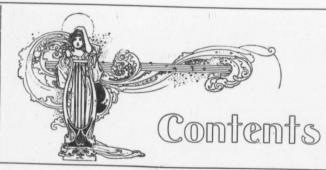
PAGES MISSING



Vol. XXI.

DECEMBER, 1908.

No. 3

Frontispiece	Page
The Farmer's Wood Lot-Ry Reversed T. W. D. C. D. C. C. C. C.	117
Canadianism—By Professor Reynolds A Trip Through Holland—By Professor Homest	122
	127
	130
Canandian Agriculture—Past, Present and Future—By Honorable John Dryden. Observations on Breeding—By Professor Arkell Experimental:	134
	138
The So-Called "Alaska" Wheat By Professor Zavitz The Treatment of Seed Grain for Seven Park W. Frank	141
Horticulture:	144
The Rural Scenery of Ontario—By D. H. Jones, B.S.A. Christmas Fruits from Florida—By H. H. Hume Editorial	148
	154
College Life Athletics	161
	165
Old Boys Macdonald	171
Macdonald, Agriculture for Women, Christman in St. 18:	178
Agriculture for Women—Christmas in South Africa—A California Christmas Christmas in Germany—Christmas in Paris—A Texas Christmas—Among Ourselves.	5-193

ADVERTISING.

Gream Separators and Appliances-Gover Page xl. Railways, Banks, Insurance—Pages i., vi., xiii., xiv., xv., xvi. Live Stock, and Stock Foods-Page xx. xxi., xxxv i .

Manufacturers—Gover-Pages i., iii., iv., v., ix., xii., xvii., xviii., xxiii., xxv., xxviii., xxx.

xxxiii., xxxv., xxxvii. Engines and Farm Machinery Gover Page ii., v., xii., xiv., xix.

Newspapers, Printers and Publishers Pages x. xv., xviii. xix.

Guelph Business Houses-Pages vi., xxii., xxiii., xxvii., xxvii., xxix., xxx., xxxi., xxxii. xxxiii., xxxiv., xxxv., xxxvi., xxxvii., xxxviii., xxxix

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DEPARTMENTAL HEADS AT O. A. COLLEGE.

THE O.A.C. REVIEW

THE DIGNITY OF A CALLING IS ITS UTILITY.

VOL. XXI

DECEMBER, 1908.

No. 3

Rome.

BY PRESIDENT CREELMAN.

TALY is a wonderful country.
Rome is more wonderful than
Italy. How's that, you say. Well,
let us see.

"See Naples and die," you hear, and you "sail away to Naples Bay," and you take a look for yourself. It is a wonderful city, surely. Its glorious blue bay, its red tiled roofs, its green country round, and its crimson sunsets, certainly lend color to the story, that "Seeing Naples one has seen it all." But you soon see all that is to be seen and you move on.

Florence is dignified and clean. The waters of the Arno sweep past and are gone. Michael Angelo looks down from his marble height on the hillside and sighs for the good old days. The Med ici family, dictators here for centuries, now rest forevermore. Dante's pen is stopped and Savonarola's voice is stipled. Merchants go about their trade and the schools and colleges flourish and teach of mighty deeds of centuries ago.

Venice is proud of her Canova and boasts of Byron's sojourn here; Pisa's tower leaneth ever, and the plains of Lombardy still flow with milk and honey dew.

And all these cities, and many more, tell of their heroes and painters and poets, some of the fifteenth, some of the fourteenth, and some as far remote as the twelfth century itself.

Now you approach the Eternal City.

"Then from the very soil of silent Rome

You shall grow wise, and walking, live again

The lives of buried peoples, and be come

A child by right of that Eternal Home, Cradle and grave of Empires, on whose walls

The Sun himself, subdued to reverence, falls."

You have been enjoying yourself in the country and the minor cities. Guitars and mandolins and fancy dress were everywhere. "Let joy be uncon fined"; on, on to Rome.

And then there falls on you a great calm, and "A!! the air a solemn stillness holds." No Twentieth Century this, nor yet of one thousand years ago.

Hush! You find yourself upon the Appian Way, where Saul of Tarsus walked, and maybe Peter, too; past the Church of "Quo Vadis;" past the baths of Caracalla; past the Catacombs of Saint Calixtus; past the Temple of Bacchus; past the Tomb of Cecelia Matella, that beautiful woman who died before the Herald Angels sang, "Peace on Earth, Good Will to Men." And yet, this old tomb stands in the form of a great round tower, "And with 2,000 years of ivy grown." No Twelfth Century story this, but right back to the beginning of things Chris tian, into Pagan Times, before "Nero perished by the justest doom."

"And from thence, when the breth ren heard of us, they came to meet us as far as Appii Forum and the Three Taverns, whom when Paul saw, he thanked God and took courage." Acts

xxviii., 15.

And so Paul walked into Rome, just here, and on past where the Tri umphal Arch of Titus now stands, commemorating the destruction of Jerusalem. The Jews still believe that they will some day enter Rome and recover their golden candlesticks. Perhaps by way of New York. And here, beside the House of Ceasar, asso ciated with the notion of imperial splendor in every European language, Julius hands over the prisoner Paul to Burrus, the Chief of the Police, in due time to be brought before the Emperor.

And so Rome seems greater than Italy—older, grander, holier, sacred ground, Mother of all the Race.

Strange to say, once inside the city one has the feeling that he has been there before. Many persons have so expressed themselves. It must be that we have become so used to seeing pictures of St. Peter's, and the Colise

um, and the Temple of Vesta, and the Pantheon, and the Castle Angelo, and the Statue of Garibaldi, that when we behold the things themselves, they seem, indeed, to have a familiar look.

It is not my intention to describe even the common sights of Rome. One must see them oneself, with the decay and crumbling and falling apart, with the cracks and leanings and fallen glory, with the masonry and cobble stones and odors; one cannot take them second hand.

"When in Rome do as the Americans do," seems to be the corrected version of the old adage. You do not find the citizens climbing to the top of St. Peter's, or travelling out to St. Paul's, or ferreting each bypath in the catacombs. These diversions are left to the English-speaking tourists, all of whom are more or less dubbed, "American."

And so we find ourselves in Rome alive to new impressions and yet keen ly on the lookout for signs of Old Rome, as we learned of it in history, and in Shakespeare. I could recall a description I had often read in a pub lic school reader, as a little lad in a country school:

"To his rude manners, his superstitious mind, and his haughty demeanor, the Romans added a sternness of spirit which at times deserves no better name than cruelty. Their history abounds in anecdotes of magistrates who sentence their sons to death, of generals who de vote themselves to death to save their armies, of noble youths who throw away their lives to propitiate the of fended gods, or who hold their right hands in the flames to prove to an alien king that torture has no terrors for a Roman. "Callousness to human suffering was a Roman virtue," and

the pages of history are red with Roman slaughterings.

"As faithful as a Roman sentinel" is the world's highest tribute to fidelity and in truth, the Pompeian soldier who was pelted to death at his post by the fiery hail of Vesuvius grandly typifies the steadfastness of the Roman character."

This was our idea of the Roman citizen, and when in April last a mer chant sold us a string of Roman pearls for ten francs, and our neighbor one of the same, for half as much, we rea lized that times had changed, and that commercial ways had come to Rome.

One should spend a winter in Rome to do it justice. I was there a week, and so was enabled to see only the Seven Hills and a few things in be tween.

Rome is not clean. You recollect that Mark Antony did not say, Friends, Romans, Countrymen, lend me your noses. One nose is quite enough in Rome, and too many in Naples, where the only thing you do not smell is something good. But the water is good and some say the wine is better. The air comes clear and sweet from the Alban Hills, and the farmers bring in fresh vegetables every morning, all the year round.

Of course, one is badly handicapped in visiting a foreign country when one does not know the language of the na tives. Nowadays, however, a man must get off the planet entirely if he would find a country where English is not known. Strangely, slang is the first thing the Italian learns of English. We were in a street car one day when a small black-eyed, macaroni-eating, Italian gammon came in to sell illus trated post cards. He was good na tured but persistent, and I had finally,

to get rid of him, to put my hand out and push him along the aisle. As he reached the end of the car he turned, and catching my eye, exclaimed,— "Skidoo," "twenty-three for you;" and so the English language is getting hold of the children of Sunny Italy.

When I returned, I was asked, what impressed you most in Rome? The question is hard to answer, and yet I was, indeed, almost carried away with the antiquity of things. In America the average man cannot tell you the maiden name of his grandmother, and can scarcely point to a single monu ment, in shape of stone, or wall, or hab itation, that antidates the birth of that same ancestor. What then of the days of the Vestal Virgins, of Ceasar and Pompey and Nero, and all? Here they lived and here are the very homes they lived in; here are their tables and shelves and beds; their fountains and pictures and couches and all. One is inclined to cry with Byron:

"O Rome! My country! City of soul! soul!

The orphans of the heart must turn to thee,

Lone mother of dead empires! and control

In their shut breasts their petty misery. What are our woes and suffrance? Come and see

The cypress, hear the owl, and plod your way

O'er steps of broken thrones and tem ples. Ye

Whose agonies are evils of a day—

A world is at our feet as fragile as our clay.

The Niobe of nations! There she stands

Childless and crownless, in her voice less woe,

An empty urn within her withered hands,

Whose sacred dust was scattered long ago:

The Scipios' tomb contains no ashes now;

The very sepulchres lie tenantless

Of their heroic dwellers; dost thou flow,

Old Tiber! through a marble wilder ness?

Rise with thy yellow waves, and man tle her distress"

A WINTER'S NIGHT.

Shadowy white,
Over the fields are the sleeping fences,
Silent and still in the fading light,
As the wintry night commences.

The forest lies
On the edge of the heavens, bearded and brown;
He pulls still closer his cloak, and sighs,
As the evening winds come down.

The snows are wound
As a winding sheet on the river's breast,
And the shivering blast goes wailing round,
As a spirit that cannot rest.

Calm sleeping night!
Whose jewelled couch reflects the million stars
That murmur silent music in their flight—
O, naught thy fair sleep mars.

And all a dream—
Thy spangled forest in its frosty sleep,
Thy pallid moon that sheds its misty beam
O'er waters dead and deep.

-Wilfred Campbell.

The Farmer's Wood Lot.

BY REVEREND THOMAS W. FYLES, D.C.L., F.L.S.

[For about thirty years Dr. Fyles has been an active member of the Entomological Society of Ontario. He was a member of the Council from 1882 to 1883, delegate to the Royal Society of Canada in 1890, 1894 and 1895, member of the Editing Committee of "The Canadian Entomologist" since 1889, and President of the Society from 1890 to 1991. He has also been President of the Quebec Branch of the Society since its formation, in 1897.

The following is a portion of a paper read at the recent annual meeting of the Entomological Society of Ontario; the whole will be published in its forthcoming annual report.—Ed.]



REVEREND THOMAS W. FYLES.

"How dear to this heart are the scenes of my childhood,

When fond recollection presents them to view:

The orchard, the meadow, the deep tangled wildwood.

And ev'ry loved spot that my in fancy knew.

Many a man who, in early life, left his father's homestead to try his for tune far away, has listened to the song of "The Old Oaken Bucket" with keen emotion.

It is the nature of man to

"look before and after, and sigh for what is not."

and, in his leisure moments, when wearied with the turmoil of the busy world, the fancy of the exile from home will often revert to the scenes of his early life

Among the cherished recollections of such an one will be the Wood Lot, with its stately trees, its pleasant glades, its cool retreats.

He will think of its hazel copses, its blackberry tangles, its furred and fea thered denizens, its wealth of flowers.

He can call to mind its appearance in the early summer when all the trees of the wood rejoiced before the Lord, when the delicate green of the young foliage was relieved by the yellow cat kins of the birches and the darker hues of the pines.

The glories of its autumn tints will also present themselves to his fond re membrance, the splendid crimson and gold of its maples, the Indian yellow of its beeches, the rich rosy bronze of its oaks.

It will seem to him as if the wood land were wont to don its richest robes,

to bid adieu to summer with befitting state.

There he learned to admire the inex haustible resources of the Divine Crea tor, revealed on every hand, and the marvellous—to speak paradoxically—diversity in uniformity under which no two leaves of one tree agree exactly in all points of outline and venation

Then, it may be, his thoughts will revert to his early companions, and their frolics in the woods and sugar house. He can recall the names, the features, the characteristics of his early friends; and he may wonder whi ther their several paths in life have led them.

But dearest of his fond recollections—dear and yet sorrowful—will be the remembrance of the home circle. He will think of his parents now laid to

"It is true," our friend may say to himself, "that the farm was less pro ductive than it had been, that the prices of produce were low, and the general outlook somewhat gloomy; but observation has since taught me, that, as the population has increased, the prices of produce have risen, that new railways have given access to bet ter markets, that such noble institu tions as the Ontario Agricultural Col lege at Guelph, and the Macdonald College at Ste. Anne de Bellevue, have made known that more can be done with, and made from, the land than our fathers were aware of. If I could have had the advantage of a training such as these colleges afforá, my am bition would have been aroused, and I would have stayed by the land and made it profitable. And what nobler



The children have gone to the city.

The old people are left behind.

rest, it may be, in a selected spot of their own land; and he will perhaps view, with shame and regret, his con duct in leaving the old folk to carry on the farm, in their declining years, without the aid of his youthful energy and strong right arm. business can a man undertake? The cultivation of the soil was the work appointed for Adam by his Maker. The occupations of the farmer have not unfitted men for high endeavors. Stock raising was the business of Abraham, the father of the faithful, the

friend of God; the prophet Amos was a herdsman; it was from the sheep fold that God took his servant David away, that he might feed Jacob his people, and Israel his inheritance. It was from the plough that Cincinnatus was called to the Dictatorship; and the poet Horace delighted in his Sabine farm."

But, leaving our city man to his cogi tations, let us now make some obser vations on the Wood Lot for ourselves.

The aristocracy, so to speak, among the trees are the lordly pine, the sturdy hemlock, the stately yellow birch, and the bass-wood beloved by bees. These rise, straight and tall, amid the numer ous spruces, balsams, tama racks, elms, maples, beeches, poplars and balm-of-Gileads.

Among all these fine and useful trees are others of smaller growth, are thorns, horn beams, amelanchiers and moosemisses.

Stand with me in such a wood, and see the tall pines, with their spreading layers of foliage rising tier above tier; the graceful balsams, like church spires pointing heaven ward; the vase-like contour of the elms.

I dare say you noticed when we entered the Wood Lot that a sentinel crow sounded an alarm; and now a dead silence seems to have fallen on the woodland. Let us sit on this log till the inhabitants of the wood have regained confidence. Meanwhile I will say a few words about the crows.

The crows build frequently in spruce trees. The dense foliage of these trees hides their nests. I had the curiosity to climb to a nest some years ago, and I was rewarded for my pains, for a strange nest I found it. The builders had stolen a whole length of clothes line, and with great ingenuity had wound the cord round and round, and between the young branches of the tree, making a very firm basis for their nest.

You all know that the first egg of a pullet is sometimes very small; the mother crow whose nest 1 invaded, must have been a yearling bird, for there was in the nest, one very diminutive egg, with others of the usual size.

Oh, our patience is meeting with its reward—the birds and animals are no longer silent. There is an oriole wend ing its way to its nest that we saw suspended from the extremity of an



BALTIMORE ORIOLE, Icterus galbula,

elm bough on the verge of the wood, and yonder, near the top of that tall hemlock stump, a golden-winged woodpecker (Colaptes auratus) is busy enlarging a hole in which to make its nest. What a litter he is making! "The carpenter is known by his clips." Now he flies away. Observe the grace ful curves of his flight, and notice his peculiar call, which suggested the common name by which he is known "Wake-up."

See yonder in the maples a pair of grey squirrels. What a frolic they are having! Chasing each other as if they

were "playing tag"-their long tails extended, or curved gracefully over their backs. Those tails serve them for winter blankets. The little crea tures in their snug retreats, during the

runways amidst the buried brush, the little animals follow these passages till they come to the young maples, that the farmer has been preserving to form a second growth sugary. They

GREY SQUIRREL.

gnaw the bark of the trees near the ground. After a long winter I have seen of young trees that had been completely girdled and destroyed by them. If a young orchard is near the creatures are apt to serve the fruit trees in the same way. Lengths of stove pipe unhooked at the

cold weather, lie closely curled, and wrapped by their soft tails and are heedless of wind and storm. They are sportive enough now; by-and-bye when autumn is well advanced, they will be busy collecting beechnuts, acorns and butternuts for their winter supplies.

sides, and placed around the bases of the trees, and then hooked together again, are a safeguard against the spoilers.

The butternuts are truly to the squir rels Juglans-Jovis glans-Jupiter's nuts-the provision made by Provid ence for their winter's need.

From our seat on the log we can ob serve many interesting things. Yonder runs a ruffled grouse or partridge. It probably has its nest at the foot of some neighboring tree. The nest is but a slight hollow in a dry spot. The bird lays many eggs. She sits close; and her color and markings so resemble her surroundings that she is seldom noticed by a passer-by. Her young can run as soon as they are hatched.

On the other side of us a red squir rel is scolding-"chuck, chuck." I have lost my liking for this little ani mal ever since I saw one of its kind tearing to pieces the callow young from a bird's nest that it had discov ered.



Yonder runs the prettily striped ground-squirrel or "chipmunk."

ORTHOSOMA BRUNNEUM.

The chipmunk and field mice are very mischievous. Towards Spring when their Winter stores of provisions have run short, and when the snow next the earth has melted, leaving

Representatives of the insect world are on the wing, or sunning themselves on the foliage. There is Poligonia

Faumus, the most beautiful of our Graptade. Notice the rich mottling of its under side. There, too, is Basil archia arthemis, one of the first of our butterflies. The dark purple of its upper surface is banded with pure white and adorned with orange spots and blue crescents. The larvae of these lovely butterflies feed upon the elm and willow, and they do little, if any, harm.

But we must not dwell upon the in offensive insects, however beautiful. Let me draw your attention for a mo ment to creatures that work in dark ness to the injury of the trees. Some of these belong to the Hymenoptera Tremex Columba, Uroceros albicornis, U. cyaneus, U. flavicorius. They are large handsome, but formidable look ing flies. Their larvae tunnel in various trees, and do much damage. For tunately their numbers are kept down by several species of even more dan



TREMEX COLUMBA.

gerous-looking ichneumons; Thalessa atrata, T. lunator, T. nortion, etc. The larvae of these follow up the larvae of the others and devour them. Many a tragedy, that we know not of, is done in the darkness.

The larvae of many beetles are borers. I dare say that this log on which we are sitting is bored through and through by the larvae of *Orthos* oma brunneum.

We do not greatly wonder that lar vae of some of the four-winged flies, and some of the beetles should bore in timber; but it does seem remark able that larvae of some of our moths should do the same.

Turning our attention to the trees again. There is a white cedar. Cedar is not plentiful on the eastern town ship farms. The man who owns a cedar swamp owns a mine of wealth, for cedar is of great value for shingles. There are, however, extensive tracts of cedar elsewhere.

Cedar, to the lumber firms, is almost twice as remunerative as spruce.

The white birch is another valuable tree. The spools which are of use all over the world are made from its wood.

There are districts in which the white birch (or "Bouleau," as the French call it) grows abundantly. Such a tract is that from Matane to Cap Chat, on the south coast of the St. Lawrence.

Observe that small tree with blos soms resembling hops. It is the hop hornbeam or iron wood (Ostrua vir ginica). Young trees of this kind and young ash trees furnish the farmer with levers firm and good.

Even the bushes around us are worthy of our attention. There is the moose-wood, also called wicopy (Dirca palustris). You cannot break a stick of it—the rind is too tough; but the wood when peeled is remarkably brit tle. The farmers when short of string use strips of the bark, which is pliant as well as tough for tying up the mouths of their sacks of grain.

As we make for home, let us con

sider the condition of things in some parts of the country.

It is grevious to see the way in which farms are often mismanaged. Men with little means, and less judg ment, buy farms "on time," at more than their value. To meet their pay ments these men have to part with everything that will bring money. They have not wherewithal to pur chase sufficient stock; and they sell the hav off their land year after year-im poverishing the farms more and more. They cut down their woods, and sell the maple for fuel, and the spruce for pulp-wood. Where there are chemical works within reach the denudation of the land goes on rapidly, for hardwood is in demand for the distillation of wood-alcohol and other wood for feeding the furnaces in the

works. By-and-bye the farm will be so unproductive that the owner will have to leave it.

Our people should seize every suit able opportunity for tree-planting. They should put in trees for wind breaks to their homesteads and orchards, shade-trees for their road sides, ornamental trees for their lawns and parks, young fruit trees to supply the gaps in their orchards, young maples to keep up their sugar woods, useful trees in every waste spot.

In conclusion I would impress upon your minds the advice of an old North Countryman:—

> "Be aye stickin' in a tree 'Twill be up'ards creepin' While ye' are a-sleepin'.

THE FROSTED PANE.

One night came winter noiselessly, and leaned Against my window-pane. In the deep stillness of his heart convened The ghosts of all his slain.

Leaves, and ephemera, and stars of earth,
And fugitives of grass,—
White spirits loosed from bonds of mortal birth,
He drew them on the glass.

-Charles G. D. Roberts.

Ganadianism.

BY PROFESSOR REYNOLDS.

O Child of Nations, giant-limbed, Who stand'st among the nations now,

Unheeded, unadorned, unhymned, With unanointed brow,—

How long the ignoble sloth, how long The trust in greatness not thine own? Surely the lion's brood is strong

To front the world alone!

But thou, my country, dream not thou!

Wake, and behold how night is

done,—

How on thy breast, and o'er thy brow, Bursts the uprising sun! —Roberts.

HERE seems to be in these days a searching of spirit among many Canadians, making for nationhood. To making of the a nation there goes unquestion ably not merely a political organ ization, such as we have in Can ada, pronouncing the different prov inces one dominion; but also, and chiefly, a national spirit, resulting in the uniting of aim and purpose. How ever diverse in character the individ uals of a nation may be, nevertheless a single spirit may be said to actuate the national councils, otherwise it can not be a nation.

Against the growth of such a na tional spirit in Canada many factors have operated, and are still operating. Among these may be mentioned the following:

The country is young. Back of the present generation there is compara tively little in the way of history or tradition, the knowledge and recollec tion of which may form a common bond of sympathy for Canadians.

The country is wide and the various provinces are separated by great physi cal barriers. This great extent of the country and the physical separations result in creating a number of separate units, each with its own local needs, and problems, and each being more or less uninterested in the situation of the others. British Columbia has its prob lem of Asiatic immigration; the Mari time Provinces have their problem of American trade and connection in its relation to confederation. When one, in travelling from British Columbia, has passed the mountains, a new coun try is reached with new physical as pects, new conditions, and, in a mea sure, new ideals.

The people are not indigenous. With the exception of a more or less rapidly decreasing number of native people, the inhabitants of Canada are of foreign extraction. Either they or their immediate ancestors have come from some foreign land, bringing with them the political and social ideals, the folk-lore, the customs and traditions of that foreign land. To complicate this situation, not one land only, nor even a few, but many such foreign lands are represented in our population.

Here, then, we have the facts; a newly organized country of vast ex tent, sparsely settled, presenting insis tent material problems of development, the distinct members or provinces of which are, for the most part, divided by great physical barriers; a popula tion not indigenous but composed of diverse races, each race having its own imported language, and social and political ideals. What forces are to unity these separate entities into a nation with a well defined national consciousness?

In discussing this topic I wish to be as brief and specific as possible, and, for this reason, am enumerating the points formally. As to the unify ing forces, these may be mentioned as the chief:

Constructive statesmanship. It is the business of statesmen, in the high est sense of the word, not merely to devise and enact laws for the govern ment of the country, and not at all to persuade voters and to carry elections: but it is the business of statesmen in Canada to discover and expound those great political interests that all of the provinces have in common. Such great common interests may exist and not be clearly apprehended by the ordinary mind or visible to the ordin ary view. Statesmen must discover and announce and cultivate those common sympathies that breed a na tional spirit.

Patriotic organizations are at the present day large and important factors in the development of a Canadian national spirit. These organizations may be the means of collecting and spreading masses of information re specting Canada. Information as to the extent, the resources, the needs, the problems of our country, is the first essential to a reasonable and permanent national spirit. What we want to cultivate in Canada is not that patriotism which indulges in the 'blind hysterics of the Celt,' but a decent self-respect, and a just pride in

the opportunities, political and social, which the country affords.

Among such organizations the Can adian Clubs which have recently sprung up all over Canada are serving a very useful purpose. They are for the most part conducted in a liberal and temperate spirit and gratify the natural curiosity of its members to know, not only their own country, but other countries as well. Speaking for the Guelph Canadian Club and its meetings for the last two years, I may say that a young Canadian could have no better education, as a Canadian, than to have heard the addresses that have been delivered at the various meetings of the Club.

It is the business of the country's literature to put in durable and beau tiful forms the various phases of the country's life and thought, and to inter pret for its citizens those great moral ideals that may be only partially felt by them. In so far as Canada may be said to have national ideals and aims, only so far is a national literature possible. Our Canadian literature is of slow growth, and, unfortunately, there is in Canada too little encourage ment for gifted Canadians to reside within her borders and to find there inspiration as well as a means of sus tenance.

When a distinct national conscious ness shall arise in Canada and possess every representative Canadian, what forms shall it take?

It must embody faith and courage. Only by possessing faith can we be true children of the men and women who came to this land as pioneers and made homes for themselves and for us. In the patriarchal sense these men and women "went,out not knowing whither they went," and in that sense they

exhibited patriarchal faith. It is that faith coupled with the courage to meet difficulties as they arise that has made Canada up to the present mo ment, and it is that faith and courage with which we must face the difficulties that still lie ahead:

"Wild and wide are my borders, stern as death is my sway,

And I wait for the men who will win me—and I will not be won in a day;

And I will not be won by weaklings, subtile, suave, and mild,

But by men with hearts of vikings, and the simple faith of a child;

Desperate, strong and resistless, un throttled by fear or defeat,

Them will I gild with my treasure, them will I glut with my meat."

It must be imbued with the largest measure of personal and political lib erty. Individually there must be full opportunity for every Canadian; and nationally, virtual independence of outside control.

There must exist a spirit of broad tolerance,—a tolerance, within reason able limits, of religious and political creeds, and even of social habits. In no other spirit can the diverse peoples of this country be made one in feeling and in purpose. Religious intolerance and sectarianism in Canada have been

the most serious set-back toward devel opment of Canadianism.

It must be marked by a love of nature, especially nature in her moun tain, lake, and wildwood aspects, and a constant disposition to refresh the physical life and the spirit by dwelling amid such scenes in the leisure moments of a busy life.

Even as I watched the daylight how it sped

From morn till eve, and saw the light wind pass

In long pale waves across the flashing grass,

And heard through all my dreams, wherever led,

The thin cicada singing overhead,

I felt what joyance all this nature has, And saw myself made clear as in a glass,

How that my soul was for the most part dead.

O light, I cried, and heaven, with all your blue,

O earth, with all your sunny fruitful ness,

And ye, tall lilies, of the wind-vexed field,

What power and beauty life indeed might yield,

Could we but cast away its conscious stress,

Simple of heart becoming even as you.

—Lampman.



A Trip Through Holland.

BY PROFESSOR HARCOURT.

O a person who has always lived on high rolling land, such as we have in this Province, Hol land, with its level surface, is an ex ceedingly interesting country. From the time we were children and familiar



THE MEETING PLACE OF FIRST HAGUE CONFERENCE.

with the school book story of the heroic action of the little boy who saved his country from being sub merged by stopping a leak in one of the numerous dykes which surround the country, we have been interested in this strange land.

It is probably the lowest country in the world, the greater part of it lying many feet below the sea level. The safety of the entire kingdom, therefore, depends upon the dykes, or embank ments, by which the encroachment of the sea is prevented. In many places these vast and costly structures are equally necessary to prevent inundation by the rivers, the beds of which are gradually raised by alluvial de posits.

Most of the Dutch towns, as well as the open country, are intersected in

every direction by canals, which are rendered doubly interesting by the numerous curious barges which are continually moving backward and for ward upon them, and by the fact that not only the surface of the water, but

the beds of these canals are fre quently considerably above the level of the surrounding country. Amsterdam itself is said to be made up of ninety islands connected by three hundred bridges.

These canals apparently serve a threefold purpose: First, as highways for the purpose of traffic, and even on the smaller canals or ditches boats replace wagons as

vehicles of the farm; second, as drains, by which the superfluous water pumped into them by the hundreds of large windmills, is re moved from the cultivated land; and third, as enclosures for houses, fields, and gardens, being as commonly used for this purpose as fences are in this country.

As might be expected, this reclaimed land is extremely fertile, and the na tural fertility is further augmented by the fact that the farmer has almost perfect control of the water supply. For, if in wet weather, too much water is present, it can be quickly removed by means of water wheels; while in dry weather a thorough system of irrigation is always available. Consequently, when we take into consideration the fact that the farms are small,



BRINGING PRODUCE TO MARKET.

and that the people are hard workers and thrifty, it is not surprising that this country should be noted for its horticultural and dairy interests.

Possibly in no other country in the world are vegetables grown to such perfection, and it is famous also for the production of bulb plants. About the end of April or the beginning of May, whole fields of hyacinths, tulips, crocuses, anemones, lilies, etc., grouped in every variety of color and diffusing hood of the city of Haarlem. It was

not our good fortune to have seen these fields in all their glory, for they were past their best when we visited them, but we could imagine what they must have been at the height of the season.

Of the dairy inter ests and the fine Holstein cattle wad ing in the most lux uriant of pastures, much has been writ

ten and I shall not to stop discuss these; for what ap pealed to me was the evident Dutch love for cleanliness. which apparently sometimes amounts almost to a mono mania; and the pic turesque costumes which may be seen everywhere but more especially in the country tricts.

To see these costumes to advantage, it is necessary to visit some of the out lying villages where they are still worn as an everyday dress. Some of the most interesting of these costumes are worn by the fisher-folk of the islands of the Zuiderzas, those of the island of Marken are particularly noted and the island is frequently visited by tourists. The quaintness of the costumes and the antics of the children, who, like those of other countries, are ever the most delicious perfumes may be ready to do something for money, are seen, more especially in the neighbor a continual source of amusement to the visitor.



HOLLAND COSTUMES.

The children of both sexes are dressed alike, until they are eight years of age. Up to this time they wear skirts and the only way to dis tinguish the boys from the girls is by a marking on the back of the heavy

to make what they could out of them in a legitimate way. There were stores where all kinds of curios illus trative of the life of the people were offered for sale, and the children will ingly sat or stood for the camera man,



TYPICAL MILKING SCENE.

hood worn on the head. After the boys get out of their skirts, they, and the full grown men, wear great wide knickerbockers and broad brimmed hats. After a girl has reached the age of eighteen, her hair is cut, only two curls, one on each side of the face, are left, and these are removed when she is married. All the people, men, women, and children, wear big wooden shoes, and make a great clatter as they walk or run over the cobble stone paved streets.

The houses are small and built of wood, many of them are set up on piles for in the stormy weather of winter the island is frequently covered with water. The interior of the houses we were allowed to inspect was scrupu lously clean and profusely decorated with Delft china and polished brass.

It was quite evident that the people of this island were accustomed to the visits of tourists and were prepared but woe betide him if he has no pen nies for them when he is through.

The villages of Volendam, Mouni kendam, and Broek are all interesting for their costumes, and the latter place especially for the almost exaggerated cleanliness of the houses and streets. Yet, with all the evident care which is taken in keeping the houses clean, the visitor is apt to go away with an uncomfortable feeling that there is still an untidyness or a something about many of the little narrow streets along the canals which leaves an unpleasant impression on the mind. This, I think, is because the houses are, generally speaking, small and old, the land is low lying, and the water in the canals, especially in the smaller ones, is black looking and not so clean as one would like to see it. But there is abundant evidence that these thrifty people do all in their power to make their homes comfortable and clean.

Another feature of Holland which was very interesting to me was a trip through the country on some of the many canals. To the visitor it was very strange to sail along these water ways, the bottom of which was in many cases above the level of the surrounding country, and to find that to get out or into Amsterdam harbor one must lock down or up, as the case may be, some nve or six, or even a greater number, of feet. It was only after seeing these actual conditions that I began to appreciate the magni tude of the work by which this land has been reclaimed from the ocean.

The change of scenery as you pass along these canals has to be seen to be fully appreciated. On every hand, ditches full of water divide the land into fields, in which luxuriant crops grow or fine herds of famous black and white cattle of the country pasture. On the ditches, too, may be seen little boats loaded with the pro

duce of the farm or carrying materials from the buildings out to the fields. At trequent intervals along the banks of the canal, huge windmills are passed, which operate the pumps or waterwheels that pour great streams of water of the ditches into the canals, and others that furnish the power for grinding grain, sawing timber, manu facturing paper, etc. On the roadway, along the bank of the canal, men and women may be seen pushing carts loaded with farm produce, sometimes the cart is drawn by a dog that appar ently enjoys his work. These and many other equally interesting scenes are continually coming into view as you pass along these wonderful canals.

Much might be written of the char acteristics of these honest, thrifty peo ple, who have reclaimed most of their country from the sea, but space will not permit and such will have to be reserved for some future time.



WINDMILL PUMPING WATER INTO



Agriculture



Ganadian Agriculture—Past, Present and Future.

BY HONORABLE JOHN DRYDEN.

HE writer now stands at the close of the second generation of those who have engaged in Canadian Agriculture, My father, as a young man, commenced by attacking the growing forest. When he bravely set forth as a destroyer of the original trees, his only object was to obtain land. None existed in Old Ontario without this covering of the forest. The trees, therefore, must first be de stroyed before the land could be util ized as a farm, so with muscle and will, the axe was applied with a merciless Pine and maple, birch and elm, hemlock and cedar were at the outset ruthlessly destroyed by fire in order that the original settler might utilize the land. After the timber had thus been destroyed, there were still left the stumps, which served as a bar to further cultivation, until they had sufficiently decayed to allow them to be drawn out, roots and all, and piled ready for the fire.

In this destruction of the original forest, the settler soon learned the best method in falling the trees so as to save labor and burn them to the best advantage. In many cases the trees were thrown into large winrows saving much labor, and producing greater

heat at the time of burning, when later on the fire was started.

As we think of it to-day, it seems a great sacrifice of original wealth. What immense value would be placed now on a thousand acres of this fine timberland? Strange to say, few of the original settlers ever expected to see the country entirely filled up in their day. At first the progress was very slow, only now and again one or two being added, when suddenly from Great Britain and Ireland they began to come in hundreds, and the best lands in the counties bordering on the great lakes were taken up within a few years. Generally, these were the choicest settlers, bringing with them to the new country much of intelli gence, integrity and hope, coupled with a strong resolution to patiently wait until they could carve out their new homes. They readily adapted them selves to their new surroundings, and their children grew up Canadians, skilled in the use of the axe, and the torch, so with thousands striking at the same time, it was astonishing how soon the face of the country was changed.

I was born on the farm now known as "Maple Shade," in 1840, too late to

take any part in destroying the ori ginal forest, but in time to have a part in the finishing touches needed to re move the last of the stumps.

The agriculture of that day was necessarily meagre. Implements were few and very crude at that. The three cornered drag or harrow was the prin cipal piece of machinery used in culti followed, and years later peas, then corn and roots were added.

As machinery could not be utilized, all sowing and harvesting were done by hand. The hand sickle was used with great skill by those early settlers. Afterwards the cradle followed and was considered a great addition to the harvesting machinery.



THE LATE JAMES DRYDEN, Father of Honorable John Dryden, and one of Ontario County's Earliest Settlers.

vating for some years, as naturally the stumps could not be removed.

Oxen provided the only motive power on every farm, and were in use for many years after horses were in troduced, each proving a complement to the other.

Fall wheat was invariably the first crop grown, and the lands first settled were those suitable to this crop. Oats Threshing was done mostly by the tramping of horses or oxen, on a hard, smooth earthen or plank floor. In ad dition the flail soon came into common use for this work, and later a very crude threshing machine driven by horse power, with no apparatus for separating straw and grain, which process was necessarily done by hand. This machine was very crude indeed, but it

was very soon improved, and these im provements have continued to the present time, culminating in the machine of to-day, which seems alive with in telligence, as it draws the grain to its mouth, cuts the bands and carefully separates straw and grain, blowing the latter into the granary bin, and packing the straw in the mow.

The first settlements were near the Great Lakes, as affording a ready out let for the produce; but soon the rush of settlers compelled the selection of farms far inland. To those the problem of transportation was by far the

ways were projected in various directions, and this work still continues making a veritable network of iron tracks over which the yearly products are now carried to the best markets.

About 1862 the writer began, as a representative of the second generation, to guide the further development of agriculture on his farm. He found it largely as nature left it. The forest had been removed, but if portions were naturally wet, they were still in that condition. The old rail fences had de cayed and must be replaced. A second campaign was instituted, replacing the



THE FIRST DWELLING HOUSE AT MAPLE SHADE.
The birthplace of Honorable John Dryden.

most important which presented itself at that time. As soon as the fall of snow was sufficient, hundreds of horse teams could often be seen following each other to the lake front. It was not a case of choice but one of neces sity. The need of the time was the iron horse.

The writer, when a boy at the old Grammar School in Whitby, saw the first locomotive which came east from Toronto over the Grand Trusk. Soon after the completion of this line, rail old snake fences by straight ones, posts and rails being largely used or in some cases lumber, culminating in the wire netting of to-day. Every field was at tacked in turn with under drainage, where it was needed. Some portions required to be covered at regular in tervals, thus year by year this work was prosecuted with diligence, until to-day the whole farm of 420 acres presents the same condition of surface, and a stranger would not know that nature had left the lands in a very dif

ferent condition. This, I take it, has been the rightful work of the second generation of farmers in Ontario. The third generation is now being installed and starts with the advantage of this extra work being completed, leaving only cultivation and tillage demanding their attention. But each generation meets its own difficulties. never heard of by our fathers now fill the soil and impose ever increasing labor to keep them down. If all farmers were equally energetic, the difficulties would be lessened, but with a neighbor allowing "sow thistles" to go to seed over on the other side of the fence, how can they be kept out?

The first generation of farmers paid little attention to live stock, having no facilities for taking them through the winter. It required a considerable ad ditional capital outlay to provide the necessary shelter and conveniences as well as to purchase foundation stock. Gradually, however, these have been supplied until many farmers dispose of their surplus grain entirely through the live animal. This plan increases the supply of stable manure which is now essential in increasing the fertility of the soil. Improved breeds of all classes of animals have since been in troduced, so that the largest returns possible are being secured. These live animals really carry on their backs the value of much of the grain grown, and stepping on the car for shipment they represent also the value of much of the labor expended on the farms pro ducing them. More and more will the grain grown in Canada, be sold in this way. In order that the largest returns may be obtained, the best breeds must be utilized and selection from these rigorously carried on. In no

other way can the best results be reached. The sale of grain through the live animal will guarantee continu ous recuperation of the soil so that with a thorough system of cultivation the soil of the best farms will never lose its strength for production.

Great and rapid advances have been brought about in two generations, but the world still moves forward, and we may expect still greater changes to take place. In the great cities the "motor" is driving many of the horses from the streets. The writer believes that not many years will pass before the motor will find its place on the farm. The steam plow is now used extensively on the great prairies of the west, but we believe a lighter machine covering much less area will be in use In the heat of the summer months when cultivation is most effec tive, the strain on horse flesh is most severe. How happy would a farmer be if he had an iron horse which would not sweat nor tire, but might be forced through twelve to fifteen hours per day when the work would prove most effective. This I prophesy is the next great innovation in Canadian agricul ture. The perfection already attained in the motor engine warrants us in this forecast. One man with four or five plows working through the entire day would outrun five other men and teams on neighboring land. The machine eats only when it works, while the horses eat always whether at work or play. This will prove to be one of the great advances of the present genera tion. It will tend to a more perfect and skillful agriculture affording time for many things which cannot now be reached. This generation must expend more labor on the land than the last

if it is to maintain its strength for production. The virgin soil is all gone, and henceforth the production will depend largely on the tillage and natural fertilization.

An increasing demand will be felt for our Canadian fruits. Some portions of Canada excel in fruit production. Let those owning such lands fear not to enter upon this branch of agriculture, for greater and still greater will the demand grow. Fruit, dairy products and live stock may be largely increased in Canadian agriculture without any danger of loss.

We who are witnessing the closing days of the second generation may leave with those who are commencing the work of the third, the solution of such problems as now face them. They are mostly educated, resolute and pro gressive, and we believe will meet every new difficulty with skill and wis dom, changing methods if need be, but ever maintaining the ascendancy of Canadian Agriculture.

Observations on Breeding.

BY PROFESSOR H. S. ARKELL, MACDONALD COLLEGE.

One learns much that yields food for thought in the study of his cattle. Why is it that individuals differ so widely in the response they make to feed? I speak as an amateur in the art of animal breeding. One vields milk, and continues so to do through a long milking period, as though milk production were the constitutional habit of her system; it seems the most natural thing in the world for her, and even under adverse conditions the habit still remains. Another presents a fine appearance at calving, makes a good beginning, then lags in the race, and the final return measures not at all above the average. In the one, the influence of all internal agencies seems to be toward the conversion of feed into milk, in the other there is a lack of harmony somewhere amongst these vital forces and there seems to be an

impediment that hinders and obstructs. The system of the one is free, that of the other is bound, constitutionally so. I can phrase it in no better way. In the one instance the breeder works and as it were co-operates with nature, in the other, at best he finds an uphill fight and makes but a lean return.

What may be the explanation? I take it that if we could unravel the mystery of heredity and the science of breeding we should find our answer. These still, however, present problems that are not yet solved, but, neverthe less, I am convinced that, practically, we may learn many things. May we emphasize first the importance of in dividual animals? May we not often fail to give due credit to the excel lence of individuals in the herd? I be lieve that one cow may be worth more to her owner, looking toward herd im



Shorthorn Cow Wilker (imp.), 84502, owned by Macdonald College, Quebec, showing a decided development of the milking type in the Shorthorn.

provement, than all the rest of his cattle put together. Milk production is more than an acquired character istic, it is a property that may be latent or active in the blood. When we find an individual with all the natural vital forces of her constitution in such har mony that she responds freely and without restraint to the efforts of her owner to make her yield a generous return, he cannot afford to have those vital, potent agencies dissipated waste fully by indiscriminate breeding, but must seek to introduce them into the blood of others of his cattle looking to the improvement of another genera-

tion. The history of a breed may be written as a biography of the influence of its outstanding ani mals, and if we would breed wisely we must find and use the scat tered individuals that excel.

The thought has come to me that we may com pare the progress of breed ing to the passage of a stream of water. Into it comes at various intervals the slow stagnant water

of a level countryside. The stream is even more lifeless than before. Such is the union of blood in cattle where there is no dominant characteristic, but mediocrity. It marks rather recession than pro gress, for mediocrity can scarce maintain, even through its volume, what has already been attained and lacks altoegther the power to renew and im prove. Then, again, the

stream may receive a tributary, whose source lies away in the mountains, and the clear swift torrent of the upland pours its power and energy into the trubid river which feels the influence of its life for miles and miles. Of such is the ap pearance here and there of individuals that excel.

Let me make my moral clear. Sires are all too frequently used in a herd that yield nothing to it of vital energy or of individual strength. Their dams and their sires' dams were but drudges that could barely pay their way. Their ancestry was of a negative sort



Pleasant Valley Jilt, Grand Champion Shorthorn Female C. N. E., Toronto, 1998, Prop. Geo. Amos & Son, Moffat, Ont. A type in which Beef Production has been highly developed.

with no positive element in it and their blood was as lifeless as the waters of the stagnant river. On the other hand a sire may be used that will bring the herd to life again. He has behind him the heritage of intense life, and his blood is as virile and fresh as the sparkle of a mountain tor rent. There is power in blood and we must find the individuals that possess it.

But whence came this power? We have yet to emphasize the importance of pedigree. Pedigree is almost value less unless the animals appearing in it be known, and it is my own belief that only the near ancestors are of much importance. In the Old Testa ment dispensaiton, the sins of the fathers were visited upon the children not farther than the third or fourth generation, and I question whether in cattle breeding the virtues of the par ents are manifested for a much longer period. It is true that irregular char acteristics will appear for many gen erations after any introduction of for eign blood, but when a type is fixed,

the influence of remote ancestors will scarce merit consideration. On a well-established breed, I take it that a pedigree has very little value except as it obtains it through the merit of the top crosses.

In the pedigrees of milking cattle, it is again the performance of the dams (with all that it signifies of active nutrition and secretion), that counts for a very great deal. Together with this is the happy union of strains through the mating of sire and dam. May we define the "nick" in breeding as the ability of the breeder to keep the blood of his cattle fresh and virile and in that way prepotent. Too great similarity or consanguinity of blood relationship must eventually end in stagnation and deterioration. It may be that there are possibilities of out cross which will yet find favor, though now condemned. Shall it be mentioned, however, as a final word that there are few agencies which will so assist in preserving the activity of blood as a vigorous existence and a natural, unpampered life.



COLLEGE CATTLE.



Experimental



The So-Galled "Alaska" Wheat.

BY PROFESSOR ZAVITZ.

E have recently read sensation al articles regarding the pro duction of heat from ashes. of molasses from cornstalks and of sugar from sawdust. Even more re cently, we have read improbable ac counts and amusing statements re garding the "Protection Wheat" in Ohio, the "Miracle Wheat" in Virgin ia, and the "Alaska Wheat" in Idaho. These wheats have all been selling at high prices, and the last named variety in particular has received a very large amount of free advertising through the public press of the United States and of Canada. As probably more has been said about the Alaska wheat than either of the others, the present article will deal with this variety entirely.

It is stated that the Alaska wheat was found growing wild amongst the rocks in Alaska in the year 1903, and that since that time it has been grown on the farms in Idaho with wonderful results. The promoters claim that it has yielded 222 bushels of No. 1 hard wheat to the acre in large tracts, and even more in favored places, that it is resistant to both frost and hail, that it will thrive in a temperature of 140 de grees, and that for the best results it matters but little whether it is sown in the autumn or in the spring of the year. This reminds one of the de scription given a few years ago of the

wonderful "Corn Wheat" in Idaho, which was going to revolutionize American agriculture, or of the no torious "Sachaline Fodder Plant" from Russia, which would withstand both fire and water, and which would grow to a height of fourteen feet in three years, and thereby enable the cattle to stand in the shade of the plant when eating the crop. The corn wheat turned out to be a well known old variety of but little value in America, and the Sachaline is practically useless for Ontario, as it freezes down nearly every spring, and as the cattle refuse to eat the plants at any stage of growth, which seldom exceeds three feet in height.

In order to obtain as full information as possible regarding the Alaska wheat, the writer communicated with the Agricultural Colleges in the States of Idaho and Washington and also with the originators and producers of the Alaska wheat.

The Professor of Agronomy at the Idaho Agricultural College wrote, under date of August 27th, 1908, that he saw no reason for doubting that the Alaska is the ordinary Miracle or Egyptian wheat (*Triticum turgidum*), of which Eldorado and Seven Headed are two of the varieties. He also stated that the very best fields of Alaska wheat in Idaho this year did



Alaska Wheat. Club Wheat. Alaska Wheat.

COMPARISON OF HEADS OF ALASKA AND CLUB VARIETIES OF WHEAT. (NATURAL SIZE).

not exceed 35 bushels to the acre, and that others gave considerably less than this amount.

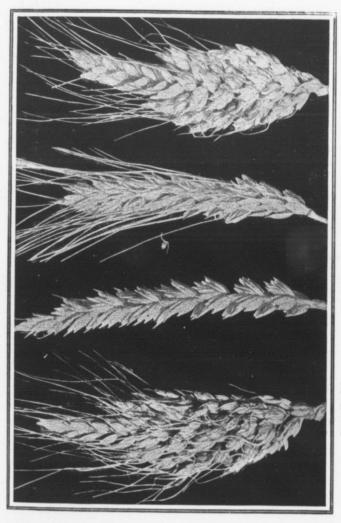
The Director of the Agricultural Experiment Station of the State of Washington wrote on August 26th, 1908, as follows:

"I will say that the wheat in ques tion is undoubtedly the same thing as the old Miracle or Seven Headed wheat."

The Miracle wheat is a winter variety in Ontario, and has a branching head of good size. This wheat was grown at the Ontario Agricultural College previous to 1893. As it gave comparatively poor results, however, it was dropped at that time. It produced 20.6 bushels of grain per acre in 1891, and 27.7 bushels per acre in 1892.

The Seven Headed variety of wheat also possesses a branching head. It has been grown as a spring wheat at the Ontario Agricultural College each year since 1896. There is certainly a close resemblance between the Alaska wheat, as grown in the United States, and the Seven Headed wheat, as grown in Ontario. The reader will observe this close resemblance in the illustrations accompanying this article.

The Wild Goose variety of the ma caroni wheats and the Red Fife variety of the flour wheats are amongst the best known spring wheats grown in Ontario. In endeavoring to ascertain the real value of any other kind of spring wheat, it seems natural for us to compare the newer introduction with these two varieties which are al



Seven-Headed. COMPARISON OF HEADS OF RED FIFE, WILD GOOSE AND SEVEN-HEADED VARIETIES OF WHEAT. (NATURAL SIZE), GROWN AT ONTARIO AGRICULTURAL COLLEGE IN 1998. Wild Goose, Red Fyfe. Seven-Headed.

ready quite well known throughout the Province. For the sake of this comparison, the attention of the reader is referred to the results here presented. The following table gives the number of bushels per acre in each of thirteen years of the Red Fife, the Wild Goose, and the Seven Headed varieties of spring wheat grown in the Experimental Department of the Ontario Agricultural College.

Year.	Red Fife.	Wild Goose.	Seven Headed.	
1896	15.7	20.4	2.5	
1897	20.3	23.1	6.5	
1898	34.2	48.3	24.7	
1899	39.2	44.5	26.4	
1900	46.3	48.4	39.4	
1901	24.1	32.1	22.2	
1902	31.9	33.5	25.0	
1903	43.5	47.1	34-3	
1904	22.2	47.1	33.2	
1905	35.9	41.5	30.8	
1906	33.9	36.0	28.2	
1907	28.0	33.2	19.1	
1908	36.3	25.6	24.5	

The average yield per acre for each variety for the thirteen years was as follows: Red Fife, 31.7 bushels; Wild Goose, 37 bushels; and Seven Headed, 24.4 bushels. It will be observed that the Seven Headed gave a yield of al most forty bushels per acre in 1900, which was at least five bushels per acre greater than the highest yields of the Alaska wheat in Idaho in 1908. It

will also be observed that the Seven Headed variety gave a yield of less than seven bushels per acre in each of two years. The yield in 1908 was 24.5 bushels per acre, which is practically, the same as the average production for the thirteen year period. It will be seen that both the Miracle winter wheat and the Seven Headed spring wheat have given comparatively poor yields in Ontario. The writer wrote to the promoters of the Alaska wheat with the hope of securing some of the seed for sowing in the experimental grounds at the College, but was unable to purchase a small quantity for experi mental purposes. The present crop was advertised at twenty dollars per bushel.

Farmers, who pay high prices for the so-called new varieties of farm crops before the Experiment Stations are allowed to thoroughly investigate the matter, have themselves to blame. The writer believes that there are not many farmers in Ontario who are led astray by the sensational advertising of farm crops with the object of en riching the promoters of these new and wonderful varieties. The Govern ment of Ontario is doing much to pro tect the farmers by its extensive sys tem of experimental work conducted at the Ontario Agricultural College. and through the medium of the Ex perimental Union.

The Treatment of Seed Grain for Smut.

BY J. W. EASTHAM, B.Sc.

Although the number of species of fungi which have been observed on our various grain crops is considerable, those which are usually responsible for

serious damage can be included in two groups, according to whether the dis case produced is of the nature of a "rust" or a "smut." Smuts are dis tinguished by the fact that the para site at one stage of its life in the in vaded tissues of the host produces a powdery mass of brown or black spores; sometimes, as in the case of ecorn smut, of large size.

The smut fungi which attack grain crops differ considerably, but not only in the appearance they present during their spore-producing stage; and in the way they affect the host plant, but also in the manner in which they gain en trance to the tissues of that host. In the case of the loose smut of ours and barley, and the stinking smut or "bunt" of wheat, the spores adhere to the seed grain and are sown with it. In the soil they germinate under the same conditions as the grain and produce minute secondary spores (con idia), which in their turn are capable of sending out a delicate fungus thread. Such a thread, or hypha, can penetrate the external tissues of a plant and take up its abode amongst its internal cells. Here it grows and spreads form ing a network of fine threads (the my celium) which keeps near the growing tip of the plant. While the ears are forming large quantities of nutriment is-being conveyed to them and the fungus now seizes the opportunity, preys upon the food intended for the young grain, and uses it for the form ation of the myriads of spores so char acteristic of a smutted plant. In the cases, just mentioned, infection is only possible during the seedling stage, tak ing place in all probability through the first leaf-sheath. Should the plant es cape infection at this critical period it would appear that the outside tissues become too resistant to be afterwards attacked.

In the case of the loose smut of wheat the spores from the smutted ears are carried by the wind into the flowers of other wheat plants. Here the spore germinates and produces a hypha which penetrates into the young seed, so that the fungus is established ready for its work of destruction be fore the seed is sown. The spores of corn smut, on the other hand, produce a germ thread capable of infecting the young tissues of the corn plant at any stage in the growth of the latter and at any point, so that leaf, stem, tissue and cob may alike suffer.

These differences in the life-histories of the various forms have an important practical bearing. With the first men tioned kinds it is evident that, if we can by any means destroy the spores which adhere to the seed sown without injuring the seed, we greatly reduce the possibility of a smutted crop. The plants, as we have seen, are not vulner able above the level of the ground and of the number of spores carried by the wind to the soil only a very few are likely to be placed in positions favor able for an attack on the grain. Es pecially is this the case with stinking smut of wheat, where the spores re main for the most part enclosed in the wall of the grain. It is indeed doubtful whether spores which have spent the winter in or on the soil are capable of injury at all. In the case of the loose smut of wheat, the fungus is es tablished in the seed before the latter is harvested and it is easy to see that any measures taken to destroy the fungus are almost certain to act injuri ously on the germ of the seed. With corn smut, again, since infection may occur at any place where the tissues are still sufficiently delicate, no method of treating the seed can be of value.

Seed treatment of some kind to les sen the injury due to smuts has been carried on for a long time, having been directed particularly against stink ing smut. Over a hundred years ago, before the nature of the disease was at all understood, it was noticed that the presence of spores amongst seed grain was associated with the disease in the crop produced by it. It was also found that washing with water or treat ment with various substances dimin ished subsequent loss.

In Morton's Cyclopaedia of Agricul ture (1851) the following substances are mentioned as finding employment in different localities against stinking smut, viz.: Salt, hot milk of lime, ar senic, chloride of lime, corrosive sub limate, and verdigris. Since then many other substances have been ex perimented with amongst which we may mention potassium permangan ate, lysol, sulphuric acid, potassium sul phide, formalin and picric acid. Patent preparations have also been placed on the market, notably one with the made name of "Ceres Powder," which has found considerable sale in Europe though probably little in America. Treatments have also been devised which do not depend upon the action of a chemical substance, but upon the effect of a sufficiently high tempera ture in destroying the vitality of the spores. Such was the hot water method advocated by the Danish ex perimentor Jensen, which consists in placing the grain for a few minutes in water kept at a temperature of about 132 degrees F. By this means the spores are killed whilst the grain is uninjured. This hot water treatment is unquestionably very effective if properly carried out, but in practice the successful management of the necessary details is somewhat difficult.

A little consideration will show

where the real difficulty of such methods lies. A seed and a fungus spore are after all quite similar in their nature. Composed of the same essential materials, and responding in similar fashion to various external conditions. By means of chemical substances, or changed physical conditions, it is easy to produce an injurious effect strong enough to destroy the spore. To do so without seriously injuring the seed is a more delicate matter.

The first method to receive careful attention was the bluestone or copper sulphate one, which consists in soaking the grain in a weak solution- a half to one per cent.-of copper sulphate or in "sprinkling" it with a somewhat stronger solution of the same chemical. Subsequent treatment of the seed with lime water is usually recommended to prevent the loss of germinating power, which is found to ensue if the unalt ered solution acts for too long a time. This process was carefully investi gated and its merits established by a number of workers about the middle of the last century, but it did not be come widely practised at that time. In 1888 Jensen published his re searches on hot water as a smut-pre ventive, and although his advocacy of this line of treatment did not lead to its general adoption, it called attention to the possibility of successful treat ment, and led to a much extended use of the bluestone method. In 1895 the use of formalin was first recommended by a German experimenter, Gunther, and from its efficacy and ease of appli cation, it has become very widely used. Seed is either immersed or sprinkled, the strength of the solutions recom mended varying considerably.

Recently an extended series of ex

periments on the effects of various treatments on the germinating power of grain has been carried out by Dr. Burmester, and the results published (Leitschift fur Pfenzerkrankheiten July, 1908). A summary of these re sults in the experiments with blue stone and formalin may be of interest.

Bluestone Method.

Oats soaked for f4 hours in ½% solution had their germinating power reduced over 40%. With subsequent lime treatment the loss, however, was very little. Sprinkling with 1% solutions, caused a decrease in germinating power of 10%, whilst with 2% solutions the damage rose to 30%.

Barley, similarly treated, showed a loss of 6% only; whilst with lime treat ment, the loss was practically none. Sprinkling with above strengths of solution, caused losses of 2%, and 16% respectively.

Wheat of two kinds was used, viz.. Criewener, and Strabe's Bearded. Soaking the former 14 hours in 1/2% and 2% solutions, lowered the germin ation 29% and 62% respectively; lime treatment reducing these figures to 18% and 47%. Sprinkling with 1% and 2% solutions, caused losses amount ing to 19% and 50% respectively. Strabe's wheat with 1/2% solution showed a loss of 7%, and after lime treatment, 5% only. Sprinkling with 1.4% strength, caused a loss of 8%.

Of the grains used in the above tests, barley appears to be the least susceptible to injury, whilst oats are very sensitive to copper salts. In the case of the wheats the great differ ence between the two varieties in the degree of injury sustained is probably due to differences in the damage to the grain caused by thrashing. Obviously damaged grains were rejected, but minute injuries not visible to the eye would be sufficient to admit the solution to the germ in injurious amounts. The effect of the subsequent treatment with lime in reducing the loss of vital ity in the seed is very clearly shown by the preceding figures.

Formalin Method.

It had been previously found that soaking for two hours in 1% solutions was enough to destroy all smut spores. In the following tests the grain was soaked for four hours in 1% and 3% solutions. With the former strength, Criewener wheat—so sensitive to blue stone—showed a loss of only 2% whilst barley and oats showed none at all. With the 3% solution the diminution of germinating power was 27, 15 and 11% for the respective grains.

These figures show that soaking in a 1% solution twice as long as is necessary to kill all spores is practically harmless to oats and barley. Wheat may suffer some injury but to a much smaller extent than is incurred by the bluestone method, even if the latter be followed by application of lime.

All the treatments above mentioned were found to be thoroughly effective in preventing smut.

None of the other methods tested gave results of the same value as those from bluestone and formalin, and the reputation which the latter has gained in agricultural practice does not seem likely to suffer by compari son with any of the methods so far de vised



Horticulture



The Rural Scenery of Ontario.

BY D. H. JONES, B.S.A.



"How bless'd, delicious scenes! the eye that greets

Thy open beauties or thy love retreats; The unwearied sweep of wood thy cliffs that scales;

The never ending waters of thy vales.'

-Wordsworth.

France, in England, and in Scotland, yet never have I viewed a scene that I consider superior to this that stretches now before us." So said a traveler to the writer not very long ago as we stood together overlooking a broad sweeping valley, the far side of which steadily rose to the distant horizon. Prosperous farmsteads inter

spersed with woodland were scattered all along its gentle slopes, and here and there were herds of cattle grazing, making altogether a rural picture of enduring charm.

The scene referred to is not very far from the City of Guelph, and though perhaps the opinion expressed concerning its merits might be questioned by other travelers, it surely is a scene worthy of praise and one to be much prized by those who live in its vicinity. The selective powers of an East, a Murray or an Aumonier could readily make of it a canvas worthy of the line at the Royal Academy Exhibition or the Paris salon. And this particular

which, wherever he may go, man will

not find a scene of greater charm or

more romantic beauty. While sailing

through the thousand isles at daybreak

in the summer, when the glorious

golden glow of dawn is stealing over

landscape is not by any means the only one such in Ontario. All that is need ed is the seeing eye and the interpreta tive hand and the many, many scenic beauties of the country would be brought before our notice in such a way as to enforce our recognition of their intrinsic merit.

the earth, one may without a stretch of the imagination feel himself to be in an enchanted land. Overhead the deep blue of departing night, with here and there a fading star just glim mering through the ether, the blue paling toward the horizon through many pearly tints and mixing with amber and the orange of advancing day; the placid waters all TYPICAL we have not in the prov SUMMER ince any mighty or solitary peaks

that tower away into the skies, with clouds enveloping their forms. But if we have not a Rocky Mountain range, or a Mont Blanc, or a Mount Stephen to draw sight-seeing travelers to our midst in search of the sublime in na ture, we have their equal in seenic majesty—the monarch of the water falls of all the world—the booming, rumbling, roaring Niagara, tumbling for-ever and for-ever over the dread precipice at our southern boundary the Lake of the Thousand Isles, than

around seen in vistas through the islands which with every hue seen overhead are mirrored in their depths; the castellated buildings of the mag nates of our land that rise above or show between the thickly foliaged trees, and the little rustic dwellings of less pretentious men that jut out at the water's edge—these all together

SCENES

combine to make a panoramic view, which once seen is never to be forgot ten; reminding one somewhat of Coler idge's Kubla Khan.

"And here are gardens bright with sinu ous rills,

Where blossoms many an incense bear ing tree;

more and more each year by jaded city dwellers in search of rest and recrea tion.

Such, however, is not the scenery on which we wish to lay most stress. Our rural scenery is not so much that which is reserved as a tourists para dise as that which is found in close proximity to our dwelling places. And here again Ontario is well blessed. Although our immediate forbears have in many instances been vandalistic in their onslaught on our virgin forests, and have left too few of those magni

ficent trees, which or iginally existed in profusion, to beautify and give dignity to the landscape, yet

And here are for ests ancient as the hills,
Enfolding sunny spots of green

TYPICAL

ery.
Twenty miles meandering with mazy motion

WINTER

Twixt wooded isles the stately river ran,"

Again in Muskoka, and the Abitibi, and around the Georgian Bay, we have such scenery as may not be found else where—scenery possessing a charm, a wildness, a ruggedness with its rocks, its rapids, its lakes and trees, peculiar to itself and which is being sought after

here and there occasionally we see them, and in places comparatively early settled we find some splendid samples of second growth spreading their vigorous limbs in dignity and stateliness.

SCENES

Who that has driven along the road



that runs from Guelph to Hamilton and has not been delighted with the magnificient sweeps of landscapes that open to the view as one rises to some point of vantage on the undulating road. Down through Aberfoil and Morriston and on through Freelton until we reach the steep descent which leads us to the bay. As we zig zag down the hill and look before us, we are greeted with a view that, bathed in evening glow would have provided Turner with an ecstacy, and undoubted ly the scene would have found its way into his Liber Studiorum and given an original fit to hang alongside any in the National Gallery. It would have been a second "Crossing the Brook." On either side we see well wooded broken hills, and as we turn a corner in the road the bay lies stretched before us, and on the further side the hill of Ham ilton rises above the city, somewhat dim in the evening light and city's smoke, and a glimpse beneath the rail way bridge to the left gives a vista stretching far away over the lake ap parently to infinity-just such a scene as Turner loved.

Who that has wandered through the glen at Rosedale or has sauntered along the banks of the Don in the neighborhood of Toronto, or has even seen pictures or photographs of scenes found in these places and has not been forced to admire the beauty abounding in them? These are all within the reach of every resident in Toronto on a summer half holiday, and undoubtedly there is many a one familiar with these places who has felt as Wordsworth did when he penned his Tintern Abbey:

"These forms of beauty have not been to me

As is the landscape to a blind man's eye:

But oft, in lonely rooms, and 'mid the

Of towns and cities, I have owed to them.

In hours of weariness, sensations sweet,

Felt in the blood, and felt along the heart;

And passing even into my purer mind, With tranquil restoration."

In the neighborhood of Niagara, too, the Falls are not by any means the only scene of beauty. From the top of Queenston Heights views may be obtained that should prove an inspira tion to the poet, the painter, and the patriot. The orchards, the elms, the oaks, the luscious fields of growing grass and grain, stretching for miles as far as the eye can see produce a land scape the opulence of which would be difficult to surpass. As we travel from Hamilton round by Galt, what pic turesque broken country greets our eye! and if we make the journey in the fall, when the maple trees are all aflame with crimson, russet and gold, then it is that we are fortunate and our sense of color effects is appealed to to its full capacity.

And such quality of scenery is not confined to the places named; but in almost every quarter of the Province it obtains.

And then our pastorals! How com mon it is to find a picturesque herd of cattle grazing, or a flock of sheep tak ing their fill in the juicy water meadow or on the shady hillside, providing a picture that only needs a Jacques, a Cooper or an Anton Mauve to make it famous in the galleries of the land; or a Gray, or a Wordsworth, or a Lampman to make it famous in our "That Nature ne'er deserts the wise books of song.

Yes, Ontario has a rural scenery of which it should be proud. True, many places have been despoiled, and ugli ness may be said to characterise some sections-the neighborhood of Petrolia for instance-yet on the whole the scenery that greets the eye through out the Province is of a character to satisfy and delight. And when we learn with Coleridge

and pure;

No plot so narrow, be but nature there.

No waste so vacant, but may well em

Each faculty of sense, and keep the heart

Awake to love and beauty,"

we shall prize our rural scenery much more than we usually do.



Christmas Fruits From Florida

BY H. H. HUME, VICE-PRESIDENT AND SECRETARY, GLEN SAINT MARY NURS-ERIES, FLORIDA.

[Note.—Upon leaving the O. A. C. in 1898, Mr. Hume spent some time at Ames, loval, from there he went to Florida, in 1899, as Hortleulturist at the State Experimental Station and Professor of Hortleulture at the University of Florida. In 1904 he was appointed Professor of Hortleulture at North Carolina State University, which professorship he resigned about two years ago to accept his present position. As a writer, lecturer tion, During his connection with the Florida Experiment Station he edited some eighteen bulletins on various subjects. His work on citrus fruits is recognized as one of the standard-works on orange culture.—Editor,]

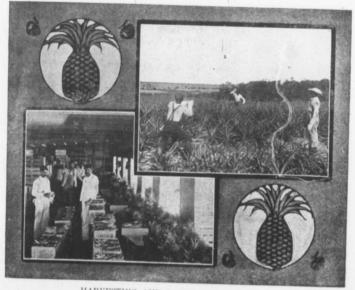


H. H. HUME.

THE Christmas season makes a break in the usual routine of daily living. It is a time when most of us look for the unusual in one form or another,—something different. I used to, and did not fail to find an unusually large stocking, one scarcely intended for my slim shanks. And on Christmas morn, lo! my forethought was rewarded by finding the ample stocking filled to overflowing with fruits and nuts seldom or never seen at other seasons of the year.

Where did they come from? Why Santa Claus brought them, of course, To my youthful mind. Santa Claus was an extraordinary individual, and his garden a wonderland wherein those strange fruits grew. And what was an orange tree like? Did pineapples grow on pine trees? How big was a banana tree? What are those funny looking nuts? These and a dozen and one other questions were asked at the usual small boy rate of four or five a minute. Certainly the answers were either very vague or they made little or no impression on my mind, for I grew up with very hazy ideas concern ing some of those Christmas fruits. In deed it was not until in after years. when I visited the Santa Claus gar dens in many different places that most of the mysteries were made en tirely clear. Some of them linger still, for something of the childhood days, and something of the child, remains with all of us to gain ascendency once more in the declining years. Our metamorphosis is never quite complete, something of the past state still re

A goodly assortment of fruits finds its way to the market at Christmas time, and as new lands are laid under tribute and new fruits are brought to notice, the list is constantly being in



HARVESTING AND PACKING PINEAPPLES.

creased. It now includes the orange, pomelo, kumquat, banana, persimmon, pineapple, grape, pomegranate, straw berry, sapodilla, cactus, fig. date and raisin (grape), to say nothing of the king of all fruits,-the apple. Among the nuts, pecans, filberts, almonds, wal nuts and Bertholletias are the most common. To supply these several fruits and nuts, many lands send their contributions, for the demand is great and ever increasing. It is a note worthy fact, however, that while not more than one or two in the above list are indigenous to North America, yet nearly all of them, and of course many more maturing at other seasons, are grown in the United States.

Not all the fruits just mentioned can be grown in Florida, still the Florida list is sufficiently large and varied to grace the Christmas table of the most fastidious. Those most commonly seen are the citrus fruits, (orange, pomelo, kumquat), pineapple, persim mon and pecan nut.

Pineapples.

Of all the fruits of American origin none surpasses, nay, none equals the pineapple, fresh from the plant. Jean de Lery said long ago that it was fit to be picked only by the hand of a Venus and exclaimed in 1578 "Ananas plus excellent fruit de l' Amerique." Therefore it seems most fitting that we tell of the Florida pineapple fields first.

In making a survey of certain por tions of the lower East Coast of Flori da, years ago, the surveyors entered in their notes that the white sandy land over which they walked, was not worth the annual taxes levied in those early days. That it was good for any thing did not appear possible. Sand as white as Canadian snow, covered with a sparse growth of scrub pine, certainly seemed to justify the estimate put upon it. They are about 99% silicon, so poor that you could hardly raise an umbrella on them and yet the introduction of the pineapple in 1864 has given to these lands a new value, and to-day they are among the most valuable in Florida.

Pineapples were at one time grown in a number of different places in in terior Florida, but this industry has disappeared, killed, the former grow ers say, by excessive express rates, and the bulk of the crop is now pro duced by open field culture between Fort Pierce and Miami. Through this section one may ride for miles through pineapple fields. They occupy a nar row strip of ridge land, from 1/4 to 11/4 miles wide, bounded by swampy or low ground on the west and by the Indian River or some inlet on the east side. The fields are regularly laid out in beds, with paths or alleys between. The plants are ordinarily set 20x20 ft. or 24x25 ft., and about 15,000 plants per acre.

To support the crop on this poor soil, large amounts of commercial fer tilizer are used. In fact it is not far from the truth to say that these lands receive the maximum amount of fer tilizer annually used on any crop any where. The applications total upwards of 4,000 pounds each year. Herein is the secret of it; the san'd supplies a foothold for the plant (the drainage must be and is good) and the fertilizer sack supplies the necessary food.

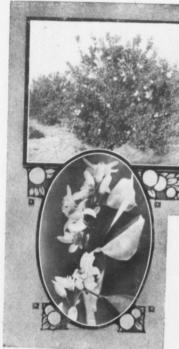
The fields are set with slips or suck ers broken from the older fruiting plants, and these come into bearing about twenty months (a little more or less) from the time of setting out. Set in August or September, the first crop from slips is produced a year from the following June and July. On well managed plantations ninety-five per cent. of the plants will bear fruit the first season. Red Spanish which some mistaken writers have likened to the Ben Davis apple is the principal variety.

The main crop is produced in June and July, though some fruit is usually found throughout the year. The win ter crop, because of the lack of heat and sunshine, does not equal the sum mer crop in quality or lusciousness.

In gathering the crop, two men usually work together. One with his lower extremities protected by stout canvas leggings, makes his way among the spiny leaves through the beds. breaks or cuts off the fruit and tosses it to his co-worker in the alley, who places it in his basket or box. It is then taken to the packing house, where the fruit is packed in half barrel crates. Each fruit is wrapped in paper and 18. 24, 30, or 36 fruits are usually placed in the crates.

Pomelo.

The Christmas breakfast, according to the way of thinking of many people, is incomplete without this tonic and appetizing fruit. I do not call to mind that anyone has ever separated the bit ter principle of the pomelo, but in its purity it must be as bitter as quinine. When one gets hold of a poor stunted specimen, it is not likely he will eat much of it unless he feels he needs medicine. One is likely to swallow al most anything on occasions of that kind. But the well grown fruit, brought to maturity in the heat of Florida's sun is a delightful blending



3. POMELO BLOSSOMS.

of acid, sweet and bitter, that whets one's appetite for the more substantial part of his breakfast.

Pomelos are known as grape-fruit in most of the markets. The name has been applied because of the grape-like clusters in which the fruit is frequently borne. The trees are much like orange trees, but with larger, brighter leaves and the trees grow to larger size. The crop of fruit on well grown trees is often very large—measured in boxes, fifteen to twenty. So completely is the crop covered by the foliage that one would think there was hardly any.

1. POMELO TREE IN FRUIT.

 GRAPE-LIKE CLUSTERS OF TRUMPH POMELO.

This inside fruit is usually the best and brightest. It looks as though it were made of wax. Good specimens mea sure from four to five inches in diamet er, and from forty-eight to eighty fruits are required to fill the Florida orange box, contents two cubic feet.

Pomelo trees of the best varieties, such as Duncan, McCarty, Marsh Seedless, Walters and Triumph are grown on Sour Orange, Rough Lemon, citrus trifoliata and grape-fruit stocks. For general planting throughout citrus regions to-day, Sour Orange stock is more commonly used for all citrus fruits than any other one, I might even say than of all others put together. In Florida there are many old seedling trees, their planting dating back to a time when they were set out, not for fruit, but as curiosities.

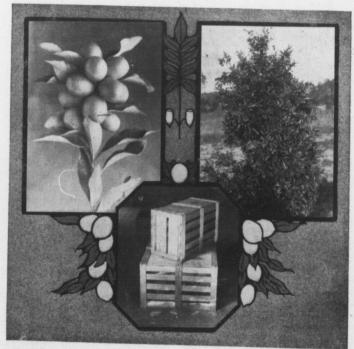
It is only about twenty-five years since the Florida orange grower wak ened up to the fact that the fruit had a commercial value. To-day from one third to one-half of all the trees set are grape-fruit. In this quarter of a cen tury we have seen an unknown fruit become the American breakfast fruit par excellence, and from being regarded as a novelty it has taken a place among the staple fruits of the country. Florida introduced it and the fruit produced in the state still leads the market.

Kumquats.

Unusual among the citrus fruits is the Kumquat. It is the newest of the citrus fruits in America, for it did not find its way to Europe until 1846, and appears to have come to America about four years later. It cannot be considered a staple fruit, but its unique ness and high ornamental value gives it first rank as a novelty.

Kumquats grow, not on trees but on bushes, which reach a height of ten or twelve feet. In the blooming season they are almost white with flowers and in autumn the dark green leaves and innumerable small golden fruit make a beautiful combination. They are grown and cultivated much as other citrus fruits are, being set about fifteen feet apart each way.

The fruit is gathered by clipping it



1. FRUITING BRANCH OF KUMQUATS. 2. TREE IN FRUIT. 3. KUMQUAT CRATES READY FOR SHIPMENT.

from the bushes with two or three leaves attached to each one. They are packed in quart baskets, the bottoms being filled with fruit thrown in loose ly, while the tops are tightly faced with fruit, the green leaves peeping out between. They are then packed in strawberry crates of twenty-four or thirty-two quarts. The fruit is used for table decorations and is the most valuable of all the citrus fruits for this purpose.

There are three varieties of Kum quats. The To variety is not unlike a small fancy Mandarin orange in gen eral appearance, but the juice is very acid. I remember some years ago, a plate of them was sitting on my laboratory table when the Professor of Mathematics came in. He always en joyed coming in, for in season there was plenty of fruit about. He had never seen To Kumquats before and took them for Mandarins, remarking how good they looked. "Why, help yourself, old man," I remarked and went on with my work. A little after, on glancing around, I beheld him sit ting motionless on his chair, a half eaten To in his hand, and the tears streaming from both eyes. Not much wonder. It analyses about 7% citric acid, and makes good ade. The other varieties, Marumi (round), and Na gami (oblong), are quite different from To. The skin is aromatic and spicy, the inner lining or rag sweet and the pulp, when well ripened, rather acid. They are eaten rind and all and the combination of flavors is very pleasant. No other citrus fruit can be used in just this way.

The demand for the fruit at the Christmas season is good, but the fruit must be marketed carefully, a few crates here and there. It is an easy matter to break a Kumquat market as the writer knows from experience.

Oranges.

From the time of the first Spanish settlements, Florida soil has contribut ed its quota of the golden orange to the Christmas festivities. The industry has passed through many vicissitudes of frost and drought, but still remains the most important in the State.

Whether from the famous groves of the Indian River, from the West coast, or the interior, the quality, when the fruit is properly grown, is unsur passed. An orange, as you know, is a reflection of the care and fertilizer given the tree. Variety counts for something, of course, but not so much as intelligent cultivation. Consequent ly there are about as many variations in quality as there are variations in the individuals who grow them. At one time the most of the oranges were grown in the central counties of the State; conditions have changed, how ever, and orange growing has shifted southward.

The cultivation of an orange grove is not unlike that of an apple orchard, but if the apple methods were applied in detail to an orange grove, troubles of various kinds would show up. The dormant season in Florida is from No vember until the end of February, this is followed by a dry season extending up until about the middle of May or first of June. Then the rainy season begins and if it behaves in a normal way rain falls almost every day until about the end of August. The general rule in handling a Florida grove is to cultivate frequently during the dry season, allow a cover crop to shade the ground in the rainy season and turn this under between the middle of No vember and the first of December. This



3. A FANCY BOX OF FLORIDA ORANGES

last is essential as a protection against cold. Fertilizer is usually applied in February and again in June.

In many sections the presence of the rust-mite makes it necessary to spray the fruit with a sulphur spray during the summer months to secure bright fruit. Some prefer the russet fruit, alleging that it is sweeter. May be so, our viewpoint changes with our thoughts or vice versa.

The preparation of a crop of oranges for market is a painstaking operation. The fruit is hand picked by clipping

2. PINEAPPLE ORANGES ON THE TREE.

the fruit from the trees with shears especially made for the purpose. It must be handled with extreme care, neither bruised, dropped or injured in any way. If it is, decay rapidly sets in,

From the field, the fruit is hauled to the packing house on spring waggons. There it is sorted by hand into differ ent grades and the culls thrown out. It is then allowed to cure for two or three days. Afterward it is run through the sizer, which grades the fruit in different sizes. The diameters vary from three and one-half to two and seven-sixteenths inches, a different size and a different pack being made for every quarter, eighth or sixteenth of an inch between these diameters. Each size is packed by itself and each fruit is wrapped as it is placed in the boxes. The boxes are packed snug and tight.

With these and many other fruits Florida makes glad the hearts of the children, young and old at the holiday season.

THE O. A. C. REVIEW

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Editorial.

This month we are pleased to give to our readers, what we have chosen to call a Christmas number.

A Special This is the first time in four years that a special issue at this season of the

issue at this season of the year has been attempted. During that period of time the men in charge felt it was not in the best interests of The Review that a special number should be issued. We are not in a position to say whether they felt rightly or wrongly, but we do know that in days gone by Ontario Agricultural College students, and especially The Review staffs, have laid for this college journal, foundations broad and deep; foundations on which it is a pleasure for present day Review staffs to erect superstructures which we hope will not be looked upon with discredit by our readers.

For some months the students now

in charge of The Review have felt it incumbent upon them to put forth an extra effort at this Christmas season. We say incumbent, for many reasons. In the first place the faculty of this college, with possibly a few exceptions, have given this periodical all the sup port that any body of men and women could possibly be expected to give. The whole student body are extremely loyal to their College organ, and The Review is indebted to many students who are connected with it, for favors shown from time to time. Moreover, we have among our contributors, and on our subscription list, a large num ber of ex-students to whom The Re view means much and, who, on the other hand, are most worthy sup porters. To many of these men their college paper is the tie that does most to keep them in close touch with their Alma Mater, and any action that will

strengthen the tie that binds graduate and college, and that brings the college closer to the graduate is a laudable one.

Then again this is the season for gifts and happy greetings. Christmas giving and receiving, with discretion and discrimination, are beautiful functions. The Review has been enjoying prosperity and growth and rejoices that it is in a position at this time to put forth an effort to please the most fastidious of its readers. It also wishes to take this opportunity of thanking its supporters for the very beneficent manner in which they have treated it during the past year, and extends to one and all of them, Christmas greetings.

For many years before the founding of the Ontario Agricultural College it was seen by Retrospective. some far-sighted men throughout the Province that agricultural educa tion was needed, if the fertility of the soil was to be maintained. It was also seen that, if increased yields and cheaper production were to be ex pected, the farmers should understand more of the science of their profession. To the Hon, Sir John Carling, of Lon don, belongs the honor of having taken the first steps towards founding a School of Agriculture in the Province of Ontario. In 1873 the farm of 550 acres was purchased by the Govern ment from F. W. Stone.

The name decided upon was The Ontario School of Agriculture, and its motto was *Practice with Science*. It was formally opened in 1874 with Henry McCandless as Principal, a teaching staff of four, and with twenty eight students in attendance.

Wm. Johnston, B. A., was Principal from 1875-1879. At his resignation the name was changed to the Ontario Agricultural College and Experimental Farm, and the chief executive was to be known as the President of the College. James Mills, M. A., LL. D., was appointed to that office in 1879.

During the first ten years there were additions made to the Museun, Na tural History and Chemical Depart ments. The Library was made more complete and the grounds were re modelled. The average attendance from 1874-1884 was one hundred and twenty-nine.

During the next ten years many marked improvements were made; new farm buildings were erected; county students were admitted, and an Ad visory Board was appointed. A new Chemical Building also was added.

In 1888 the barns were burned, but were immediately rebuilt. It was in this year that the College was affiliated with Toronto University, and on October 1st, the first degrees were granted to a class of five, among whom was our present President. In 1889 the first Review appeared, and later on the Experimental Building and Gymnasium were built.

Following these were additions to the Dairy and Horticultural Depart ments, improvements to the Main Building, new Greenhouses and Botani cal Laboratory, and in 1892 larger additions to the Dairy Buildings. This period began with a teaching staff of eight and closed with a staff of four teen. The average attendance from 1884-1894 was one hundred and fifty one.

The next ten years witnessed many great changes at the college. First, new Poultry Buildings, then a new Chemi



THE REVIEW STAFF, 1908.

cal Building, an electric light plant installed, and additions to the Biologi cal Laboratory. Short Courses were started in 1899. A Cold Storage Build ing was added the next year. In 1902 '03 the greatest additions were made. In 1902 the Massey Hall and Library, the Biological Building and Live Stock Pavilion were built. In 1903 the great est additions in the history of the col lege were made, viz.: Macdonald Hall and Institute. These are large build ings of red pressed brick, imposing in general appearance, commodious in their internal arrangement, elegant in finish and capable of accommodating one hundred and thirty girls. average attendance from 1894-1904 was two hundred and twenty-seven, and the Faculty of Instruction had in creased to twenty-four. In 1904 Presi dent Mills resigned to accept a posi tion on the Railway Commission at Ottawa. To him belongs the honor of having stood by the college for a quar ter of a century, guiding it through storm and discouragement to the high position it had attained at the time of his resignation. Mr. G. C. Creelman, B. S. A., M. S., was appointed as his During the same year successor. many improvements about the Resid ence were made and the Consolidated School was built.

The following year was one which will long be remembered by many at the College, it being the first time that the O. A. C. Judging Team won the Bronze Bull at the Chicago International Fat Stock Show. The Machin

ery Hall was started the same year and completed in 1906. In 1907 there were new additions made to the Chemical Laboratory, College Residence, and Biological Building. A new water tower and coal shed were built. Last year was marked by a very important event, viz.: The coming over from Chicago of the Bull for the third time and to remain; it having been won three years in succession.

The year which is now drawing to a close may well be said to be the banner year of the college in point of attend ance and usefulness. The Faculty of Instruction now numbers forty-six. The attendance is the largest in the history of the college, there being four hundred and twenty-one names on the roll. Additions are still being made in the way of buildings; a new fruit and vegetable house was put up this year; the barns were remodelled, and a new incubator house is now under construc Progress has been the watch word in the past, and as we look back over the years at the growth of the Col lege we realize that the future is largely the outcome of the past, and we can only look for a most prosper ous development of this Institution in years to come, since after years of varied experience it has become firmly established in the estimation of the class for which it was instituted, and it is to-day imparting a great deal of useful information to the farmers, is creating a widespread interest in Agri culture, and is adding dignity to life and labor on the farm.



College Life



"Nor shall the aerial powers Dissolve that beauty, destined to en

White, radiant, spotless, exquisitely pure,

Through all vicissitudes, till genial Spring

Has filled the laughing vales with wel come flowers."

-Wordsworth.

The last month of the present year is upon us ere long to be sunk in oblivion, never again to be lived through by mortal man; let us there fore make the most of it. The prevail ing atmosphere of the month is one of heartiness and good cheer, and it is to our interests to harmonize with these sentiments if we wish to make the most of life. The Christmas vaca tion is nigh at hand, when through the clouds of life there will be a moment ary gleam of sunshine to kindle our slumbering hearts to fire; the bewitch ing charm of home will soothe our sorry hearts and cause us to speedily recuperate from the ill effects of over work(?) Perhaps, too, there is some fair eyed damsel to be considered-but enough! This comes not within the writer's province. On the very thres hold of such luxury let us not lose courage at the scent of a few paltry ex aminations, but let us rather gather up our remaining strength for the final struggle-now is the psychological mo ment to do so-and assuredly we shall come out right side up.

A Retrospection.

This is the time of year when a self retrospection is not out of place. We come to this college in September with resolutions which, did they ma ture, would bring us all out at the head of our year, would make us lead ing lights in all the college societies, in fact would mould us into acolytes for the remaining members of college society to revere. These excellent resolutions, however, have not matured and in all probability never will; we have either overestimated our own ability or underrated that of our asso ciates-and this is one of the numer ous idiosyncrasies of that highest type of vertebrate animal-homo sapiens.' The question. therefore, resolves itself into this - that though our resolutions have fallen short of fulfillment to some degree at least, yet, notwithstanding this, have we acquitted ourselves in a manner be fitting to ourselves and to our college? There is no doubt but that the major ity of us have, yet there is ample food for reflection in this matter, and as this is the season of meditation let us 'take the bull by the horns,' and 'do it now.' A self-examination of char acter is one of the most difficult prob lems with which we are confronted, yet it is essential to our wellbeing that we make one occasionally.

One of the greatest aids to the moulding of character is to formulate in the mind's eye some definite code of life and, whether our neighbors con sider it good, bad, or indifferent, to live up to it.

In conclusion I would again empha size the value of a retrospection and would bid those who have not yet formed their compendium of life to remember that all truly great men have been "Suaviter in modo, fortiter in res."

Growth of the College.

As regards development our Alma Mater is well rid of her seed leaves and continues to grow, like a 'milk-fed pumpkin.' She is fast covering the ground on 'College Heights' and bids fair to envelope half the city. Already the keeping of boarding houses for students is an extensive business, and this despite the capacious residence. Every year sees an extra half dozen or so houses erected each of which is cap able of sheltering at least three or four students. This year is no exception to the rule, in fact the rate of building ap pears to be on the increase. Another factor in the growth of the college is the erection of private residences for members of the Faculty and we are pleased to note that here again we are well "up to the scratch." We live in a country and an age of progression, and, therefore, it is not to be wondered at that we progress. In the past de cade the additions to the college have been so extensive that the subject fills an enquiring mind with wonder. I venture to assert, in conclusion, that after the lapse of another few years the institution will have so completely eclipsed itself in magnitude that it will be as strange a maze to us then as it was on our first introduction to it.

The Cosmopolitan Nature of the Student Body.

There can be no criterion of excel

lence better than a world-wide reputa tion. It is a foregone conclusion that our college is cosmopolitan in nature, few of us, however, realize the extent to which this is true. In the accom panying plate are figured the coats of arms of all the different countries rep resented here. If we take a map of the world and look up these various countries we find that we have repre sentatives from the 'uttermost regions of the earth:' Guelph might be likened to a magnet of intense power to which particles of 'grit' are being attracted from the four corners of the earth! Is it then to be wondered at that we are proud of our "Fostering Mother of Learning!" Is it to be wondered at that we occasionally shock our neigh bors by uttering our own encomiums. Suffice it to say that this institution is the largest, the most cosmopolitan, the best Agricultural College in the world, and in these facts lie the legitimacy of the above expressed sentiments.

Subtended is a list of the countries figured in the plate:

The United States—The various States represented are : California, Connecticut, Illinois, Ohio, Maine, Massachusetts, New Jersey, New York, Pennsylvania, and Vermont.

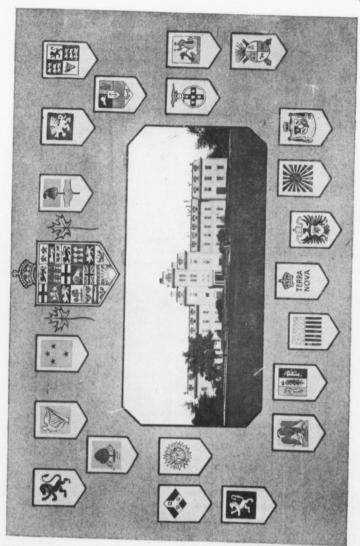
Japan, Spain, Belgium, Java, France, Germany, Uraguay, Mexico, Canada.

Every province is represented, namely: Manitoba, Saskatchewan, British Columbia, Alberta, Nova Scotia and Quebec.

The Orange River Colony: Trans vaal, Barbadoes, India, The Argentine, New Zealand, Jamaica, British Isles, including England, Wales, Scotland and Ireland.

Our Four Presidents.

In this issue we present to our readers photographs of the Presidents



COATS OF ARMS OF VARIOUS COUNTRIES REPRESENTED AT O. A. COLLEGE.



W. M. WADDELL,
President of Union Literary Society.

of four of the College Organizations, namely: The Literary Society, The Athletic Society, The Y. M. C. A., and The Philharmonic Society.

We all know Waddell as President of the Literary Society, an able speaker himself, he has always been an ardent supporter of matters literary. There is an old adage which says "small men accomplish big things." and this is true of 'Mac.' We see him at his best filling the presidental chair at a union debate or other important function; in fact he fills it with such an easy grace and carries himself with such decorum that we half wonder how it is that he can deport himself in the other multifarious walks of college life so successfully. It matters not, however, where we find him, he is always the very impersonation of geniality and hospitality. He says little when not holding forth upon the

platform but, being a deep thinker, what he does say is always worth list ening to. Under the present leader ship the "Lit." is flourishing and, to cut a long story short we shall con clude by saying that we have the "right man in the right place."

Charlie Lawrence has been a sup porter of athletics ever since his ad vent to the college in 'o5. Though he does not always adorn the football and hockey teams himself, yet it is not too much to say that a game is incomplete without Charlie, as a spectator at least, to cheer for the college, and instil into the players that spirit of "do or die," which has so often led to victory. Again the executive ability of our worthy President must not be forgotten,-and who can criticize ill favorably the present business-like management of the Athletic Associa tion? Lastly, we would refer to



C. A. LAWRENCE, President of Athletic Association.

Charlie's popularity; though in case there is too much of the eulogistic in this note, I would say, in all deference to him, that he is at no pains to be popular—he simply cannot help it.

In Angle we have a man fully quali fied for the dignified position in which we find him-President of the Young Men's Christian Association. Since his coming to the college he has been an ardent supporter of all things having a spiritual bearing, and without doubt has accomplished a great work in ele vating the moral tone of the institu tion. "Paul" is a man of parts, in that he is alike enthusiastic in things of a literary trend, and in athletics, in addi tion to being a leader in his own par ticular sphere of work, and thus he has won for himself the respect and admir ation of the student body. We shall conclude by saying that when P. E.



P. E. ANGLE, President of Y. M. C. A.



A. McLAREN, President of Philharmonic Society.

Angle has bidden us a last farewell, the college Y. M. C. A. will indeed have lost a strong man.

Alexander McLaren is President of the Philharmonic Society. This so ciety without a McLaren would be like a Hamlet without a ghost. For two years Mac has been President of this now flourishing organization. college year 1907-'08 saw it make steady and substantial growth, but the ambitions of its worthy President were not satisfied, and Mac returned to O. A. C. in the autumn of 1908 firmly determined to make this youngest of the college societies one of its best, and he has done it. Last year saw the compilation of a song book. This year an orchestra, which is already doing good work, was organized, and the Philharmonic concert is now an annual affair. O. A. C. student body owes much to Alexander McLaren.

"The Union Lit."

The second meeting of the Union Literary Society was held on Saturday evening, November 14th. This society embraces three sub-societies, the "Alpha," "Delphic" and "Maple Leaf" respectively, among which there is an annual debating contest. At the last meeting the "Alpha" and "Delphic" societies debated, the "Delphic" win ning out; at this meeting the "Delphic" and "Maple Leaf" were in competition, the "Delphic Society again being vic torious, and thus winning the laurels of the series.

The program for the evening was as follows:

Clarionet solo—Mr. L. R. Martin, Address—Rev. G. W. Arnold. Vocal solo—Miss Sydney Aird, Debate—Resolved, "That Strikes

and Labor Unions are Detrimental to the Welfare of a Nation."

Affirmative—Messrs. O. C. White and C. M. Leamonth.

Negative-Messrs. J. E. Rettie and W. Dawson.

Piano solo-Mr. R. Fraser.

Reading—Selection by Dr. Drum mond—Mr. J. W. Jones.

Presentation of Prizes—Cross Country Run—J. E. Howitt, M. S. A., Hon. Vice-President A. A.

Judges' decision— Critic's remarks—

God Save the King.

The evening was eminently success ful from start to finish, and all concerned are to be congratulated. The musical program was well up to the standard, the solos by Miss Aird being especially appreciated. Rev. W. G. Arnold, of Knox Church, gave an excellent address mon the "Art of Smiling." Mr. J. W. Jones surpassed him

self as an interpreter of Dr. Drum mond's poetry, and was vociferously encored. The debate, which was, of course the feature of the evening, was in every way excellent; Mr. O. C. White, as leader of the affirmative, de livered the speech of the evening. Mr. Leamonth made an able supporter of the affirmative, delivering a carefully thoughtout speech, which certainly had its merits; Mr. Rettie, as leader of the negative, showed rather a lack of preparation, but, nevertheless, deliv ered a good straight-forward speech; Mr. Dawson had an excellent speech, but made the fatal mistake of reading it, thereby losing in emphasis and de livery. As a fitting close to the even ing the winners of the "Cross Country Run" were awarded their prizes, an account of which contest is given else where.

The Conversazione.

It may seem rather premature, but just a word re the "Conversat." This is the great social function of the year at this college, and we cannot afford to miss it. Whilst at this institution we are sometimes apt to overlook that all important social phase of our life, and when we have left the sheltering wings of our Alma Mater we realize but too keenly our mistake and alas, it is then too late. Therefore, come back next term prepared to take part in this conversazione, and make it a phenomenal success. Each year the conversat is better than its predeces sors, and this one is to be no exception -it is going to be the best social even ing that has ever been held at this col lege, and therefore, on no account per mit the opportunity to slip by without attending.



Athletics



A Short History of the Development of Athletics at the Gollege.

BY W. J. SQUIRREL, B.S.A.

THE history of athletics at O. A. C. is almost as old as the his tory of the College itself, but the present state of perfection, to which these, in their various forms have been brought, was only arrived at after a long period of development.

We find that between 1874 and 1882 there is almost no mention of games of any kind being played, or of field sports having been held. Looking back to the early history of the College supplies us with the rea sons for this. The College course, during this time, occupied but two years. Students were required, for the first five years in the history of the institution, to work one-half a day, every day; most of the remaining half day being taken up with lectures. Later this period for work was reduced to one-half day every other day. In the early days the student had very little time to devote to athletics. The lack of an organized Athletic Associa tion, a physical director and a gymnas ium in which to train, were prominent factors in keeping down the athletic spirit in the early college days. It was not then so generally recognized that for the student's best development an athletic, as well as a mental training, was necessary.

Rugby has been the most prominent game played, some of the most suc cessful teams being among the very first ones.

The teams of 1884 and 1885 were perhaps as strong teams as ever represented the College. The year of 1888 also saw a first class team, and witnessed the defeat of Up per Canada College, Trinity College, Toronto Second Fifteen, and the Guelph Rugby team. This team, how ever, was not successful in defeating the Toronto First Fifteen, though they made a very creditable showing, being defeated by only ten points.

Rugby continued to be played in 1889 and 1890, but in 1897 gave way to Association football. The game was not again prominent until 1898. In this year Woodstock College was twice defeated, by scores of 18-10 and 14-0. Galt won the first game of the season by a score of 10-0, but was de feated in the return match 19-0. The team of 1899 was not so successful, winning and losing to the Guelph city team.

It was decided in 1903 to enter the intermediate series of the O. R. F. U. . This was done, and while the team was successful in winning some of the games, they were unable to win the



THE RUGBY TEAM.

district in which they were entered. The team of 1904 had like success. Nineteen hundred and six witnessed the winning of the Western College Association trophy.

The Rugby efforts of 1907 and 1908 have not been crowned with success. This has been principally due, not to the inferiority of the teams, but to the strong company in which they found themselves placed.

In summing up the Rugby situation, it is safe to say, that never was the en thusiasm greater, or the game more popular than it is at the present time. It is not so many years ago, that from three to five men of the first team turned up regularly to practice, and it was often difficult to get that number out. When we see as many as seventy men turning out for regular practise, prospects for the future of the game are bright indeed.

Association football has never en joyed the popularity at this institution that Rugby has. This I think, has been due chiefly to the fact, that from raw material, it is easier to construct a fair Rugby team than it is to make a fair Association team.

The game was played very little until 1890. In 1892 and 1893 several games were played, mostly with High School teams; of the number played, the college teams were able to win about one-half. Perhaps some of the old boys of 1893 will recall the occas sion, when the team on leaving for Seaforth to play the High School team of that place for the Hough Cup, took a basket to bring the cup back in, and were trimmed by the score 7-1.

The most successful association teams which have ever represented the College, were those of 1896 and 1897. These teams in two successive years, won the Intermediate Championship of the Western Football Association.

The Association game is handicapped considerably by the short length of the spring term. This game is played in Ontario largely in the spring, and by the time the season opens most of the boys are away. But for this fact, we would have more Association football, as there is material here for a first class team.

Hockey, which is a comparatively new game, compared with the two pre ceding ones, has been played every year, in the winter season, since 1894. The teams of 1894 and 1895 were com prised largely of eastern men and were able to hold their own with any of the teams west of Toronto. The College in 1899, entered a team in the intermedi ate series of the O. H. A., in which series there were two other Guelph teams, the Victorias and Nationals. The team defeated the Victorias but lost the round to the Nationals. In 1900 the College team amalgamated with the Victorias of Guelph, and a team known as the O. A. C.-Victorias was represented in the W. O. H. A. After playing the season through, the team finished second, Berlin winning the championship. From 1900 until 1906, hockey was largely confined to inter-year games. The years 1906 and 1907 witnessed no championships, but meeting teams playing the brand of hockey which the inter-college teams do, has certainly raised the standard of hockey played here, above that of the last few years.

It is to be hoped that the boys make use of all of their opportunities to play hockey. It is far superior to any other game played during the winter season.

Cricket as a game, has been played here for many years. During the per iod extending from 1884 until 1892 the game was very popular, due to the large number of English students who were then in attendance at the college.

From 1892 until 1903 very few games were played. We are glad to see, how ever, that in 1907 and 1908, the Guelph O. A. C. Cricket Club was able to win the championship of the Western Ontario Cricket Association. Cricket, at no time in the history of the College, has appealed so strongly to the major ity of the students as has football. This is due, in some measure, to the fact that the game is played altogether during the summer season when very few are in attendance at the College.

Baseball secured an earlier start at the college than any of the other games. It was played almost without interruption until 1902, but like Asso ciation football suffered severely from the change in the length of the college spring term. None of the other field games, can be said to be so strictly a local game as baseball. Very few games have been played with outside teams, those played being chiefly games with Guelph teams. Guelph, which has always been known as the best base ball town in Canada, we have never been able to defeat, but have nearly always been able to hold our own with the best teams in the Guelph City League.

Tennis has been played at the Col lege for more than twenty years. The games played have been chiefly with Guelph representatives of that game. In these games the College players have been able to win about one-half. We have, however, on several occa sions had men here who outclassed any of Guelph's players.

Indoor baseball and basket ball are of very recent origin at the O. A. Col lege, having only been played the past six years. Teams representing the two games, so far, have been very success ful, winning a large majority of the

games played. These two games have been deservedly popular, and are games especially adapted for playing during the winter months.

Track events and field sports have been held as far back as the seventies, but no organized Athletic Association was formed until 1892. The officers of the first Athletic Association were the following:

stands as the College record. The sec ond athletic meet was held in the fall of 1892, W. Macdonald winning the all-round chanmpionship. P. B. Ken nedy, who won most of the runs during this meet, afterwards developed into the best quarter and half mile runner in the big universities of the United States.

A. Kipp, the all-round champion of



THE TRACK TEAM,

Hon, Pres...Jas. Mills, M.A., LL.D.
President....H. L. Beckett
Vice-President...T. J. Hurley
Sec.-Treasurer...G. E. Day
Banker...A. McCallum
(A. M. Soule

Executive Com..... P. B. Kennedy S. Curzon

Auditors..... (R. Harcourt J. J. Ferguson

The first meet of the Association was held on June 4th, 1892, T. J. Hur ley winning the all-round champion ship. S. Curzon won the running long jump of 19 feet, 4 inches. This still

1893 and 1894, was one of the best jumpers and shot putters that the asso ciation ever turned out. His record for putting the 16-pound shot stood as the college record until 1907.

The champion of 1896, M. N. Ross, was the best high jumper the College has ever had, and his record, 5 feet 5½ inches, still stands. Mr. Ross was sent, by the Athletic Association, to the Varsity sports in Toronto in 1896 and succeeded, not only in winning the high jump, but in breaking the Var sity record for that event as well.

In more recent years we have E. C.

Hallman, the winner of the long runs on sports day at the O. A. College, going to Varsity and winning the mile run. Later running for Varsity against McGill, he broke the Inter-Var sity record, making the good time of 4 minutes 46 seconds. The same year Mr. Hallman won the five mile open event at the Guelph Cross Country Run and Road Association.

The champion of 1904, 1905, and 1906 was W. Kerr of Ashburn. Mr. Kerr enjoys the distinction of being the only man who has been champion athlete on three different occasions; and he certainly was one of the best all-round athletes who has ever at tended the College.

The 1907 annual sports brought for ward the best weight man, in the per son of J. W. Jones, who has so far at tended the college. Mr. Jones was also successful in that year in winning the all-round championship.

No medal for the all-round champ ionship was given in 1908, but champ ionship medals for each group of events. This departure from the old rule is a good one, as it gives the differ ent contestants a chance to specialize and makes record breaking a greater probability. This point was very fully justified by results in the 1908 sports; six new records being made. This is a greater number than has been made at any previous athletic meet.

The holding of annual indoor sports is of quite recent date, all the meets having been held within the last ten years. Chas. Morteaux was the first indoor champion.

If taken in the right spirit, there is no part of a college student's education, which will make him more a manly man, and teach him self-control and self-reliance to a greater degree, than athletics.

The Rugby Situation.

At the beginning of the football sea son this year, we prophesied for our College a winning team. The fact that our boys were thrown out of the race in the preliminaries may lead some of our readers to believe that our prophecy had no good foundation, and that a winning team is something we shall never possess.

In justice to our manager, and our captain, Messrs. Coglan and Treherne, and to the team itself, which did every thing in its power to bring the honor to our institution that a football team may, we would say that they were un doubtedly the strongest team that has represented the College for many years, and that they got no further in the race than the preliminaries does not by any means indicate that they were un worthy to uphold our reputation in a league such as the one in which we were entered.

In Varsity we were up against the strongest team in the league, one that had the benefit of a good football coach, and a daily practice with a sen ior team, from which they could draw extra strength when occasion de manded. When we realize strength of the team our boys were pitted against, we may more easily understand why they failed to live up to our expectations. Had we been drawn against any other team in the league with the possible exception of McMaster, we would undoubtedly have gotten into the finals, but as it was we were unfortunate to have as our first opponents the undisputed champions of the league, and they, supplemented by some of their senior men.

We cannot have the benefit of a practice with senior company every day, nor can we draw extra strength from them for important matches, but we believe that it is within our power to obtain a competent coach, and this is the only means by which we may ever expect to have a finished team.

No captain can at the same time, both play with and train a team prop erly, and we cannot look for Mr.



RUGBY TEAMS IN ACTION.

Knauss to give us a winning team unless he has more assistance than has been given to captains of this and former years. A coach is what we need, and when that problem has been solved, and we are supplied with an experienced player who could devote all his time to the training of the men, then and only then can we expect the best results from the material we possess.

Rugby.

Realizing that the organizing and training of several junior teams at a college is the only way by which to develop a strong first team, our foot ball directors this year assiduously set to work having that in view, with the result that we have had no less than five fully organized Rugby teams this fall. Each team has made a reputa tion for itself in that at some time or

other during the season it has defeated the team ranking next above it.

On Monday, October 19th, the third team which entered the City League, demonstrated its worth by defeating the Guelph Collegiate Institute, in a one-sided game, the score being 26-6. The game was a snappy one and cre

ated a good deal of enthu siasm, but the G. C. I. boys were never in it with Clark's fast bunch. Roger's good kicking, together with fast following up by the other members of the team, kept the ball dangerously near G. C. I.'s line for the greater part of the game, and when the word "to buck" was given it was generally accepted as the signal for another touch down.

The College team was as follows: Full back, S. Rogers; halves, King, Bell-Irving, Austin; quarter, Dawson; scrimmage, Kinnear, Rice Baldwin; guards, Peart, Young; tac kles, Hoffman, Clark (Capt.); ends, Smith, Webster.

The second, and the deciding game for the championship, was played on the exhibition grounds, Guelph, on Wednesday, October 28th, the Bankers being the victims, by a score of 16-o. In spite of the fact that the grounds were very wet and slippery, the Col lege team played a fast, sure game. The wings followed up very quickly giving their opponents no chance to return the ball, and when it came to bucking, the bankers were quite power less to stop them, Bell-Irving being in a great measure responsible for the gains College made in this way. Rogers played his usual cool, heady

game, his kicking being very effective. The team as a whole are a well-bal anced aggregation, and are sure to give a good account of themselves.

The winning of this game gives the College boys the city championship, and the cup.

O. A. C. lineup was as follows: Rice, Baldwin, Kinnear, Young, Peart, Clark (Capt.), C. L. S. Palmer, Web ster, W. H. Smith, Dawson, Austin Bell-Irving, King, Rogers.

O. A. C. Downs Central Y. M. C. A.

Thanksgiving Day witnessed another decisive victory for the O. A. C., when they defeated the Central Y. M. C. A. of Toronto, by the score of 30-0. The game was rather too one-sided to be interesting, the Centrals being danger ous only once or twice during the whole game.

The College team: Emmerson, Bald win, Young, Toole, Kennedy, McFay den, Hoffman, Rice, C. L. S. Palmer, Clark, Dawson, Austin, Bell-Irving, King, Rogers.

O. A. C. II.'s vs. Victoria College.

The second team played their return match with Victoria College on Satur day, November 14th, on Victoria's grounds. At no time was the result in doubt, and consequently our team did not exert themselves, or the score would undoubtedly have been much larger. As it was it stood 8-2 in favor of college. The game was very clean, there being only two penalties im posed, these on Victoria men.

The following represented College: Rogers, King, Edgar, McFayden, Jack son (Capt.), Webster, McAleer, Moor house, Emmerson, Toole, Culp, Clev erly, Palmer, Kennedy. Spares—Young, Bell-Irving.

Association Football.

The standing of the teams at the

close of the season, in the City Associa tion Football League, places College at the head of the list, and thus they are winners of the handsome cup donated by Jock Smith, of the Bell Piano Com pany.

This is the first year for some time that the O. A. C. has entered an asso ciation football team in any league, and by winning the series, and the cup, they have demonstrated that it is possible for us to carry on successfully both the rugby and the soccer game.

Cross Country Run.

The Annual Cross Country Run is an occurrence of no small importance in the cycle of athletic events that take place at our College every year. Keen competition and fast time has been the rule, and this year's race held on Thurs day, November 9th, fulfilled the rule in both these respects.

Seven men lined up for the start, Howell, Clemens, Shaw, White, E. W., Smith, Culp, and Duncan, and so well matched did they appear that no one ventured to predict the winner. Culp set the pace, and Smith stepped in be hind him with Shaw in third place, closely followed by the others, and they were running in this order at the end of the first lap. During the second round a regular blizzard arose, which though it did not materially affect the pace of the runners, made it very un comfortable for the spectators who were eagerly waiting to see who should first appear over the hill, just before the home stretch. A cheer from the second year announced the arrival of Culp, who finished strong and fresh, his time being thirty-three minutes forty-five seconds. Shaw followed closely. Smith, Duncan, Howell and Clemens arrived in the order named, White not completing the race.



Our Old Boys.



Percy E. Reed, of Georgetown, is one of the successful graduates of the Ontario Agricultural College, who can say with pride not only "I was born and brought up on the farm" but also "I am a farmer." After receiving his commercial diploma from the George town High School, "Percy," as he was know among the O. A. C. boys, entered the college in September, '99, as one of the youngest members of the class of '03. While at the O. A. C. he took an active part in College life, and was one of the most popular students in his year. After completing the Diploma course, he returned to Halton county to the home farm, of which he is now proprietor. In his farming operations, Mr. Reed is making a specialty of dairying and horse breeding. He now has a fine herd of pure bred Jerseys, and as he ships sweet cream to Toron to, 30 miles distant, this breed is well adapted to his purposes. For some years "Percy E. Reed" has been a name frequently occuring in the lists of prize winners in both heavy and light horses at all the fall fairs in his vicinity. In light horses Mr. Reed has this season won first prizes in all classes, high-stepper, roadster, carriage and saddle.

As our illustrations suggest, Mr. Reed has a homestead well equipped with a comfortable home, surrounded by wide lawns, and with large and well appointed barn and stables. Since becoming proprietor, he has put into

practice many of the suggestions re ceived at the O. A. C. Under the direc tion of Mr. E. J. Zavitz he has on a hilly portion of the farm set out a forest plantation of 5,000 white pines and 3,000 black locusts. These are growing rapidly and promise soon to become a most valuable part of the farm. Since leaving the College Mr. Reed returned to take the winter course in Stock and Seed Judging. By occasional visits to the Chicago International, and by frequent visits to the Guelph Fat Stock Show, and to the College, Mr. Reed is keeping in close touch with all that is best in agricultural advancement.

W. T. MacDonald, B. S. A., a gradu ate of '03, has been appointed Profes sor of Animal Husbandry at the Washington State Agricultural Col lege, Pullman, Wash., to replace W. A. Linklater, who goes to Oklahoma. For some time after graduation Mac Donald was engaged in Farmers' In stitute work in Minnesota, but gave up that work to accept a position on the Animal Husbandry Department at Oklahoma.

G. S. Henry, B. A., an associate of 1896, is farming on Yonge Street, a few miles north of Toronto.

Twentieth Century Agriculture is not so closely allied to the lumber business as was agriculture of our



SCENES ON THE FARM OF A PROGRESSIVE EX-STUDENT, PERCY REED.

pioneer forefathers, but there seems to be a community of interest sufficient to draw men from the one line of work to the other. As an instance of this might be cited the case of T. F. Patterson, '96, who is engaged in lum bering in British Columbia, in company with his brothers. Tommy Gadd who took his associate dipfoma with the class of 1896, and was engaged in dairying in the West for some time, also forsook agriculture to become manager of a lumber concern. He has evidently made good, for his reputation as a business man stands high.

Dr. Judson F. Clark is another grad uate of the same year who has taken up the commercial side of Forestry.

After graduation Dr. Clark took a post graduate course in Forestry at Cornell. Obtaining his Ph.D., he was appointed assistant to Dr. Fernow, of the Cornell School of Forestry, and later Provincial Forester under the Crown Lands Department, Toronto. Some two years ago he resigned this position to manage a British Columbia Lumber Company. He paid the Col lege a visit this summer, and while here gave a very interesting address to the Canadian Club.

The class of 1896 had the first spe cialists in Chemistry and Physics, among them being G. A. Smith. Having received his B. S. A. degree he took up post-graduate work at Cornell, where he obtained his Master's degree. He was assistant to Dr. Caldwell for some time, but later was appointed to a lucrative position with a paint manu facturing concern in Brooklyn, N. Y.

C. L. Messecar took the Associate course with the class of 1882, returning

to his father's farm at the end of his second year. Feeling an inclination towards business he left the farm to take the agency of the Massey-Harris Company. He occupied this position successfully until his appointment as manager of the Brantford Cordage Company, which office he still holds.

We had as one of the many visitors to the College this fall Fred Sissons, an Associate of 1896. Mr. Sissons is farming near Red Deer, Alta., and re ports very good crops in that district this year. He likes the West and is very enthusiastic over its prospects.

T. H. Robertson, '94-'96, better known as "Tiny," went west and en gaged in lumbering in Forget, Sask., but sold out to go into the contracting business in Regina. His room-mate, while at College, Geo. Robertson, raises high-grade pure bred poultry at Ottawa, and occasionally judges poul try at the fall fairs.

Jack Livingston, B. S. A., 'oo, is dairying in Vancouver, where he is a manufacturer of butter and cheese. Jas. Hollis, of the same class, is in Bermuda managing an estate.

Mr. Mitchell, the principal of the Kingston Dairy School, has been ap pointed to the Professorship of Dairy ing at the Manitoba Agricultural College, Winnipeg. He took the Dairy course here some years ago.

P. S. McLaren, of McGarry P. O., is one of Lanark county's most progres sive farmers. He does a good deal of experiment work with the cereal grains, Emmer in particular, and has one of the best herds in the Lanark

County Cow Testing Association. He received his Associate diploma in 1889.

D. A. McKenzie, B. S. A., '08, has been appointed assistant to the Spe cialist in Agriculture at Lindsay.

W. A. Kennedy, B. S. A., '95, is farming near Fertile Valley, Sask., and has Alex, McPhadden, '96, as one of his neighbors.



We present on this page the unique spectacle of the chance reunion, after a separation of twenty years, of three graduates, all of whom have disting uished themselves in their widely diver gent paths of life. On the left is Mr. B. E. Paterson, of Winnipeg; in the centre is Mr. W. B. Sharman, Profes sor of Bible Study in Chicago University; the person to the right is Mr. G. Harcourt, a brother of Professor Harcourt, of the Chemical Department,

and now Deputy Minister of Agricul ture for the Province of Alberta. The photograph was taken as they stood in the portal of the Government buildings, Edmonton.

Wheeler, '07, is in the Soil Survey Department of the United States De partment of Agriculture, and is work ing in Illinois.

The Review extends its heartiest congratulations to Sid Curzon, and his brother Arthur, commonly known as "Tot," upon their receipt of a legacy of some £25,000 sterling.

Statistics tell us how wide spread are the graduates of this College, and how widely extended is the range of their vocations, but we are most strongly impressed with this fact when ex-students keep dropping in from all parts of the globe for a short visit.

T. H. Sharpe, B. S. A., '03, was at the College this summer. He manages a banana plantation in Bermuda.

W. C. McKillican, B. S. A., '05, of the Seed Division, Alta., was here Thanksgiving Day.

R. D. Craig, '98, the manager of a British Columbia lumber firm, left his duties for a short time to visit the college.

W. J. Thompson, '96, spent a day here in company with his wife while on his way from Bermuda. He has charge of the Fertilizer Department of Swift & Co., Chicago.

A. McKenny, '07, Agricultural Spe cialist in Essex county, gave us a call while on his way to the Fruit, Flower and Honey Show in Toronto.

Frank Reed, Specialist in Agriculture at Lindsay, has been appointed to the Seed Division of the Department of Agriculture in Saskatchewan, to replace Doc McFayden, who goes to the Barton Seed Co., of Warrington, England, to act as their Western representative.

B. E. Patterson, Poet and Philoso pher, Journalist and Farmer. "Pat" came from New Brunswick, was edu cated in Ontario, and is now doing business in Manitoba, Saskatchewan, Alberta, and British Columbia. In his travels he meets many ex-students of the College, and has always a kindly word for the old place. The Old Boys remember him as one who, dur ing his college career, wrote the Col lege songs and played the bones, and no company in College, town or coun try round about was complete without B. E. Patterson. In his pilgrimage to Montreal every other year, he never fails to visit the O. A. C., and to spend a day or two with his old classmate, the President.

It will be of interest to some of the ex-students of the College to know that the separator offered for the largest number of subscriptions obtained for the Review by Oct. 31st has been awarded to an old boy, Mr. I. I. Devitt, Freeman, Ont. The number of subscriptions handed in by Mr. Devitt was eighty-one. Mr. W. M. Waddell, of 'og class, was a close second, with seventy-six subscriptions.



THE FIRST MAIN BUILDING OF O. A. C. THE PORCH IS STILL THE MAIN ENTRANCE.



Agriculture for Women.

BY MISS YATES.

[The following article was an address delivered before the annual meeting of the National Council of Women, in Ottawa, by Miss Yates, who is at present taking a course of lectures at O. A. C.—Ed.]

TN Canada, where so many women have nobly helped their husbands and sons to lay the foundations of successful farming, one certainly should feel under no obligation to apologize for a practical and abiding interest in Agriculture. At the same time, there is no doubt that numbers of farmers' wives and daughters in this country are adopting an attitude of re sentment towards these pursuits, and as soon as circumstances permit, it seems pretty evident, in numbers of cases, that the men of the family back them up in the effort to be relieved of duties in the barn.

One agricultural lecturer was asked at a big meeting whether his wife milked the cows. The answer, given in scathing tones, was, "My wife, sir, does nothing on the farm that a man can do for her."

Having a personal weakness for calves, I frequently make inquiries as

to the number on hand, method of feeding, etc. More often than not, the ladies in the farm home look very bored, and say that they really don't know anything about it, and it is months since they were near the barn. This is all right perhaps, and no doubt proceeds from a chivalrous desire on the part of the men to keep their wo menkind as apart from their business interests as their city friends do, and in these days of cheese factories and creameries it has become more possible for the dairy interests to be managed by the men. However, it seems a great pity that any feeling that it is derogatory to the dignity of a woman to do outdoor work should have arisen.

In the Old Country, the very highest in the land, from the Queen down wards, take an interest in such things, and there are colleges and training schools where educated gentlewomen go voluntarily to actually learn how to work at agricultural pursuits. These have, as is well known, an extraordin ary healthful influence upon even nerv ous and delicate girls. The interest keeps up, too, as years go on, and the passing of youth does not in any way affect ability to enjoy the work, and the progress connected with it, viz., Shows, Competitions, Clubs, etc.

With the exception of a few cases, general farming has not been found to lend itself to the average woman's ability. In my own opinion this is merely because of the lack of ordinary business knowledge common to the The average woman could not take the head of any business satisfac torily, so it should cause no surprise that she is unable to manage a big farm. The number of successful ex ceptions only draws attention to the rule. But so far as small holdings are concerned, and in regard to the lighter branches of agriculture, and with the application of intensive methods of production, then, a woman of ordinary ability after sound training can materi ally add to the comfort and happiness of her life and surroundings. By the lighter branches of agriculture, I refer more especially to Horticulture, Poul try, Bees, and Small Fruit.

In England, it is a gratification to their friends to be able to say that the Royal Horticultural Society's gold medal has been won for several years by educated women. The year before last, the fortunate girl was a friend of my own. I should say that over one thousand candidates take the examin ation each year, and it is open to professional gardeners. This year her great friend has won it, and the two have entered into a partnership on a small market garden just outside of

London, with a six-hundred foot run of glass, the object being to supply first-class stuffs to the neighborhood. I hear this week that prospects are excellent and their trade brisk. They now employ three men and are hard at work themselves. Tomatoes, cu cumbers, forced strawberries, mush rooms, violets, and wreath and bou quet-making being some of the branches of their work. England is looking on and wishing the firm of twin gold-medalists every success.

Of Miss Cornelius Wheeler's work at Cosham, I can only say that it has been established many years now on similar lines, and has been a brilliant success from the start. At its head there is, of course, sound commercial ability and the gift of leadership. Many others I could quote, and in my own profession of poultry. The out standing names of Miss Edwards and Miss Tammadge show definitely that we can succeed financially in the de lightful work on the land if we have perseverance, energy and business rectitude. The finest yield of peas in England this year was on Miss Brad ley's model small holding in Kent. We have it on authority from the Ontario Agricultural College, that the possi bilities of one acre may be even quad rupled by proper and intelligent culti vation.

For those having had a first-class training, there has been no lack of suitable openings so far; in fact, it may be said that the difficulty has been to inspire the girls with sufficient con fidence to accept the responsibility that invariably accompanies a high salary.

It has been said that only twelve per cent. of the educated community is able to do the world's work—the rest merely do the packing. This has been my experience, and it is one of the most disappointing features of trying to help women to earn their living.

Apart from salaried positions, and especially for those women having some little means and desirous of adding to them, it may be said that few occupations offer such opportunities for a happy independent life. Many women fail to realize that some commercial knowledge is necessary before undertaking any business what ever. Failing this, trouble leading to disaster frequently arises from making insufficient provision for working capital—and then agricultural pursuits are pronounced unsuitable for women.

Some of the difficulties connected with the life may be overcome by co operation. I refer to the sense of isolation, the monotony and the fatigue inseparable from living alone in the country. The best plan is for several to start together, and in this way a more comfortable put-up can be secured. The social advantages need not Be enlarged upon, but it conduces no little to the enjoyment of life to meet an agreeable party at meal times and in the evening when work is over. I say agreeable, for women at work out of doors are not so apt to be irrit able and nervous as those living an in door life.

The land may be used jointly for many purposes—fruit and poultry, dove-tailing well. Many appliances can be used in common and the stable can be worked jointly, to say nothing of a co-operative method of marketing which has been found to work very satisfactorily when tried.

There is no reason whatever why this work should not be advantageous

ly carried on here. Ontario seems to me particularly well adapted for it. The thriving system of Women's In stitutes, managed so admirably by the Department of Agriculture, provides excellent opportunity for receiving fur ther instruction and for keeping in touch with the experimental work be ing done in the Province. Further, a plan is on foot to establish a co-oper ative small holding scheme where each member shall have ten acres of pro ductive land to work. If I may be allowed to recommend it, an account of this scheme would be of interest to the Quinquennial Meeting of the Inter national Council of Women, to be held in Canada, together with addresses from some of those women who have actually succeeded in making a finan cial success of some of the lighter branches of agriculture. Many girls could take up the work at home pro fitably. It has been estimated that one more egg per hen in this Province would run the Ontario Agricultural College and allow \$75,000 per annum for improvements.

In this vast country, the acquisition of territory has seemed of paramount importance, but it should be remem bered that the few acres well cultivated have their undoubted possibilities financially. The capture of the highclass market in England by Denmark has been accomplished by the small producers whose system might be glori ously emulated by the women of Can ada. How about women's markets in our cities and towns-where the pro duce should be what it pretends to be, and Grade A is indeed Grade A, where petty trickery is unpractised and payment according to quality is the rule.

Christmas As Macdonald Girls Have Seen It.

CHRISTMAS IN SOUTH AFRICA.

Climatic conditions in South Africa are so different from what they are in England or Canada that it is almost impossible to keep Christmas day as it should be kept or enter thoroughly into all the pastimes and pleasures which that merry season brings to us. In the early days of Johannesburg it was thought to be quite enough to go for picnics and drive home late at night under a full summer moon, when the heat of the day was over. But, with the coming of more people from other lands, we all try to make the day as "Christmassy" as possible. We decorate our homes with holly and hang the mistletoe bough in likely places, but the good old African sun shines on warmly and the sky is a beautiful blue. Even if the seasons were reversed and Christmas came in wintertime, it would still be a bright sunny day, as dull skies in South Africa, in the Transvaal particularly, are very rare. The sun always shines, and the days are very cold and dry. One longs for rain, and sometimes it is six months before the clouds come up. People from England appreciate these dry conditions, and by some the climate is considered absolutely per fect.

We play tennis all the year round, not on turf, but on hard gravel courts, and on Christmas day this game is the chief form of amusement. Along the reef the different mines have their annual sports' day, as it is one of the two holidays which falls to the lot of the miner, and naturally he is not slow to take advantage of it. Cricket is also played a great deal and everyone takes an interest in the many exciting matches played at the Wanderers' Club, the playground of Johannesburg sportsmen.

One advantage perhaps of having a summer Christmas is that the churches are always exquisitely decorated, as flowers of all kinds bloom to perfection in Johannesburg and Pretoria, but it is strange to sing the glad Christmas hymns on a hot day, although the old familiar tunes ring out just as merrily. One Christmas eve a party of us went out to some of the mines and sang carols. We drove round to the differ ent houses on a mule wagon, and our singing was accompanied by two violins and a small harmonium, which was placed in the middle of the wagon. We grouped ourselves around, and as our way took us over many jolty roads, and in some cases mere tracks on the veldt, it proved to be most exciting. In spite of this, and the fine summer night, we lustily sang

"When the snow lay on the ground, Deep and crisp and even,"

and joyfully partook of the good cheer offered us at each house. Mince pies taste good even in summer time. Those of us who have spent Christmas in South Africa will look forward to our first Canadian Christmas with pleas ure, at the prospect of spending it under such different conditions.

A CALIFORNIA CHRISTMAS.

By E. Bryant.

"How are you going to have your Christmas this year, Pete," asked Pinte Bill, "hot or cold?"

Now Bill was a Californian, and he knew.

"Just medjum, Bill, just medjum."
And so I ask you how you want your
California Christmas, and if you knew
as much about the subject as Pete you,
too, would say just "medjum."

You may go to Pasadena and enjoy the wonderful Rose Festival which is held there every Christmas day, or you may go to the high-peaked Sierras for a snow-shoeing expedition in the great silent forests. But best of all between these extremes you may find the real typical Californian Christmas.

You will find it in the foot hills of the Sierra Nevada Mountains. Here Christmas dawns like a morning of spring with one difference, the Christ mas spirit is in the air. On the rolling hills the California holly is hanging in heavy red clusters on the drooping bushes, and the mistletoe is white-ber ried and full of suggestion of this glad time. In the woods there are tall ferns and spicy evergreens. The gardens are a glory of chrysanthemums, roses and violets. The forests are crowded with straight little fir trees, all waiting and eager to be "butchered to make a Roman holiday."

A little tree is selected, placed in the wagon and the remaining space is filled with holly, mistletoe and ferns. Scores of wagons are in the woods to-day, be ing filled with Christmas cheer, but when they are all filled and gone there

will be plenty left, for nature is gener ous in California.

Then away to "town" to get the necessary artificial decorations for the proper Christmas tree. The mining town is transformed into a gay little city.

In the shops are chattering Indian women, haggling for gaily-colored calicos, while the men stand by,—their stolid faces just a little less rigid be cause it's Christmas. People bustle eagerly along the streets with mysteri ous bundles. Little waifs peer into candy shops. Ice cream parlors are a scene of a great deal of business for the excitement necessitates frequent re freshment.

At last the shopping is done, the tree is bedecked and all is in readiness for the evening's fun. This will commence about half-past eight, after the turkey and mince pies, which you saw in the pantry, have disappeared.

It is growing very dusky and soon the moon will rise, so we saddle our horses and away for a moonlight ride before the uproar sets in. Up the moonlit trail rides a lonely horseman, a cowboy returning from town. He whistles softly to himself and tied behind the saddle are numerous suspicious-looking bundles.

"Where are you off to, Bill?"

"Home," is the laconic reply, and noting your gaze at the bundles, "Tak in' the wife and kids a few little toys," and Bill rides on up the trail, happy because the Christmas spirit has crept into his rough old heart, for Christmas is Christmas, even in No Man's Land.

CHRISTMAS IN GERMANY.

By Irene Robinson.

Some few years ago it was the good fortune of the writer, along with a party of friends, to spend the holiday season in Germany—the very birth place of things Christmassy, from old Kriss Kringle himself down to the lit tle woolly lamb that he carries in his pack, bearing the label "made in Germany."

It is the week before Christmas, and we find ourselves in the city of Berlin, and a wonderful Berlin it is! For weeks preparations for the great holi day have been going on, and the very air breathes festivity. We cannot help feeling the infection of it all. Our blood flows faster, and by the time we reach the toy shops we are experiencing again the happy thrills of child hood.

And these toys! Words fail to de scribe the wonders of form and color and mechanism. Nowhere in the wide world would we find them in just such wonderful masses—nowhere but in Germany, for Germany produces them.

Leaving out the mechanical toys that require the appliances of a factory for their construction, they are made, for the most part, in the homes of the peasantry—whole families being often employed in this way. The art is handed down as a family secret from father to son.

Should you go into the home of one of the German toymakers about No vember, you would find one room stacked from floor to ceiling with the year's production of toys. This toy making is an interesting occupation, but not a paying one—a mere pittance being all the peasant gets for his work. The profit goes to the dealer and exporter.

On emerging from the shops into the streets, we find that what was once an open square is now a dense wood—a veritable forest of Xmas trees, ready for sale. Germany is prodigal of Christmas trees, one alone will not suffice for a family, but each individual in the household must have his special tree.

The decoration of these trees is a matter involving much care and the usual amount of secrecy, without which half the charm would be lost. At the top of the tree is placed a small image of the child Christ, then come candles of various colors and all sorts of bright-colored ornaments. The sub stantial gifts are not hung on the tree, but placed on a table nearby.

Not the least item in the list of pre parations for this great festival are the "eats." Now is the time for the housefrau to show her culinary skill, and this is done in no frugal way. Special cakes, candies, puddings, meats and wines all appear in abundance—for the feasting must last at least a week.

On the day before Xmas we said good-bye to Berlin, and with our party drove to the estate of one of our Ger man friends, where we were to spend Christmas day. The air was crisp and frosty, quite Canadian Christmas weather—which we were told—is rare in Germany, and as our sleigh sped over the snow any trace of longing we may have had for the homeland, dis appeared.

Having arrived at the home of our friends we found the usual Christmas preparations in progress, and we were warmly welcomed into the midst of it all. The programme provided for our entertaintment was novel and interest ing. First came a visit to the tenantry of the estate in their own homes—this is an event long looked forward to, for the most friendly relations exist be tween landlord and tenant. Often several generations of one family will serve on the same estate. Besides these visits were the bringing of nice presents for all, and wonderful hamp ers of good things for the work of feasting.

The children of the tenantry re turned this visit later in the day, and a merry throng they were as they assembled in the great hall—their faces bright with soap and happiness. They entertained us with song, recitations and gymnastic feats of various kinds—all specially prepared for the occasion. The entertainment over, each gretchen was made happy by the gift of a doll and each hans became the proud possessor of a knife, the virtue of which he at once proceeded to test.

The children's visit was followed by the house servants' Christmas. The large servants' hall was decorated for the occasion, and a special tree provided for each, along with an abund ance of desirable gifts and good cheer was the order of the day. Last of all came the turn of the family and guests. We had been sitting around the open fire in the drawing-room telling stories and singing old German carols and songs, when our hostess invited us to the dining-room. At the door we stood spellbound, imagining for a minute that we were entering Fairy land. The twenty trees were hung with myriads of colored candles, which shed their soft light through the branches, making an effect of extraordinary beauty—long to be remembered.

When we had become accustomed to being in Fairyland, we were anxious to find what the fairies had brought us, and we were soon busy opening our gifts.

We Canadians were much amused at the expressions of surprise and plea sure from our German friends, over their gifts, being queer, guttural sounds—untranslatable, unanswerable. What a happy day it was! and dear old Germany—how well she understands the art of merry-making and the joy of giving! To her we owe a debt of gratitude for the beautiful myth of Santa Claus, and the joys and toys that go with it.

CHRISTMAS IN PARIS.

By E. Ellis.

Christmas Eve of — found us in Paris, in cheerful certainty of enjoying life, even more than is ordinarly possible, in the gay Capital where, the everyday rou tine, whatever one's sphere of life, is crammed more full of charm than are the holidays and festivities of the dwellers of other cities. We made no settled plan—we were in the heart of Paris, the Quartier Latin, and assured of that indefinable Parisian atmosphere

which endues the simplest form of pleasure with a charm far beyond its merits.

The Reveillon? Yes, just the thing! With just the suggestion of dissipation, in the negotiation on foot of Parisian streets at midnight, so dear to the prosaic law-abiding British mind.

A few moments, and we were down in the brilliantly lit boulevard, crowded with students, garbed in every variety of garments of cut and style, suffi ciently unique and pronounced to pro claim indisputably to the world that the pursuit of art and knowledge, by whatever path, had rendered them in different to the conventionalities and restrictions of the sartorial kingdom. Our way led us over the Seine, flowing, dark, broad and deep under its myriad bridges, past the grand cathedral of Notre Dame, where the pathetic figures of Adam and Eve, divided by an austere line of Saints and apostles, carved personification of Cause and Effect, set in a veritable embroidery of stone, gazed down upon us, hurrying past, not caring, a little superstitiously perhaps, to linger in the gloom which the close vicinity of the ill-omened morgue, with its ghastly tenants, crouched in the shadow of the mighty cathedral, seemed to give out to the night. The glittering streets, thronged with pleasure seekers, were soon reached. Vehicles and equipage, miracles of soundless and graceful movement darted or slowly passed along, their lamps gleaming like huge emeralds and rubies amongst the thousand diamond-rayed illuminations of stores and public buildings.

The City of Light, indeed! And such stores! Veritable Arabian Nights of the store world to him who could regard their wealth of art, beauty and riches with the controlled gaze of the museum haunter, whose reason re strains him from coveting the object purchasable only to the few.

Now before us looms the great Par thenaic-columned Church of the Made line, and we are soon merged in the crowds of sightseers and worshippers swarming, like ants, up the wide, lofty flight of steps. A cordon of "sergeant de ville," armed with sword and revol ver conspicuously displayed, drawn around the edifice, act as stern re

minders of the pains and penalties which had followed and would follow again any demonstration from a Pari sian mob filled, at that time, with ran cour and ill-feeling against the priestly element.

Our tickets examined under stern scrutiny, which only our faction—free conscience—enabled us to undergo without a tremor, we passed into the incense-laden, dimly-lit interior.

The Elevation of the Host drew to a close; the solemn chanting of priests and acolytes ceased, and, as the clock struck out the last note of mid-night, a voice, the most wonderful voice in Europe, rang out the famous Noel: "Minuit. Chretiens! c'est l'heure

solemnelle

Ou l'Homme-Dieu descendit parmi

Before it, the hum, the stir, the gayety of spirits drawn from the gay streets, the church, the city seemed swept into nothingness, the curtain of centuries rolled back from before a starry East ern sky, the Babe, the tender Mother, the kneeling Kings, and the wonderful voice worthy, if voice could be worthy, of the glorious message:

"Teuple, debout! Chante la delivrance! Noel! Noel! Voici le Redempteur!" With it, still pealing and reverberating through our being we stood once more in the streets, though feeling the ma terial exigencies of life presented by a deluge of rain, merging the newly aroused spirit into a wild anxiety to board hopelessly crowded 'buses and fiacre upon whose services, the deluge had set a premium; to get home to the "reveillon," feast, whether of black pudding, of mysterious composition, or pig, in every shape or form, the im agination or experience of "char enterie" could devise, or the more luxurious turkey, stuffed with chest nuts and flanked by such indigestible accompaniments as are considered necessary to the true enjoyment of a nation's festivities.

Our flat beamed with its welcoming decorations of scarlet-berried and rich green holly, reflecting in its shiny sur face microscopic gleams of a dancing log-fire. A noble turkey on a well spread board suggested appetite of which, till then, we had been uncons cious; whilst smothering, by its tempt ing appearance, any doubts as to the gastronomic fitness of the hour. The feast proceeded joyously, terminating in the time-honored "plum pudding," served in its indispensable accompani ment of purple flames, and unutterable suggestions of "le diable's" agency from a horrified concierge who could only be induced to remove the dish after fortifying herself against the sup posed evil spirit by frequent and de vout "crossing."

A few hours' interval of sleep, and we were wandering away the rest of Christmas Day in the tarnished and jaded beauty of the Palace of Versailles through suites of rooms and corridors absolutely permeated with the dim sense of the presence of ghostly habit ants whose living passions, pleasures and pride had swaved Empires cen turies before; through the hundred year old, quaintly and fantastically trimmed walks and altees of the gardens, by fountains still and silent, and statued groups of nymphs, fauns, satyrs and naiad, moss-grown and crumbling, in and out the minature farm dairy hamlet, pathetically quaint monument to the ill-fated Marie An toinette's fancy to play milkmaid, whilst her husband mended watches, and the machinery of a nation fell to pieces around them. Then home ward and finis our first Christmas in Paris

A TEXAS CHRISTMAS.

By Helen Millspaugh.

O! For that day of all the year when throughout the whole world, among rich or poor, old or young, black or white, in the frozen northland or the brilliant tropics, the spirit of Christmas reigns which makes that day the best.

When I think of Christmas, the sound of popping fire-crackers, and the sight of mistletoe comes to me and I am at home in a little town far out on the prairies of Western Texas, and I hear that glad greeting: "Christmas gift! Christmas gift!" which wakens me on Christmas mas morn.

The day is perfect. Yesterday's whistling "norther" has died down dur ing the night, and left the air sparkling

and bright. The sun is shining as it can only shine in Texas, and the great blue dome of sky is half filled with billowy white clouds, drifting lazily southwards. Grandmother, who hails from the cold, frosty North remarks that in Texas it never seems like Christmas to her without snow, and the jingle of sleigh bells. I say let the snow come some other time than the twenty-fifth of December, for we couldn't do justice to both snow and Christmas in one short day. So those white cloud banks are our snow, and instead of the sound of sleigh bells we have fire-crackers and torpedoes keep ing up a lively tune.

The Christmas tree we gather around at noon—aunts, uncles and

cousins are there with us—and all join in the giving and receiving of gifts, good-will and cheer. Even the "old black nigger," Andy, comes in and receives each present that is handed him with a "Thank-you, Miss," and a bow, and a shuffle accompanied by a broad grin that displays the whiteness of his teeth, and breaks the blackness of his face. We linger about the tree loving it for its deeper meaning and hoping that the next one will find us all to gether again.

No sight is merrier than a crowd of happy people around a Christmas tree, unless it be the Christmas dinner-table, laden with the customary good things—the turkey being the monarch of the feast. The table is enlarged with un used, dusty leaves welcoming back the same dear faces to their old ac customed places—only this year there is one more, the only son brings home his bride.

The remainder of the afternoon is merry and gay with visitors coming and going. Lilian runs over to show her new bracelet, and Virginia, her Concho pearl ring, the pearl of which her brother found in our river just be low old Fort Concho. Robert comes riding up, like the true cowboy he as pires to be, on his new horse. After cavorting around to show off Buck's good points he nobly gives up the sad dle and then we all take a trial lope around the block, riding double to save time.

Here our inspection comes to an end by mother calling to us the time. So in we rush to dress for the dance that we are going to that evening at a ranch fourteen miles from town. The sound of the bugle announces the ap proach of the tally-ho, and after a fare well look in the mirror, and a "Hurry

Up!" from the boys and girls, we are with them and hastening on to the next place, soon filling the tally-ho which is drawn by the four big fire horses. Some one remarks that the Bucket Brigade will have to "get busy" if there's a fire to-night.

At last we are off across the prairie in the glorious moonlight, and the limitless freedom of the plains makes one feel that "There's nothing like the prairie when the wind is in your face, * * * 'Tis then you feel the won der and immensity of space."

We see the lights of the ranch in the distance, and finally reach there ready for all the fun that is in store for us. The house is decorated with huge bunches of mistletoe hung in conspicu ous doorways, and all sorts of unex pected places. The "house-warming" begins with good Mexican music for the dancers, and out doors Roman candles and sky-rockets are shot off, blazing across the sky and disappear ing on the horizon.

The novel feature of the evening is "The Round-Up" when the big ranch man host calls out the figures of a country square dance, and fast and furious is the pace—

"Doce Ladies, Gentlemen, all Get your partners And stampede the hall. Swing!

Swing your only dear!— So it keeps up until all are breathless with hilarity.

After "Home, Sweet Home," is danced, and good-byes are said, we re turn to town happy, but too sleepy and tired to appreciate the beautiful breaking of dawn, and thus ends our Christmas celebration in the Lone Star State.

Among Ourselves.

The Hallowe'en Reception.

When the subject of a fancy dress promenade was brought before the Ex ecutive Committee of the school, they, after procuring the consent of the au thorities, promptly placed the matter in the hands of two of their members, Miss Casey and Miss McKee. These efficient, and extremely capable young ladies at once appointed committees, and in a very short time had things in working order. Their first and firm re solve was to make it an unusual, orig inal and interesting event, and most unlike anything ever seen at Macdon ald in the past. So they began with the programs, and they were distinctly a novel feature, long, narrow, yellow cards with the numbers printed in out standing black letters with the pertin ent heading, "What's Doing."

Immediately upon the opening of the entrance doors, an eager and ex pectant crowd of College men, profes sors and their wives poured in, to con gregate in the lower halls, and to seek for partners. As soon as the allotted time for this had elapsed, the opening number of the programme was an nounced. All the couples were re quested to march to the gymnasium, where the Grand Pageant took place, the chief features of which were a gracefully performed minuet, by the Misses Fuller, Rogers, Cooper, Rogers, McKeen and Bankier, who looked most lovely in beautiful gowns of the last century, and powdered hair, with Messrs. Coke, Tothill, Treherne. Kea gan, Douglas and Burke in knee breeches, periwigs and big-buckled shoes. Upon the platform were grouped the members of the Macdon ald and O. A. C. Faculty, and, as the

varied scene passed beneath them, the three judges-President Creelman, Professor Reynolds and Mr. Kendallselected from the many ingenious and original costumes those which, in their opinion were the most pleasing. The couples then roamed about through the crowd, amusing them selves, by attending the various enter tainments provided. A few of the most popular were the Palmist's Booth, Oracular Salmon, and in the upper story-Nothing Doing. During the fourth promenade the word "Soph omore" was acted in the gymnasium, by means of charades. Toward the end of the program a trio, "Three Maids of Lee," was charmingly rend ered by the Misses Fuller, Aird and Hartley, at the conclusion of which the prizes were presented by Mrs. Creelman to Miss Watson, as "Libby, gaun to the Kirk," and Mr. Lewis, as a very realistic Teddy Bear.

Every guest had been presented with a Soup Ticket, in the beginning of the evening, and when the time for refreshments arrived, the crowd col lected in Punkin Inn for coffee and sandwiches, and these tickets were ex changed for pumpkin tarts instead of the expected chicken broth.

The evening wound up with a Pea nut Hunt throughout the building, and when the twenty-third promenade was announced the company dispersed, agreeing—we hope—that the anticipa tion was amply fulfilled by the realiza tion.

The gymnasium was tastefully decor ated by the advanced class in Domes tic Art. The large screen at one end was most effective, forming a back

ground of autumn leaves that showed up the central diamond across which in yellow corn cobs, was written the word "Hallowe'en." Above the fire place niche was a corresponding declar ation, "Macdonald," written in pine cones, a large lighted pumpkin taking the place of the central O. Above this were three sheaves of wheat in a green ground. Suspended from the archway were strings of apples and peppers, while inside were arranged pennants and cushions in graceful profusion. The rest of the long room was trans formed by lighted pumpkins and other seasonable decorations.

Much credit is due the College men for the ingenuity of their costumes, and a vote of thanks extended to Miss Greist and to Mr. Kendall, who so ably assisted with the preparations.

Literary Society.

The first Literary Society meeting of Macdonald year was held on Satur day evening, October 24th, in the gym nasium, the President officiating.

In an opening address, the President made it understood that all were ex pected to take their parts in helping on the work of the Society.

A program of general interest was rendered. Miss Josephine Kilpatrick ably performed a very difficult piano solo, after which Miss Elizabeth Robinson gave two readings, "That old Sweetheart of Mine," and "Mary Ellen at the School of Expression." A solo by Miss Aird, "Coo," was given in her usual charming manner, and a vio lin duet by Misses Robertson and Rutherford was much enjoyed.

With a violin obligato by Miss Rogers, Miss Fuller's solo, "Thy Beam ing Eyes," was also much appreciated.

Y. W. C. A.

For the Y. W. meeting of October, twenty-fifth, we were privileged to have with us Miss Kent, the President of last year, who gave a most interest ing and instructive address upon Silver Bay. A charmingly rendered solo by Miss Fuller was also enjoyed.

Miss Ferguson addressed the meet ing the following Sunday evening very acceptably, upon "What is Worth While!"

The last meeting was taken by Miss Dobson, the newly elected Vice-Presi dent, who gave an excellent address upon the opportunities which the college girl meets with in her daily life.

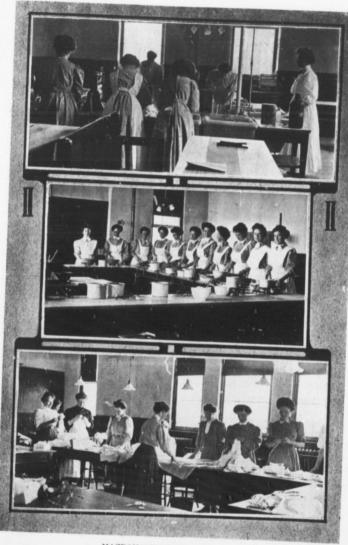
For a short time every day during the past week a meeting was held by the girls in observation of the Week of Prayer, which was held throughout the world.

The Manufacturers' Luncheon.

On Saturday, October 31st, one hundred and seventy of the visiting members of the Canadian Manufacturers' Association gathered in the fire-lit drawing-rooms of the Hall, quite ready for their dinner, after a busy morning spent chiefly out-of-doors.

Promptly at 1:30, luncheon was an nounced, and the guests passed into the dining-room, which, prettily decor ated with "mums," looked very dainty and inviting. Here Miss Maddock's waitress staff of thirty-seven Juniors proved their efficiency, for to them much of the success of the dinner is due, and after the coffee was served the blue and white gowned figures ranged themselves around the room to listen to the speeches, with which the meal concluded.

The menu, under Miss Blyth's



MACDONALD GIRLS AT WORK.

charge, was prepared entirely by the girls.

The following lines, composed by one or two "waiting" homemakers, ex press clearly the feelings experienced by some of our maidens during that last quarter-hour.

"Thirty-seven greenhorns standing in a row,

At the end of dinner, when it's time to go.

Speeches still continue, will they never cease?

Thirty-seven greenhorns will soon be spots of grease."

Ground Hockey Notes.

The past month has witnessed a great deal of solid work, and the in

crease in skill and knowledge of the game exhibited by some of the members is certainly remarkable. Much of the credit of this improve ment must be ascribed to our patient coach, Mr. A. M. Shaw, to whom our gratitude for his persevering en deavors, his cheerful super vision and his unflagging at tention to our interests, shall ever be most fully due.

Regular practises have been held on Tuesday and Thursday afternoons and Saturday morning, the routine being varied by three rather irregular ones—on Tuesday, Oct. 20th, when the town girls came out and practised with us, and on Tuesday, Nov. 3rd, and Tuesday, Nov. 10th, when eleven of the O. A. C. men and eleven Macdonald play ers divided up and two good fast games were the result.

Matches—On Monday, Oct. 19th, the Hall vs. the College. Score 3—2. On Tuesday, Oct. 27th, Homemakers vs. the World. Score 1—5.

The Guelph team was unable to ac cept the challenge sent by the Macdon ald Hall first eleven as the fitting close to this first hockey season.

Farewell!

From the Class of H. E. VII.

To Miss Watson.

To Miss Greist.

To all our teachers and instructors. To the large bright sewing-rooms.

To the laundry.

To the Mechanical Building.

To the comrades who for the past three months have surrounded us.

To our pleasant life of learning at the Macdonald Institute, O. A. C., Guelph.



GROUND HOCEKY.

Yet ere we drop our pen let us pic ture one final scene—an attentive class ranged around the long table of Room 121, our beloved and honored mistress in her accustomed position at our head,—and let us pierce the veil that hangs before our eyes, and as each name on the roll falls in turn upon the silent air, take a wee glimpse into the future of her to whom our thoughts are called. Our laughing Sydney! We can see her in the years to come for ever slender in a brown directoire skirt.

Here's to Casey, our energetic bard.

We can see her in future consulting the misses under all circumstances, on all occasions, a most gracious hostess, ever hating man, but clinging to pussy cat and her teddy bear.

Who does not love our Clarkie? A fine old granny she will make, seated in a comfy rocking chair, a dainty cap upon her snowy locks and instead of the proverbial knitting an embroidery hoop between her eager fingers.

Sensible Effie! It is easy to im agine the grateful creatures who will ever depend upon her for that last frantic, absolutely essential and im perative shopping!

Our kind and gentle bride, so soon to be established in her new home. Our best wishes accompany her there, to remain about her always.

Leila, our assistant guide-chart, will never lack a new hat for each and every occasion, nor will those at home ever have to seek far for an accomplished seamstress.

Cunning Baby Jo, our pet and play

thing, and yet wise enough withal! We see her a responsible matron, fitly oc cupyng her appointed sphere.

Willing, helpful Mildred will always fill a post of honor, and throughout future years will assuredly be serving someone as faithfully as she has served us in her difficult position as our official representative.

A new Clara, roller skating days gone by, new pleasures and duties crowding in upon her, and the kettle singing brightly on the hob!

Edna, the thoughtful and reliable! A universal peacemaker, the joy and blessing of an entire countryside!

Happy Zoe will ever fill the fleeting moments.

"Men may come and men may go," but she'll chat on forever!

Dear little Hazel! May she never want for a strong protector to shield her from every care and worry!

Silence once more, and once more, "Farewell."



MACDONALD DRAWING-ROOM,

Signs of Christmas at the Hall.

With All Apologies.

'Twas the week before Christmas and all through the hall There was bustle of learning-enough for us all! The boxes were placed by each doorway with care, As a sign that the holidays soon would be there, And the hour when nightly each maid reached her bed. Was too late for a dream to find room in her head, For Miss Watson in wonder, and we in despair, Had just settled our minds to that fortnight of care. When over the hills, with the first fall of snow Came that warning of Yuletide we all of us know, The voice of St. Nicholas, breathing the joy Ot decking the tree and arranging each toy, Of filling the house with the green and the holly. Of planning surprises and everything jolly. What cynic can murmur, belief in his heart, That such visions as these are from wisdom apart?

Yet a word of the comrades returning no more,
For though voices are glad, there are hearts that are sore.
There are eyes in whose depths a sad wistfulness rises
At thought of the classmates, all ages, all sizes,
At thought of the present so soon to be past,—
May each find true friends where her future is cast!

So the days took their flight till the twentieth woke, How the moments then dragged! Sure a saint 'twould provoke At last four o'clock—"Leave your studies and sport, Come, come all, Homemakers, Seamstresses, Short, Come Housekeepers, Normals,—good-bye to the Hall! Now dash away, dash away, dash away all!" As atoms of dust from the broom bristles scatter, And cleanliness, calmness, succeed to the clatter, So off to the station these particles rushed, To leave a still campus, snow-whitened, snow-hushed, But the carol rose clear ere they passed out of sight, "Merry Christmas to all, and to all a good-night."

Much Ado About Nothing.

A Hockey Match.

On Friday, October 16th, the ground hockey team of Macdonald Hall sent the following challenge to the Ontario Agricultural College:

"The Macdonald Hall Hockey XI. challenges the O. A. C. team to a game of hockey, at 4:15 p.m. on Monday, 19th, on the Macdonald Hall ground.

"Handicap—The O. A. C. team to wear skirts not more than 3 inches from the ground, which must not be lifted in any way during the game."

And in due time received this reply: "The Ontario Agricultural College Ground Hockey XI. accepts the chal lenge so valiantly offered by the Mac donald Hall hockey team. And to this end will meet them in deadly conflict on the Macdonald hockey field on Monday, at 4:15 p.m., clothed in the necessary armour, in accordance with the terms of the challenge."

Memorable Monday at last came. Hundreds of beautifully dressed spec tators crowded around the side lines, cheering and waving colors. game started, a scene (!) which will never be forgotten either by those who watched or those who played. One distinctive feature of the game was the marvellous dexterity with which the O. A. C. team managed their skirts. But perhaps the most noticeable thing of all was the perfect grace displayed by those willowy forms, especially when gliding across the entire hockey field in three strides! In spite of sev eral interruptions for such necessities as water and hairpins, the game went on amid the hearty laughter and cheer ing of the crowds.

A word of praise must here be given

to those of the O. A. C. team who trimmed their merry widow hats with such exquisite taste. So beautifully were the hideous colors of red, purple and pink blended together that one might think that milinery was included in the course of studies at O. A. C. Al so the dainty hosiery, twinkling now and then from beneath the rustling draperies, showed off to perfection the young "ferry boats" which so elegant ly completed the effect.

At half time, one of the more delicate players (who was supposed to be goal, but was usually beyond the for ward line!) was completely overcome by the rustling sensation of skirts and dropped in a faint on the ground. The nurse was called to his aid and not until a box of talcum powder and half a bottle of eau de cologne had been poured over his face did he regain consciousness.

The game again started. The referee put the O. A. C. goal off for not keeping his place! Then their half back rudely obstructed the way of a Macdonald player, who was running up the field with the ball. He put his stick out to hit it and in so doing tripped his opponent. He was prompt ly put off for foul play! So the game wore on. Until half a minute before time, the score was 2—2, but in that half minute the victory was won. Just as the whistle blew, the ball rolled majestically through the O. A. C. goal and Macdonald Hall held the day.

Prayers in the Assembly Hall 8.36 1-3 a.m. Signs of trouble from the platform, then a voice:

"Girls, I don't mind (Phil) harmoni ous noises, but I can't endure the

sounds that issued from this room last night!"

At Philharmonic Practise.

Conductor—I don't want to go chas ing after (ladies, this doesn't refer to you) each member of the choir.

Table 2.

Just eight of us, down near the door, We ate till there was nothing more,

When Nettie brought pie,

Our spirits were high,

But when Madam arose we were sore.

00

Information Wanted—In physiology class after a careful explanation from Dr. R. how the blood makes its course to the heart.

Student—"Well Dr. R., but how does the blood remember which way it's supposed to go!"

00

Wanted—Miss G. M. would like a few lessons in bass to enable her to pronounce "present" at roll call with the correct intonation.

At the Promenade on Hallowe'en.

Mr. B— came up to Miss A— and stood admiringly in front of her for a few seconds, then said:

"Miss A—, how nice you look, really I didn't know you at first!"

Miss W.—"Pardon me, but!! How are oysters on the half-shell cooked?"

A.—"Are you going to dress in fancy dress on Hallowe'en?"

B.—"No, I'm going to dress as a gentleman."

A .- "Oh! that will be sufficient dis guise!"

00

Mr. W-, dressed as a pretty little girl, was sitting at the refreshment table. Suddenly a groan was heard and Mr. W— said: "Oh! goodness, I'd better not eat too much to-night; I've got a belt on."

00

Our stern Professor of English asked Miss W— what her reason was for putting a capital T for the word "two" when it came in the middle of a sentence. Miss W— looked thought ful for a minute then answered, "Well,

Table 7.

S is for slumber—so late in the morning!

To come down to breakfast, the lazy ones scorning.

E is for everything, edible, eater,

By each of the eight of us—government treater!

V is for vacant, a feeling which may Thrice daily beset us—soon driven away.

E's the essentially earnest effect

Produced by the *meetings* we must not neglect.

N's for the night, which comes soon after tea-

May your dreams be as pleasant, as pleasant can be!

00

I thought the effect was good." Again when asked why she used the phrase "Since you professed no profession," she said, "Because it sounds Irish!!"

In Cooking Class.

Miss H.—(tasting hot chili sauce, then cheering visibly)—"Oh, well, it won't be so hot when it's cold."

A Senior's Dream.

Senior—Starting up from sleep, "What! Is it a dagger that I see before me?" "No! 'Tis a Dietary lacking in Proteid."



Black-(Observing the new fresh man which is driven by Ross Creel man, and answers, in a low, sweet voice, hee-haw! hee-haw!) If any of you fellows need an insect for your collection, there's a dandy!

Eastham-Give me of your tobacco store, Stafford!

· Staff.-What am I that I should be parasitised by you?

Eastham-Well, you ought to give of your substance to your friends.

Staff.-Begone, do they call fleas on a dog's back, "friends?" 00

Before the Masquerade-

Student-Have you any spirit gum in stock, please?

Clerk-I'm afraid we haven't any left, but we have something just as good; try this Tutti Fruitti.

You ask for an explanation? So, it was a red and blue who couldn't be lieve that Tutti ruminate was a good thing to stick on false moustaches

with. But it was a maiden familiar with students who suggested "some thing just as good."

Gentle Saunders (At Botany)-Sir, what term do we use to locate the gymnasium when it is situated below the receptacle?

If one proverb tells us to "Strike while the iron's hot," why should an other advise us that "Second thoughts are best?"

Scotty-Have you ever heard Gaelic spoken?

-Yes.

Scotty-There's nothing like it.

-I'm glad to hear it.

Cleverly says its beastly crude to survey with a donkey level.

Was it the Freshman's experience which led him to speak of the judging pavilion as the stock judgment hall?

Act I.—Scotty Lawson stood upon the sidewalk as four of the sweetest of Macdonald Hall, emerged from the station and called a cab.

Act 2.—It was a shame to allow them to carry those heavy grips to the waiting vehicle. So Scotty choked down his native shyness and assisted.

When each fair maid was safely stowed within, Scotty, with that quick intelligence not possessed by every wee, canny man, jumped up beside the driver, enroute for Macdonald Hall

Act 3.—Four cramped, and tired maidens emerged from within the cab, as it drew up in front of the "abode of the beautiful," each paid the price of her ride to the expectant Jehu, and then trotted toward the hall. Scotty meanwhile scrambles down from on high and proceeded to depart.

Act 4.—The cabby contemplated the fares within his grimy paw, and then exclaimed to the last of the maidens—Hi! there, aren't you going to pay for this little boy?

The President of Lit. (at Union Lit.)—Professor Dean has kindly con sented to act as critic this evening. If any of you become weary, have pa tience, the last car does not leave until a quarter to eleven, and the lights are on until midnight.

Rettie (Union Debate)—Mr. Chair man, Ladies and Gentlemen, As the leader of the affirmative stated: "A house divided against itself cannot fall."

N.B.—Perhaps he was thinking of the college residence. Therefore ex cuse him, "O Kings."

"It's not the coat that makes the man (it's the socks.)"—Elmer Rice.

Professor Reynold (English class)— Do you believe that there were clocks which struck the hours in Caesar's time, or is this sentence another case of anachronism?

King—Perhaps Shakespeare was re ferring to the sun striking the dial.

Professor Dean (To second year dairy class)—I hope you will excuse any mistakes I may make in my lec ture this morning, but I have just taken two periods with the first year, and I'm not feeling well.



ROSS CREELMAN AND HIS DONKEY.

"These are the times that try man's soul."—The Editors.

Romance in the life of Napoleon?— Yes. Of Shakespeare? Yes. Of Cae sar? Yes. Of Capt. Tommy Clarke? Yes.—It would seem that all of earth's truly great have their softer moments.

Tommy proved himself to be no ex ception to the rule, when he sat with smile-bathed visage upon the side line, whilst the Rugby team trampled their way to victory. The light of battle shone not in his eyes. For at his side there sat a maiden fair, who gazed at Tommy, and betwixt her sighs, he whispered nothings through her au burn hair.



Before Christmas-and-after Christmas

The Game of Rugga Feetball. By Monseur Dimlux.

Mr. The Editeur,—It is sometime since that I write you of the game of baseball match, of its follies, its progidies, its savageries. At that time it was empossible to figure myself a game more terrible, more ferocious. But regard then your game of Rugga Feetball! Ma Foi! Is it that your base ball is rude? Your feetball is brutale; is it that your baseball is compliqued? Your feetball is one veritable enigma!

Your baseball is a game of some savages, but your feetball is of more than that! Of some fanatiques? No! Of some lunatiques? No! Of some wild beasts? No! Of what then? Of some demons!

Me who speak you, I have seen it. Listen, I will tell you. One day I meet my Canadian friend; but what damage? He has an eye poached, the head trussed, the arm in a scarf, his figure has cut and swelled itself. "Ciel, my dear friend," I exclaim, "what has arrived? You have had an accident? Perhaps a coleesion on the railway road!" "It is then bicyclettes?" "No!" A blow of lightning?" "No!" "How then?" "Oh! nothing, M'sieu, only Rugga!" How Rugga? I comprehend not feetball is a game, is it not? Yes M'sieu, and a joli good game, too." "Joli! Majoi! sans doute! To have

the eye poached, it is joli n'est pas? To have the arm broked, it is joli, also! I know not your feetball, but I have no envie to play him.

"I go with him to see the game. Be hold us arrived. There is a large field of herb, very humid, there are speck potatoes in thousands. At each end a gibet, gallows, what you call. At the middle some men all striped, they are some Hyaenas—some others all covered with spots—they are some Leop ards. Good; the Hyaenas and the Leopards they shall fight one to the other."

I ask my friend what they are, the gallows? He say:

"They are not gallows—goles. I ask how it spells itself. He tell me 'gaol.' I search it in the dictionary at my re turn. It is a prison. From the prison to the gallows is not but a step. Messieur, the Hyenas and the Leop ards arrange themselves, the pumpkin is in the middle. I ask my friend what is the big man in the meadle with the whistle? He reply, 'He is a Reverie!' 'Ciel! A Reverie is not but an idea! Never I see soo much solid Reverie.

"Then they play; upon one the other they jump. Then they are sorry and they hug of them around the throat. The Reverie he get jealous and blow of the whistle.

"The pumpkin escape to the side

line. The Reverie siggles again, the players surround it like the wall. Within it is dark; they cannot find the pumpkin. One fall down, for him also they feel; he utter a cry; they have found him-that is well. Reverie siggles again, the peoples roar, the pumpkin rolls, the game is ovaire. The Reverie he run to the hotel, the people they catch him not. That is all. But what of Rugga? Is it a game? Who knows? Regard it for a moment as a game, the poor pumpkin-my heart bleeds for it. But on contraire, regard it as a race. The poor Reverie If he not win what become of him. I know not, but I have my idea."

P. C. O.

Someone suggested to Ginger Smith, that he would make quite a hit at the masquerade as a bunch of carrots. But Ginger Smith didn't turn up. The bell rang for study hour, and still they stayed. He suggested that he was keeping them from their studies, and still they stayed. He smashed the electric light bulb;—they moved not. Exasperated beyond measure he took down his mandolin, remembering that music hath charms to sooth the savage beast. He struck a chord, which was not lost. There was a stampede for the door and with a satisfied smile, Gan dier lit his lamp and resumed his studies.

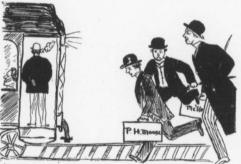
Conjecturing how this world so long

endured.

With his co-operation unsecured."

—Cecil Schuyler.

At the Masquerade. Freshman (ad dressing fair maiden whom he believes to be his next partner)—Pardon me, but are you the last Rose of Summer?



Mext station guelph Junction.

Whilst starting on one of the stock judging trips, four of the Agricultur ists overslept one morning, but the above sketch shows three of them as they overtook the train at Guelph Junction. The fourth man was too far behind to be within the range of the camera.

Mr. McMeans believes that there is money in onions. Indeed, he asserts that down in the States, there are lots of men riding around in automobiles made out of onions. That is a strong statement, strong enough to make one's eyes water. I wonder what 'Mac' means?