fair day to come, as this brilliant autumn

time promises a rich newness of life to earth next spring. And as we briskly retrace our steps, we feel the strengthening, uplifting effect of this touch with nature, and rejoice in the beauty of her seasons.

"The wizard has woven his ancient scheme;

A day and a star-lit night;
And the world is a shadowy-pencilled dream
Of color haze and light.

Like something an angel wrought, maybe,

To answer a fairy's whim,
A fold of an ancient tapestry,
A phantom rare and dim.

Silent and smooth as the crystal stone

The river lies serene,
And the fading hills are a jewelled throne,
For the Fall and the mist, his Queen.

Slim as out of aerial seas,

The elms and poplars fair,
Float like the dainty spirits of trees
In the mellow dream-like air.

Silvery-soft by the forest side—

Wine-red, yellow, rose—
The wizard of Autumn, faint, blue-eyed—
Swinging his censer, goes."

First Impressions of the Macdonald Hall and Institute.

One's first impressions are generally the most lasting, as they sink deep into our minds, and no matter what our ultimate opinion may be, we recall our first impressions of persons, places and things with pleasure or pain, as the case may be.

On arriving at the Macdonald Hall

and Institute, one at once feels the freshness of the air and notices that the grounds are situated much higher than the city; so that from the top of the buildings there is a beautiful view on every side.

As we go towards the buildings we feel, rather than see, that the grass is green and well kept and that there are lovely trees behind us and on either side.

Entering the Hall, we are struck with the warm welcome which we receive from Mistresses and Seniors, who seem to be there on purpose to make us welcome as one of themselves. The building itself surpasses anything we may have imagined, and the small sitting-rooms and furnished ends of the halls give a home-like appearance to the whole. The halls are so wide and lofty; though there be a hundred girls or more within them, there is no want of air or feeling of being crowded. The stairs are wide, and from the first flight to the top story there is an open pit allowing the air to circulate freely. The reception-rooms do not strike one with the air of stiffness, which is generally the chief feature of such rooms in public buildings, but have a friendly homeliness about them. While the dining-room, with its many tables, surrounded by girls from all parts of the Dominion, is a pleasing sight

Above the dining-room is the gymnasium, with a cosy fireplace at one end, with inviting seats on either side, and round the walls the Indian clubs arranged in order. This room seems to assure us that games and dancing may be enjoyed in our leisure time, as it has a beautiful hardwood floor.

Going over to the Institute we enter laundries, kitchens and workrooms,

where each is so perfectly equipped that we long to get to work. Even here the homely feeling is not wanting, for the reception-room is furnished without stiffness. Farther on we come to the magazine room, filled with all sorts of magazines, where everyone may find reading to her taste. In the library are reference books, over which we can linger for hours, as there are books on all the subjects that we are to take up, and books on subjects of general interest. Next to the library we enter the museum, with its curiosities from different parts. Ascending the stairs we see the stained window bearing the Macdonald crest. And on the third story we arrive in the assembly hall, where the students gather for prayers and different meetings.

Going back to the grounds we carry with us a general idea of the perfect arrangements and neatness of the buildings and are glad to have seen them.

E. Briggs.

A most enjoyable meeting of the Literary Society was held Friday evening, Oct. 19th. The subject for the evening was Kipling, and as so few of the girls were present the meeting was held in the drawing-room. After the transaction of the business, Miss Wright read a paper on "Current Home Events"; Miss Mary MacLennan, one on "Foreign Events." These papers are especially helpful to those of us whose stress of business prevents our daily perusal of the newspapers. Miss Fuller played Kipling's "Recessional," one of his best-known works. Miss Kate MacLennan read an article on Kipling's work and life in India, written by an associate editor on a Lahore paper. Miss Christie, of Guelph, always a

friend of the Macdonald girls, was present, and sang two of her best songs for us. The best was kept until the last, and after Miss MacKenzie had presented the critic's report, the meeting was informally adjourned while we all gathered around the open fire and spent a most delightful hour listening to Miss Watson reading selections from Kipling's works. The choice of prose and poetry was an excellent one, illustrating the great writer in his several moods. This reminded the old girls of many happy Friday evenings spent around the fire in Miss Watson's cozy office, while their hostess entertained them by reading from various authors; and gave the new girls an idea of what is in store for them this winter. We feel sorry for the many girls who spent the holiday at home, and so missed our treat.

The Habitant in Macdonald Hall.

I cannot spik good Henglish, I'm only
Habitant,
I come from Frenchman's country on
Eastern Canaday,
But I've got one story dat I was want
for to spik,
And if you'll only listen, I'll try for say
her quick.

You have ever seen dem student upon
Macdonald Hall?
Dat's always looking every place to
find nothing at all?
Dey wear big apron 'round der waist
wit pocket on de side,
For carry every ting dey find an' more
beside.

Well, me I'm one dem feller, me, dey
call us "Nature Class";
We're just lak noder scholar 'cept we've
not got so much brass;

Course we're always pretty wise, an'
never act lak fool,

Cause we have got diplomas, an' was
teaching on de school.

Der's fifty of us in dis class, an' most of
us is girl,

An' just about de nicest girl was
ever on de worl;

Course all de teacher girls are nice, an'
noddors dey will pass,

But if you want to see de bes' just look
on Nature Class.

For some time now we've live dis place
an' like her pretty well,

An' we have had some good tam here,
more nice'n I can tell;

I wish dat I could spik more good for
tole you all de fun,

Dat we was have upon dis school since
fus' de fun begun.

Der's plenty tings for learn you know
upon de Nature Course,

An' all de teachers mak us work jes lak
one nigger horse;

Jes' same we don't work all der tam,
I'm tole you dat mon view,

We do some tings beside ourselves de
Professors don't knew.

Plenty tams we're up at night an' hav'ne
grand soiree

When matron tinks we're all in bed an'
keeping tight maybe;

But nex' day den we're all in class an'
looking pretty wise,

An' everybody tinks we're good an'
never maks no noise.

All same de Profs. are pretty good, we
fin' no fault wit dem,

If dey was work us very hard, dey lak
us all de same,

An' when we go out on de school an'
try for mak one mark,

We'll know dey did der bes' for us to
give us one good start.

Our days at Guelph will soon be pas',
der goin' purty soon;

Bye-an'-bye we'll all say good-bye to
all de ole class-room,

An' maybe when we're out on school
an' tink of day gone by

Growin' flowers an' gadderin' flies—
we'll cry upon our eye.

But let me tell you all dats here before
de lef' behind,

Der's every reason on der worl' why we
should have big time;

Der's parties an' der's meetins an' der's
college suppers, too,—

Well, tak in every ting you can das bes'
ting you can do.

And now I say good-bye to you an'
hope you all success.

An' plenty more of happy day still livin'
on dis place;

Dat's all I've got for spik to you, an'
now I say no more,

So Profs. an' girls, an' boys, an' all,
"Adieu" et "Au Revoir."

—H. Rothery, '06.

Miss M. Patello, a Homemaker of '05,
spent Thanksgiving Day at the Hall.

Miss Agnes Robertson, of '06, made
a very brief call, but most of her old
friends had an opportunity of saying
"Howdy."

Miss McDonnough, of the '06 Nor-
mal Class in Domestic Science, is now
teaching Domestic Science in the Y. W.
C. A. of Kingston, Ont.

Miss A. Fleming, of '06, does not for-
get us when she returns to visit Guelph
friends, and frequently runs up for a
cup of tea and a handshake.

Locals.

General abstract truth is the most precious of all blessings; without it, man is blind; it is the eye of reason.

Packard must have left his at home the day on which he jumped off the car down town. He must certainly have been "lying" or whence the mud on the back of his coat.

"It is as great a point of wisdom to hide ignorance as to discover knowl-

edge." So thought Baker at the Literary meeting, when he said that he would like to hear the judge's decision before he gave his opinion.

Overheard at Choir Practice (choir practicing the Amen):

Bell—Do not hang on to the —men, so long, ladies.

Stafford (in Botany Class)—Do you see this grass, Duke?

Duke—It's knot grass.

Stafford—It is grass!

Duke—I say it's knot grass.

!!!! No flowers, by request.

Poor old Stafford, he was such a dear old fellow.

Dr. Reed (to Freshmen)—There's more life in that hat than there is in this whole class.

It is the custom, at the Macdonald Hall, when any girl absents herself from prayers, to present that girl with a card bearing the inscription "Your absence from prayers was noticed on the — inst. Please write your reasons on the back of this card and return to me." These cards are returned to Miss Watson. One week, Miss Watson happened to be away, and on her re-

turn she was presented with this card, as a joke. Nothing daunted she pulled out her pencil and wrote, "I have been visiting other Insane

Asylums, with a view to improving the running of the Institute."

Poor girls! We are told their case is hopeless.



Scenes in the Obstacle Race.

Coke says that the only fault he has to find with the pigs at the college is that "their pasterns are a little weak in the hock."

Sirett informs us that he once knew a doctor who took a quantity of strychnine by mistake. However he (the doctor, not Sirett) did not lose presence of mind, but immediately took an "anecdote" and lived for a year and a half longer.

Professor (in literature period)—I am

not sure whether this class embraces the ladies or not.

Unknown voice (probably Tweltridge's or some other lady-killer's)—Do you mean as a class, sir?

A good definition of an anecdote was given by a little boy. "An anecdote is a short, funny tale." Example—"A rabbit has an anecdote."

"Thomas B. Macaulay had three brothers and five sisters, of whom he was the eldest." Problem—"To find to what nationality the man belonged, who wrote that."

A learned junior says that if Lot's wife had not turned to "rubber," she would not have turned into salt. But, on the other hand, he says there is nothing unusual in this, as he himself has seen a whole herd of cattle turned into a pasture field.

Johnny Geewhiz, K.C., of the O. A. C., makes most touching speeches to the jury and will win any court case—references may be had from Taylor.

Stafford (buying a hat—I want a hat that will suit my head.

Clerk—You had better have a soft hat.

Thomson thinks that things have come to a fine pass when the Macdonaldites won't even speak to a fellow-student without an introduction.

Overheard at church social: Young lady—"You can have half of my partner; he's long enough for two." Alas Mac! That was the unkindest cut of all.

On a recent horticultural expedition McGrath found himself "up a tree," and reported the phenomenon to President Creelman.

We have a warning to give to all those who have ambitions towards agriculture. Mr. Cooley, the well known agricultural authority, during one of his recent speeches, made the following statement: "Owing to the great agricultural progress, good men are growing less and less." (Ed.—If anyone notices Pat growing smaller please notify us at once.)

Mr. Prittie made a very neat speech at the literary meeting a week or two ago. He was speaking on the utilization of Niagara power, and said, "Why do we need to preserve the beauty of the Falls; have we not still the 'pretty girls' with us? He also made the statement that alcohol could be made from molasses. Was that the reason for the Freshies looking so sober after initiation.

One more from the "Hall." We aim at originality of matter and method in our "Dems." Here is a decidedly original introduction:

"The subject of our 'Dem.' is milk, and don't you forget it. Milk as you all know is an animal food. We obtain milk from the beef creature, commonly known as the cow. It may also be obtained from ewes, goats, etc, although it is sometimes quite difficult to obtain milk from goats, as they decidedly object to 'butters in.'"

The Freshmen evidently believe in making practical application of the principles they imbibe from the lectures in Soil Physics. As a lasting illustration of "Mr. Archimedes" principle, they endeavored to find the Specific Gravity of Voorhees. It was found, that it took three good men applied superiorly to act as sinkers. This was

probably due to his being encumbered with his wearing apparel, the removal of which was not permitted under the circumstances.

It may here be stated that Mr. Voorhees was experimented upon because he tried to see whether water could wet such a "sleek" lot as the "tapping committee." He found that he could not wet them without wetting himself—Q. E. D.

Passing along Upper Panton the other day, we noticed the sign, "We began in 1843." If this be true, then what year will they graduate in? The only answer to this question seems to be "in the course of time."

(Ed.—We recommend these students to adopt Froebel's motto right away. It is "Come, let us live with our children.")

Overheard: "Did you have to pay to get into the grounds at Berlin on Saturday, Winslow?"

Winslow—Well, I jumped over the fence first and when I found there was an entrance fee, I jumped back again and paid my money.

Honesty is the best policy.

Mr. Taylor still continues his duties as Butter-making Instructor to the first year. In the course of his lecture, he said, "After the butter comes and you run off the buttermilk, you wash the butter and then take it out and 'work it.'" Just then the smile-that-won't-come-off beamed out over Sunny Jim's expansive face, and he asked, "How much do we get an hour for working the butter." (Ed.—All you get is a capacity for more "Force.")

Overheard at chapel service: Preacher

—Very often a very lean soul is to be found in a fat body.

Jacobs to McKenney—You must have an awful fat soul, Mac."

In home nursing lecture: Dr. R.—Why do we place a blanket next to the undersheet in making a surgical bed?

Bright short course girl—To keep the hot-water bottle warm.

Professor—What smell has Ethyl Acetate?"

Duke—Cherry Brandy smell.

Who are the members of the "Young Ladies' Association Young Men's Club?" Why Every Boddy.

Overheard at church social: Young Lady—What nationality do you belong to, Mr. Knauss?

Knauss—American.

Young Lady—You're-not-American, are you?

Freshman—I smell cabbage burning.

Sophomore—You've got your head too close to the fire.

Alexander (in gymnasium)—Can any of you fellows tell me why the blood rushes to my head when standing on my head and not to my feet when I stand on them?

Second Freshman—Because your feet are not empty.

Auldwinckle is experiencing great difficulty in keeping his domestic affairs straight. He objects to taking knots out of his sheets more than twice a day. He wishes it to be distinctly understood that he will not put up with it (any longer than it lasts).

Professor Dean—What is the best finish for the inside of a dairy building?

Stock—Grazed brick.

Notwithstanding the advice not to let the college canoeists' advice "upset them," two sophomores explored the depths of the Speed. They report great growth of weeds and general dampness of surroundings. They both had good clothes on, and were bemoaning the fact when Packard came forward with the suggestion that "those clothes should be kept moist till they dry." No doubt by following this sage counsel the two will be all right.

"Coming events cast their shadows before." Thomson's moustache must be a coming event. But Thomson, deah Chappie, do not have anything to do with suggestions.

(We have been told that onion applied every morning is a good fertilizer.)

Galt Steel Siding



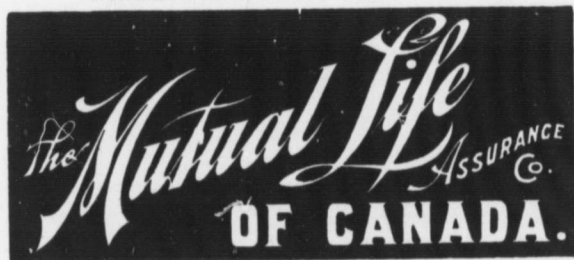
is more easily and economically applied than wooden siding. It repels fire from outside (reducing insurance) and retains heat inside (saving coal bill).

*Worth knowing more about. Write for Catalogue and Classic Kids Booklet.
This is the Sheet Metal Age.

GALT ART METAL CO. Ltd
GALT, ONT.

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
Mortgages.....	\$4,265,533 86
Debentures and First Mortgage	48.22
Bonds.....	3,245,401 89
Loans on Policies.....	1,017,480 99
Cash on Hand and in Banks.....	261,960 60
Real Estate.....	56,281 08
Total Ledger Assets.	\$8,846,658 42

*This item does not include stocks of any kind.

<p>R. Melvin, President</p> <p>W. H. Riddell, Secretary</p> <p>Geo. Chapman General Agent - - McLean's Block</p> <p style="text-align: center;">GUELPH</p>	<p>Geo. Wegenast, Manager</p>
--	--

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