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## The O.A.C. Review

Published monthly during the College Year by the Students of the Ontario Agricultural College, Guelph

THE DIGNITY OF A CALLING IS ITS UTILITY.
Vol. XIII. Ontario Agriculfural Coliege, Guelph, November, 1901.

## Seed Control.

During the last few years I have had occasion to travel through the chief farming sections of Ontario, Quebec and the Maritime Provinces, and have had an excellent opportunity for studying the conditions which affect the production of farm crops in those districts. While continually meeting and conversing with farmers, I very frequently heard, and as far as possible inves tigated the cause for cormplaints about common farm crop seeds that had been bought in good faith from seed dealers, and which had in many cases turned out worse than useless. In most cases-but not in all-I found just cause for complaint.

Although we have quite a number of reliable and well established seed houses under the management of men who would not knowingly permit deception in the marketing of heir goods, it is quite certain that
there are others who are less scrupulous, and who either through carelessness or design profit by the ignorance of the less intelligent
farmers.

The question of how the trouble caused by the continued sale of impure and dead seed can best be overcome is one which-though quite new in Canada-has been carefully and effectually dealt with in most European countries. The cuality of commercial seeds in the markets of Great Britain, Germany. AustroHungary, Belgium, Demmark, Norway, Sweden, and to some extent in France is largely controlled by the voluntary united efforts and progressive spirit of their most enterprising seedsmen. The maintainance of their seed testing stations, which are usually comnected with State experiment stations, does much toward encouraging the marketing of
seeds according to fixed standards of quality with a guarantee from seedsmen or seed dealers as to the purity and vitality of the goods offered.

In Germany there are tiirty-nine establishments for the te:ting of seeds. In Austro-Hungary there are sixteen, the principal one being at Viemna. Seed testing at the Scandinavian stations - which number twenty-two-is all done by uniform methods in accordance with rules drawn up by a committee a;pointed by the Governments of Dehmark, Sweden and Norway. There is one important station at Copenhagen. In France-where seed testing has not made much progress, there is only one station, at Paris.

A special botanist is appointed by the Roval Agricultural Society of Great Britain to test seeds for its members, but most of the British seed houses have private seed control contracts with reputable testing stations on the continert. In Switzerland, there is an mportant station at Zurich, which is supported by the State.

Seed control work has not as yet been fully established in the United States although many of the agricultural experiment stations have been engaged in seed investigation work for a number of vears. Regulations for seed testing were drawn up by a committee of the Associations of American Colleges and Experiment Stations, in January 1897.

The voluntary co-operation of both sellers and buyers in the marketing of seeds, governed by laws of trade. has less objectable features than an official seed control managed bv the enaction of law, and in some European countries is has proved to be quite as effectual. It is painfully evident, however. that there is small possibility of inducing such co-operation in Canada to an exient that will bring about a satisfactory
system of seed control in the course of five years. Enterprising and progressive Canadian seedmen know thoroughly the quality of the seeds they offer for sale and their goods are usually what they are represented to be. But the business of these men is brought into competition with dealers who do not go to the expense or trouble of acquiring a knowledge of the real worth of the seeds they are handling, as well as with those who premeditate methods of deception. There are iew agricultural mercantile articles in which the real worth is so difficult to judge from appearance is clover, grass and other small seeds. As long as unscrupulous dealers are premitted to profit by selling seeds that are not what they appear,impure and dead seeds will be forced on the market.

Fair competition in the seed business is possible only where such seeds are sold according to fixed standards of quality or under a definite guarantee based upon a standard method of analysis. Although but few European countries assume official control of commercial seeds, the legally enforced State control system in Switzerland, has done much to establish the guaraantee system in Europe. English. German, and Belgian seedmen were quick to see that purchasers gave preference to the guaranteed article and that their best trade was falling off.
By act of the Swiss Federal Congress, all seed dealers, without exception, offering seeds for sale withir the confines of the republic, ate obliged to have their seeds tested at the Zurich Station, and to brand or otherwise mark each retail package with the precentage of pure vital seed as reported by the Station.

Unless a farmer knows the pef cent of vital seeds he is sowing, his calculations are mere guesswork, Much loss is each year sustained
through sowing clover and grass seeds of low vitality and weak vital energy on expensive lands that have received an extra amount of labour in preparing them for such crops. While it would not be wise to introduce legislation in Canada that would in any way discourage enter-
prise and progressiveness among our seedsmen, yet it would secm plain that such legal measures as would discourage carelessness and roguery, and protect honest trades against unscrupulous ones, is worthy of adoption.
G. H. CLARK.

Having had an opportunity, in connection with Farmers' Institute work in a number of the Provinces and Territories, to make some observations, I thought it might prove interesting to the readers of the O. A. C. Review if I wrote down some of my observations of how farming was carried on in the portions of the Dominion I have had the good fortume to visit.
As so inany have acted on the advice of Horace Greely ". to go West," I shall begin in the far East and work westward.
Only one of the Maritime Provinces, viz., Prince Edward Island, can be considered as almost wholly an Agricultural Province. It certainly is a fine farming country, capable of producing very large yields of the produce which can be grown there and I believe the farmers as a whole ane doing well. Dairying is receiving a great deal of attention and as a result is becoming one of their chief sources of revenue. Their great draw hack as a farming country is that they, for about three or four months in the winter have no outlet tor their marketable produce. The splendid market of Sydney, C. B., is greatly benefiting the P. F. I. farmer. They are paying considerable attention also to the improvement of their live stock, and I believe that the outlook
for the Island farmers is a bright one.

Nova Scotia and Cape Breton 1sland, as is generally known, are better suited to mining and fishing than to farming. Yet there are tracts of good farming lands, rich valleys of considerable extent, and broken uplands where farming could be carried on most profitably. While there are a number of good farmers in N. S. I believe the number is quite limited compared with those who pretend to farm. The whole country is well watered with spring brooks, creeks, rivers and lakes, which makes it a particularly good grazing Province. It is in this matter that they are woefully behind. It is true the fartuers have attempted to improve their stock by the purchase of pure bred sires aided in this matter by the local government through their agricultural societies. The great mistzkes which they have made to my mind are, that they have too many breeds represented in a locality, and they have not followed up their attempt at improvement by better care and management of their stock. I believe that there are good opportunities for sheep and cattle raising all over the Province, and in many parts the cultivation of the apple and small fruits could be sucressfully carried on.

There are sections of the Province where exceptional advantages prevail, as in Cumberland and Colchester Counties for instance, where they have those large hay marshes reclaimed from the Bay of Fundy and enriched from time to time by its fertilizing mud sediments. Here land is worth from $\$_{100}$ to $\$_{200}$ per acre and often three to four tons of hay per acre is obtained.

A visit to New Brunswick reveals the fact that on the whole it is a much better Province for farming than is Nova Scotia. There are larger areas of good lands found in blocks and equally as well, if not better watered than is Nora Scotia. Where farming is carried on extensively as prevails in the counties of Westmorland, Kings, Qucens and Carleton, the farmers gencrally are prosperous and rapid advancement is being made in the cultivation of the soil, improving stock and especially along the lines of deirying. They are beginning to realize that they should be producing wore pork of the right sort. I believe that it will not be long before they have some pork packing establishments in this Province.
There are many sections of this Province, however, that are woefully behind in farming methods. This is where their attention is yet divided between lumbering or fishing, and farming. So long as this prevails but little advancement will be made. The tive is soon coming, however, when lumbering will be confined to much narrower limits and then the farmers wi:l be compelled to farm betcer or take a back seat.

I believe the prospect for the New Brunswick faimer is more hopeful on the whole. The progressive agricultural policy of the New Brunswick Government, directed by the Hon. Mr. Farris, himself a fammer, is doing much to attain this end.
The leading crops grown are hay, oats, potatoes and buckwheat.

Through the government's wheat pol cy, as it is called, in some parts of the Province they are now grow ing considerable quantities of wheat and having it manufactured in rolling mills which are aided by the govermment.

The Farmers' Institute meetings are doing much for farming and the French farmers are tahing an especial interest in these meetings which is a hopeful sign of the times. The meetings now being held in the Province are well attended and everywhere they are recognized as doing good service. The department of agriculture is now proposing to import some pure bred horses to improve the class of horses in the province.
I will not in this issue discuss farming as I saw it in Quebec as I may have a more intimate acquaintance with it before returning home when 1 can do it better justice. I will pass over our conditions in Old Ontario and close this paper with a few notes on farming in New Ontario. Some years ago 1 attended a number of Institute meetings in Southern Algo:na, along the Soo line, and last winter I visited some points about Fort William and Dryden.

I believe there are some fine arcas of farming lands in New Ontario where clover will grow brautifully. Some parts will make good stock districts and sheep especially should do well in the more broken districts when they will be safe from their natural enemies.

The settiers on the whole seemed to be contented with their lot, as they found a ready market for all their produce in the mining or lumbering camps, and they could get employment in the woods in the winter if they wished it.

New Ontario holds out strong inducements to men with limited capital and a willingness to put up with some inconveniences for a few years.
-T. G. Raynor.

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## Cbe Open Door In Stock Breedins.

When prices of live stock reach a high figure, the minds of some turn instinctively towards restrictive measures. Car we not shut others out and retain the profits to ourselves alone? is a question which they desire should be answered in the affirmative. When a cow produces a thousand-dollar call each year, the owner sometimes reasons with himself saying, " If I can get ethers out of my way, may I not in 1ruth say that I have found the goose that lays the golden egg,? Put two or three or more such men together and they begin to formulate plans and seek to obtain influence which in more than one country has in the past. led to governmental regulations, higher registrations fees, absolute exclusion, and similar methods, all having the same object -to destroy freedom of action so as to contribute to the supposed benefit of a limited number.

Such a course, I subnit, always was and always will be a grievous blunder. It tends to dry up the fountain from whence the stream is supplied. If the argument be a sound one, why not carry it further? If restriction is good for a country, why is it not good for a Province or State? If that be allowed, why not carry it further and make it apply to a district or county? Where is the proper place to draw the line?
The real object of cultivating pedigreed stock in any country is not that they may go to the intcher's block at certain age, but that they may be used for the improvement of the ordinary herds and flocks so as to bring the average product of the country to a higher standard of quality. To accomplish this result
the best that can be found is none too good. The skilled eye of the breeder sees in his animals some defect. He wants to correct it. He may not be able to find the proper material with which to do this in his own state or even in his own country. He sees it outside. Ought he not to be permitted to reach out and secure it? The restrictionist says not; he must put up with what he can find in his own State or country whether it suits his purpose or not. I ask in that case is he not injured? And is his counstry not injured because he has been prevented from doing the best for his own herd or flock the influence of which is far reaching sometimes touching the interests of hundreds of others? Does not restriction therefore defeat itself if it prevenis the best from being produced, while another breed or another country has liberty and an open door, and in consequence forges ahead in the race ?

What is it to-day that gives the breeders of Sinropshire sheep in Great Britain a better chance to improve their flocks than we in Canada possess? It is the fact that they have a much larger number of superior flocks of long standing from which to make a selection. Suppose the Scotchman should be told he must select only in Scotland. Would he not rebel and say he was being embarrassed and injured and prevented from securing for himself an equal chance with his English contemporary? When the late Mr. Cruickshank laid the foundation of his Short-horn herd, could he have been so successful if he had been restricted to his own countryScotland? If he were alive I do not think he would answer in the affirm-
ative. He had a free hand to secure the best that could be found, and although at a later stage he used bulls of his own breeding to perfect his herd, he lived long enough to see the absolute necessity of going elsewhere if he was to maintain the standard quality of his animals.

At one time an agitation started among the breeders of Shropshire sheep in America to restrict the number of flocks by charging a higher fee for registering imported animals. The feeling of some was that we had a sufficient number of animals in America upon which the breed could safely rest, and that the breeders who were in possession of the field ought to be permitted to hold it; and that a ren-dollar registration fce would probably prevent much importation. At that time I argued strongly against it. I thought then, and I have not changed my opinion, that nothing worse could have happened so far as the breed in America is concerned than to have adopted such a course. I should prefer to encourage every man to enter upon the breeding of these sheep; the more the better. It is only here and there that anyone can be found who will make aty headway towards general improvement of the breed ; but the percentage of those who do will be greater in proportion to the number found in the business.

The object of our res ister associations is to perfect the breeds represented so far as we can in America ; and while it is true that the time will come when every pure-bred animal cannot be sold for breeding purposes and some must go to the butcher instead, that condition of things ought not to be stizgested as an argument against the open door. It will prove a blessing to every breed when it comes. Study if you will the course pursued by any of the founders of the most ncted herds or flocks, and you will find perfection was reached by persistent selec-
tion. Certain animals could not be removed from the herd at any price. It is so to-day in the herds of such men as Duthie and Marr. Ask the price of certain animals and the answer comes promptly "Not for sale." The man who is aiming to make money rather than a herd or flock will sell anything, but the time will come when everything will not sell except to the britcher and when that day arrives the old adage will apply as to stock breeding that - there is always room at the top of the ladder while the bot1om is crowded." The best shepherd or herdsman will win, and he ought to win, and the best man will have under these circumstances the best chance. Will anyone suggest that Mr. Andrew E. Mansell could have held such a sale in England this season if there had been no open door in stock-breeding ? His best customers came from across the sea. Will any one tell me that they were not ad vantaged by being permitted to do so ? Restriction in that case would have injured all round-the Fuyer as well as the seller. The foundations of flocks have now been started in many countries as the result of the distribution of that one superior flock ; and this will only increase the demand for that which is best in Shropshire sheep everywhere

I think I am right in saying that all the foremost breeders in Canada realize that it is necessary; at least at regular scasons, for them to go to the original breeding ground of Short-horns in order to replenish their herds with fresh blood if they are to maintain the standard of excellence they now hold. At first sight it might seem that we have all the foundation stock necessary, but experience has proved that our position is much strengthened by repeated drafts from herds in Great Britain. The reason of this 1 apprehend is not merely because of the skill displayed by those engaged in the business in that country ; it
must be have som view is to consi horses, ci originate been cons ing their of time. world ha much in territory It would engaged to under meastures closing $\quad$, country is
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> THE O. A. C. REVIEW.
must be that the soil aad climate have something to do with it. This view is strengthened when we stop to consider how many 1 reeds of horses, cattle, sheep and swine have originated in that country and have been constantly improved, maintaining their excellence for long periods of time. No other country in the world has succeeded in doing so much in this direction as that small territory known as Great Britain. It would be extreme folly for those engaged in the business in America to undertake by any restrictive measures to injure themselves by closing the open door from that country which now exists.
It is probably equally true that certain portions of Canada are the natural breeding grounds from whence fresh supplies can readily be taken to that portion of the United States known as " the corn belt." The circumstances under which the cattle are yrown in the two countries are different, and it would seem from past observation that mutual advantage would be obtaired by an interchange of animals from one soil to the other. I am ciarly of opinion that it would be quite possible for cither Mr. Duthie or Marr to secure ani-interchanges of blood for their herds in Scotland. The restrictive measures adopted in Great Britain preclude this from being accomplished. The open door for them would prove a blessing and not an injury.
It is to-day an open question whether Ruberta or Cicely, the two great Short-horn cows brought together recently at Springfield is the superior animal. One is the product of Great Britain and the other of the United States. To see two such cows standing logether is an inspiration to any lover of the breed, and some of us are awaiting with pleasure the prospect of witnessing the further conitest of these animals. It is certain the blood of Cicely will help the breed in America and it
might be equally true that the blood of Ruberta would give a similar result in Scotland if an open door would allow it. The exchange of two such animals placed in proper hands would no doubt lead to extended influence in both countries, giving to each an advantage that they should sot be deprived of.

I shall always vote for " the open door.' John Dryden. - Breeder's Gazette.
" My Lord, I desire to b. excused from jury service."
"Why? "
"Because, my lord, I can now only hear with one ear.",
"Oh, you'll do," said the judge. "We only hear one side or the case at a time."

Caught.-Passenger (at the booking office): "I want a halif-ticket, too, for my boy."
Clerk (suspiciously): $\quad$ Do you mean to say that boy isn't over fourteen ?"
"No-only thirteen?"
"Oh, weil, all above twelve have to pay full fares."

A lady employed a very ignorant Irish servant who would not rise in the morning at a sufficiently early hour. An alar'n clock was therefore bought, and presented to tue servant with the words-
"You know, Bridget, that I require the fire alight every morning by seven o'clock ; but I carnot get youl to do it, so I have beught you this alarm clock."
Bridget examined it, and said-
" Thank yo, mum; it's very pretty. But fancy a thing leike this bein' able to loight a foire. Shure, it's a wonderful invention, mum."

## cocals.

Literature Class-Prof. Reynolds"How would you explain this line ?": "Shall be the maws of kites."

Newman-" Why be the mothers of kites, of course."

Fawcett-" Is the new fire escape fire proof?"

Student-" No, I do not think it is."

Fawcett-" Well then, i would advise that it be wet the $1: i g h t$ before a fire breaks out."

La Pierre - "Oh! do come in, ladies, make yourselves at home. Allow me to call my roommate and introduce him to you; he is such a nice quiet young fellow."

Prof. Lochhead lecturing on Orthoptera - "In some countries they eat this class of insect and very good eating no doubt they are."
"Remoye the insides! Certainly not, intestines are a delicacy. Oysters, which you all enjoy, are nothing but one long intestine."
"Farm cattle " - The stentorian tones awakened the newcomer to Craig street rather rudely from his beauty sleep.

Her Gott " vas ist das?" came through the partly opened door.-A flash of light disappearing down the street was the only answer.

Prof. D.-" What should you ob serve when churning, Mr. McKray ?"

McKray-" Take the cover off the churn at every turn to let out the gas."

What is the difference between the ends of Craig street ?

At one end there is Dewar but at the other no dur,-at least Mr. G-m-b-found it so.

3rd year Entomology - Silcox. classifying insects. Poiniing to a cricket; What's this one ${ }^{3}$ Oh! I see, its a gorilla.

Prof. Lochhead - What examples have we near by of the Running Orthoptera?
Broderick.-Spiders.
The same, examining a blister beetle.
Why ! where is the blister on it ?

And how dia the hair restoret work, Mr. C-a-e ? Probably he knows where the blister was.
"Found ' in the meal pudding, in the larva state, a specimen belonging to the

Phylum-Arthropoda.
Class-Hexpoda.
Order-Coleoptera.
Family-Tenebrionide.
Genus-T enebrio.
Species-Molitor.
Name-Tenebrio mo'itor.
"Very beneficial" the savants tell us.
"May its tribe increase " is the earnest wish of every student.

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Mr. Stev indeed be s my face.

Little Ba you come fr H. - " Oh lands."
B.-" I thing of the

The janitor is herewith requested to ring the college bell promptly at the appointed ime, and in future to refrain from unccessarily damaging the college property.

The land flowing with grapes and honey is the latest way of rendering that much quoted verse. .

In memoriam - T. Sharp - Saved from fire but caught by the deluge.

From McAuslan's score cardHerefords.
No. I has a letter coat of hair being finer and more off it.
No. 1 has a fetter covered thigh also being a valuable cut.

At the trial-The Crown Attorney cross-examining. Mr. Rowsome in the witness box.
C. A.-Were you in bed when you were dumped out?
W.-I was.
C. A.-Did you feel yourself going over?
W.-I did not.
C. A.-Did you wake ..? when
W.-I did.
C. A.-How long were you on the floor ?
W.-Jusi ten ainhte:
C. A.-Are yor sure,
W.-I am.
W.-I am not positive that my night shirt was langing on the door but I'm sure of it
Mr. Stewart as witness -I would indeed be surprised to feel water on my face.

Little Barbah-" And where did you come from, Mr. Harcourt? " H.-"Oh! I'm from the Fiji Is-B.-" I thouglit there was something of the cannibal about you."
" Henceforth, when I neud chrysanthemums," says De Long, "I'll go down town for them. Iict some one else help to support the Government."

A small but choice consignment of live stock has already been received by Mr. Filion.
One great sell already effected. Others are on the way.

## What's the :natter with the O. A.

It's all right: it has now trained three members of it's faculty for the ministry.

Peart; walking into $t^{1}$ le President's office in quest of information on the fearfully and wonderfully construction curricuium.
The President, looking up
" Good morning somy, you bel ing to the first year don't you? Have a Exit Peart.

Alf's theory. - As a cell grows it becomes larger.

Reynolds (wearily reviewing his Horticulture notes).
Read aloud- " France once supplied the world but now it takes California's whole crop to provide prunes for the college."

Ist year agriculture-Prof. Day"I wonder what we could have in the class-room here that would attract Mr. Prettie's attention."

Wheelright- I'm not so lazy as Montgomery was anyway. Monty had something to do and he did not do it. I have recthing to do and I

Some of the would be moustache growers are wondering whether Shy nourtures his sprouting plumage on milk or water or frequent applications of attar of roses.
F. H. Prettie in grammar class"What gender is a baby? "

What a pity G. A. lost the sprint on Hallowe'en cise he wou!d, in all probability, have entered the Guelph races.

Yankee Gunn went down town a few days ago intending to set a pair of woolen gloves but on returning found that he bad purchased a pair of ladies tose.

The following preparations have been recommended to us by a 'o3 student as a most efficient preventive of baldness.

1. Benzine; 2, Vaseline; 3. Zinc Ointment: 4, Witch Hazel; 5. Chase's cure; 6, Compound syrup of Hypophosphites; 7. Alcohol; 8, Menthol Liniment; 9 , Condition powders; 10 , Acetic acid; II, Menthol Compound; 12, College cut mixture; 13, Chase's pills; 14, 13odd's pills; 15, Maddock's Euthymol; 16, Larkims sweet home soap; 17, Pearce's tar soap; 18, Turpentine; 19, Fowler's wild strawberry.

To be used $n$ the above order twice per day.

The 7 th, 13 th and 14 th, $t$, be taken inwardly. The 12 th to be inhaled.

The rest, coutward application only.)

Old gentleman : "Don't cry, little boy. Did he hit vou on purpose ?" Little boy: "No, sir: he hit me on the head. "

Monday, Nov. IIth, $12.30 \mathrm{p} . \mathrm{m} .-$ Two visitors walking around the college.
ist V.-This place used to be the students' dinning-hall. It must have been turned into a sheep pen.
and V.-It sounds like it anyway. Hear the foolish young things calling for their food.
ist V. Well now, how things do change. I wonder where the young men dine now-a-days.

Notice : First Year Students are requested to hand in locals on them selves.

The Dook's honour was at stake." Fists and the tongue at sixty paces," said he, " a lontrance. ." And he waited whilst his wily opponent slid down town to bid a fond farewell.

But she held him tight and the Dook waited in vain
In the mme cine, however, his honour got satisfied somehow, and later when the other principal returned the meeting was declared off. They kissed and made it up. Next time chappies, try acid at 6 paces. "He who lives by the sword, etc."

McKillican, after numerous difficult experiments, has mounted tobacco among his collretion of noxious weeds.

At the regular meeting of the Maple Leaf Literary Society on Nov. 2nd the following officers were elected :

President-F. H. Reed.
Vice. President-H. Mayberry.
Secretary-S. M. Pearce.
Programme Committee - F. J. Boyd, J. R. Linklater and J. J. Groves.

In

# The O. A. C. Review. 

## BUSINESS MANAGERS:

G. B. ROTHWELL. Secretary.<br>W. H. GUNN, Treasurer.

## SUBSCRIPTION RATES:


#### Abstract

Annual subscription, 50 cents. Single copies, 10 cents. Advertising rates on application. Ex-Students are requested to contribute to our columns.


NOVEMBER, 1901.

## Editorial.

In the leath of the late W. E. H. Massey, the piovince has suffered a great loss. In Tcronto where he was born, and where he was most widely known, his early death cast a gloom over the entire dity. Mr. Massey's sphere of intuence was not confined to the city in which he lived. From his central ollice he directed the management of his business in many lands. His sympathies were cosmopolitan. The variety and magnitude of Mr. Massey's l-usiness enterprises brought him into th uch with all classes in the conntionity, and though he sometimes suffered through being in.sunderstood he ever strove to do t'at which he considered to be nis dnty. That his efforts have been appreciated is seen in the wide-spread regret and sympathy expressed by so many in all walks of life. His hife, though short, was one of unusual activity and one well worthy of our 'mitation.

The annual mecting of the Experimental Union will be held from Dec. atin to 13 th melusive. The pro gramme for the coming meeting is an unusually goou one, and a large number of the leading experimentalists throughout the province are expected to be present.
That the work done by the Union throughout the province is being
highly appreciated is shown, not only by the interest manifested in these Union meetings, but by the steadily increasing number of practical farmers and horticulturists who are conducting experiments on their own iarms. Mr. C. A. Zavitz, director of experimental work throughout the province, spent the greater part of the summer visiting the difierent .xperimental stations in Great Britain, France and Germany, and in addition to giving an arcount of the experimental work conducted at tie college during the past year will deliver an address on "Agricnitural Exisimental Stations, and $k$ 'ndred Institutions in Europe." I. W. Hodson, J. A. Ruddick and Ir. H. W. Wiley, chief chemist of the United States Agricultural Depatment are arneng the prominent outside speakers. The usual ladies' session will be held Wednesday afternoon.

The Provincial Winter Fair which is to be held in tin city of Guelph from the ioth to the 13 hh of December is at event in which all O.A. C. students should take a deep interest. Last year the fair far surbassed the expectations o. its most hopeful promoters, and judging fiom the first draft o: the programme the coming one vill be even more profitable. The henefits to he derived
from attending the Fat Stuc, $k$ Show can hardly ie over-estimated. Here we see exhibited, in their best form, many of the finest animals this province can produce. From cur most successful breeders and stohmen we may gather valuable mformation regarding the ieeding and management of Live Stock. To those engaged in the production of dressed meats for the home of foreign market, the exhibition of dressed carcases will preve interesting and instructive, while the lectures delivered by such able men as Hon. John Dryden, IIon. Sidney Fisher, and Professors Day, Robertson, Dean and Grisdale will pive much food for thought. In the epen discussions many valuable suggestions will be thrown out which may be turned to iractical account.

We publish this month an article by G. H. Clark B. S. A., on " Seed Control." The questian is one of vital importance and one which has not until recent years received the attention its importance demands. Mr. Clark is is graduate of '98 and at present has charge of the Selection of Seed Contest in the Dominion, under the direction of Prof. Robertson, of Ottawa

To all ex-students who may be with us at the Union we extend a hearty welcome. It does us good to renew old acquaintances, talk over old times thd live over again-if only for a few h.ours, the years we have spent together at om Alma Mater.

Then, too, we would not lorget to remind you that the colunns of the Review are always open to our exstudents. This year we have an exstudent agricuitural editor. This, we hope, will increase the interest of ex-students in our College paper but
we want you to feel that the success of the paper depends in no small measure on ;our support. Send us short articles on live topics. Your old class-mates will be pleased to hear from you :f only through the " personal column.

The increasing demand and great success of the Magnet Cream Sep arator has necessitated the Petrie Taylor Mig. Co., enlarging their works.
Their new factory which will be occupred in January 1902, will have over an acre of floor space and will be the most modern machine shop in Canada.
The enlarged factory and entire energies of the company will be devoted to the mannfacture of the Hagnet Cream Separator only.
Machinery and tools have aiready been ordered to increase the com pany's output from four to ifteen Separators a day.
$\mathbb{W}$ : are pleased to note the success of Canada's only Cream Separator and as the only " Canadian Cream Separator " it is deserving of the support of all Canadian farmers and dairymen.

## Some Things That Are Not So.

Cayenne pepper dosen't come from a pepper plant, nor Burgundy pitch from Burgundy. Jerusalem artichokes do not come from Jernsalem. nor turkeys from Turkey. Camel's hair brushes are made from the tail of the squirrel. German silver is not silver, and it was invented in China; Cork legs are not made of cork ; neither do they come from Cork, Ireland. Prussian blue does not come from Prussia. Irish stew is not an Irish but an English dish. Cleopatra's Needle was set up a thousand years before that lady was born. Shamoy leather is not the hide of chamois, but the flesh side of sheepskins.

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## Atbletics.

What's the natter with Hallman - He's ail jight

Who's all right-Hallman
Who said so-We did
Who are :ve-Everybody.

By winning the mile run at the sports of Toronto University and affiliated collwes, Halluan was chosen as their representative on the track team to compete, in that distance, against the crack rumers of McGill. This is perhaps the best meet of Canadian athletes, and Hallman was in हnd cornpany when he went up aganst Stovel and Gray of McGill. But the college lad every confidence in him and in a fine way did he uphold that contidence. It is yeedless for me to say more than that he won landily, doing the distance in 4.46 nd thereby knocking 10 secs. of the inter-collegiate record. On his return he was given such a reception as is rarely seen in Guelph. The ooys quit work 'en masse' to so down town and welcome him. And after parading through the streets of Guc!ph and letting the Cuciph citizens know that Hallman had practically " put McGill on the bum " they returned to the college and rolled him over three or four tunes before they could quell their cuthusiasm. It was a day that will lung be rememhered by all loyal stadents, for had not the 0. A. C. in one day been raised to the front rank of athletics to compare favorainly with Varsity and McGill.

On Saturday, Oct. 26th, the fleetfooted of the college met in contest for the Doherty-Dryden Cup. As every loyal student experted there
was much interest evinced, not only by the students and the staff but also by the isuelph peopie. The race was a grand success, and considering this is the first race, which hereafter is to be an annual affair, we predict a still keener interest in years to come. The course was a five-mile cross-country one, starting at the college and ruaning around the college and dairy biocks just inside the ience. Nine rumners ficed the starter, namely -Pickett, o2; Newman, o3; Coglon, Paul, Bray, Barber and Dewar, all of o4; and Young and Stewart of $u 5$. For about one mile all kept in $A$ bunch but after this Pickett took the lead and kept it till the fimish. The fimsh was close and exciting. Pickett, Young and Dewar jumped the fence at college entrance logether, and then came the sprint for irst place. Here Pickett proved to be the best man and finished about ten yards ahead of Dewar, with Young a yood third. The others finished in the following order -Bray, Stuart, Paul, Cuglon, Newman and Barber. Mr. Pirkett, the wimner did the distance in 35 min . which we cunsider very good time.
On Saturday following, a public presentation of the cup took place in the Gymnasium. Presidett Hallman acted as chairman and in a neat speech introdnced the sulject and made a few congratulatory remarks about the donors. Prof. Doherty
made the presentation made the presentation and took occasion to cmphasize the object sought for by the donors of the cup, namely, the development of a good physique among the students, accomplished ouly by systematic training. He also congratulated Mr. Pickett on being the first one to have his name engraved on the cup. The first five to finish received
badges, representing their position in finishing.

Now since tie ball has leen set rolling and the first race has been run, let all those who intend being contestants $\because$ future take Proi. Doherty's sulvice and commence systematic :=aining at ence. Let us see such a !arge entry next year as will surprise and gratify the donors and cause : $:, \cdots+n$ to think that their object has $n \rightarrow t$ been in vain. There is no reason winy the O. A C. cannot put up un entry that vill compare favorasly sith any ether col lege in the Doismion.

Saturday, November yth, was a memorable iay in the history of the Guelph Cross Country and Road Race Association and as much so in the annals oi the O. A. C. A. A. The first birthday of our noble soverign Edward VII, since his ascension to the throne, was bell and nobly celebrated by the students of the O. A. C. and the citizens of Guelph who turned out to witness the annual races of the Guelpl. C. C. and R. R. Issuriation.

Perhaps nevor has there been gathered together in Canada so many long distance rumbers. Over seventy-fice contestants went to the scratch inclu.ling some of the fastest men on the tontinent. The sports consisied of six rpen events, namely: -20 mile road race, 10 mile cross country, 10 it. ${ }^{\text {le }}$ walk, 5 mile road race and a 2 mile race for boys mider sixteen years. A very heavy wind hampered the rumners, but notwithstanding bhis, splendid time was made.

The College Athletic Association had men entered in all the events and the following is a schedule of the entries and places taken :-

20 mile race. - Baket, 4 !h; Cleal 5 th; R. E. 「;urn.

10 mile cross comntry.-Figuson. 2nd; Meduly, 5!h; Prckett, 6th; Metcalf.

10 mile walk.-Sudgen 3rd.
5 mile road race.-Haliman, Is1. time $3^{8}$ min.; Dewar, Jouns: Stuart.

2 mile; boy i race. - Peli, 2nd; Cleal, Bingenial.

The most noticable feature is the increase of the number of entries made and the number of prizes taken by the boys of the O, A. C Last year we had only five entries and gained only fiaree prizes whilst this year we inad fifteen entries and secured eight prazes.

In the 20 aile zace Cleal and Baker showed great plack and endurance in finishing the listance withont any previous training whateve- They should mabe two likely men for next year. In the to mile cross country Jas. Ferguson hade his debut as a rumner and did exceedingly well to give Foster, the winner, such a race as this is Fos!er's fourth year in the game As it stas, he finished only a few feet ahini. Latile McAuley who finished if th is indeed a pick-wp and should win the race for the college next year. Pickett also did well and we are sorry this is his last year at the college. In the 10 mile walk Sugden showed his usual good form in walking, and fimsheti a goond third. But it was in the 5 mile cross country that the college found a wimer. In this we had entered our invincible little runner, Hallman. and this means that the race was won before 1- started. Pell, who won second in the bovs race is another novice a wi should to vell next year as should a'so Cleal and Bingeman.

This has beer a very successiul year for the pig-skin chasers. A1though we have not had on any outside game, :tili there has been a great interest winced in the game by the students. The practice games have been fully attended and excit

ing. Twice in practice have the first and second years met on the gridiron and both times the freshmen proved themselves to be the better team. Percy Suckling is a tower of strength to the ffeshmen and is always in the "scrim," whilst Gunn and Baker show up well for the sophomores.
On Friday, November 15th, the second and itird years played the lirst game of a series of games for the Marshall-ilarris (up). It was a very much one sided game and resulted in the favor of the second year by a score oi $35-0$. Not once was there alty dangei of the third year scoring and our full hack had little chance of distinguishing himself.
For the second year, Baker at centre half and Gumn at quarter played their usuai star gime, the scrimmage :ss strong and pushed their opponeats easily and the forwards held their men and followed up well. The third year showed some good individual play but as a team they dici not work together.

The teams lined up as follows:

| Second Year. |  | Third Year. |
| :---: | :---: | :---: |
| McNaughton ... ........ Back |  | Galbraith |
| Williams |  |  |
| Baker (Capt.) | Halves | Cleal (Capt.) |
| Dewar |  | ... Delong |
| R. E. Guma - Quarter W. H. Gunn | Quarter | W. H. Gunn |
| Dysart -....... ) ( De Corioles |  | De Corioles |
| Colter | Scrimmage | Broderick |
| Coglon $\quad$ Maccallum Atkinso |  |  |
| NacCallum |  | Atkinso |
| Hamilton |  | Newm |
| Mackae |  | Elder |
| Nanckivell |  |  |

The second vear won the toss and chose to lick with the wind for the first half. the ball was licked off by the third year but was immediately returned into their territory and after 1 few scrimmages Baker went over ior a try, which was converted. This play was repeated several times witil at half time the score stood $22-0$ in favor of the second year. In the second half the third year played with the wind but it did not sectn to beneht it em much as the second vear kicied as little
as possible, wereby keeping the ball in their own hands. It was in this half that tine eflective work of our scrimmage was seen but perhaps the greatest feature was the bucking of the line by Gumn. Time and time again he weat through for considerable gains and twice canried the ball over the line. The game closed with the ball in the third year's ground.

On the following day, Saturday, November ist.1, the third year were scheduled to play the first year and the winners of the game were to play the vinuers of the first game viz. :- The second year. But the third year were unable ${ }^{10}$ raise a team and :o defaulted the gime. It now remains for the sophomores and freshmen to decide the championship dt so:ne subsequent date and as both are confident, we anticipate an evciting game.

Now inat the foot-ball season is nearly over the " puck-ciaisers " are beginning to fook. forwand to a good season of tociey and this year prospects are uhusually bright. Although one cat speak with little certainty so early in the season still the eagerness already exhibited by the boys is a good omen. The Athletic Committee, not to be behind, have already beg:in preparation for an open rink on the college grounds and so far everything has progressed favorably. It is the intention of the Athletic Issociation to enter a team in some league, probably the W. O. H. A.

On Thanksgiving Day the annual 5 mile cross-country run of the Ontario Amateur Athletic Association will take place in Toronto. Last year the college was successful in winning the race and we intend making a try for it this year again. The college will probably be represented by Ferguson, Pickett and McAuley and we have every reason

## to believe that they will bring honor to their alma mater.

We are sorry to hear that Hallman has given up rumning but probably it is a wise act for todlay he stands unbeaten in his favorite sport and as he has not time to devote to steady practice he could not do justice to himself in future races. Probably no one has done so much to advance athleties at the college as E. C. Hallman. In all contests he has proved himself to be a thorough sport, wimning all his events fairly and never losing his head over his success. The students showed that they appreciated his untiring efforts to bring honor to the O. A. C. by electing him Presi dent of the Athletic Association for the present year 1901 of and so fat he has filled that white to the satisfaction of all concerned it is. then, with great pleasure that we append his record as given by the " Guelph Herald " of Nov. 1th.
F. C. Hallman, wimner of the five mile open is a mative of Dundee. Waterlon comtt, and a stmdent in his 隹adnating yeat at the O. A. C. He stands five feet six and when in ruming condition weighs $1,35 \mathrm{lbs}$. Mr. Hallman started his very stre cessful career as at rumber in this city in 1900 , when the won the twelve mile cross comntry rum at the annual sports of the (Ettelph Crose Country and Road Race Association. His time oll this mecasion was 1.27 . Since then he has competed success fully in several very important races. In the ammal Ontario Amateur Athletic Issociation sports held at Toronte in the fall of 1900 he won the five mile cross comntry against Sherring, of Hamitton, and Allan, of Toronto His next race was this fall, when the won the mile and half mile at the $O$. A. C. annual sports. Mr. Hallman was one of the O. A. C. tean to the Toronto Varsity sports held in Toronto on October 18th last. His success there
gave him a place on the Varsity team to compete in the Canadian Intercolegiate sports at Montreal. Here he met in the mile race Stovel and Gray, of McGill, and Teasdale, of Toronto. In this race Mr. Hallman succeeded in cutting ten seconds ofi the Intercollegiate record by covering the distance in 4.46 .

## He Asked a Favor.

An old farmer who was in the habit of eating what was set before him, asked no questions, dropped into a cafe for dimer. The waiter gave him the dimner-card and ex plained that it was the list of dishes served for dimer that day. The old gentleman began at the top of the bill of fare and ordered each thing in turn until he had covered about one third of it. The prospect of what was still before him was over powering, yet there was some things at the end that he wanted to try. Finally he called the waiter and, confidentially marking off the spases on the card with his index finger, said: " Look here, I've et from thar to thar. Can't I skip from thar to thar and eat on to the bottom?"

## The Disease and the Cure.

The candidate, in the course of a speech just previous to election, had occasion to refer to the flogging of children. "Some folks," ine said, " object to beating youngsters, but I agree with the truth conveyed in that saying of the wise man, 'Spare the rod and spoil the child.' I suppose 1 was no worse than other boys," he went on to say, "but I know I had some flogging myself, and I believe it did me good. On one occasion I was flogged for telling the truth." " It cured yon, sir ! " cried a voice from the back.


Walter Edward Hart Massey
Founder of the Massey Hall, and Library of Ontario Agricultural College, Guelph.

## OBITUARY.

Sincere and universal sorrow was felt around the college when it was announced that Mr. W. E. H. Massey, one of Toronto's most prominent and respected citizens had passed away, after an illness of about five weeks duration.
Walter Edward Hart Massey was born on April 4th, 1864. His early life was spent in Newcastle, Ontario, and Cleveland, Ohio, and as a student he attended Brooks Military Academy and Boston University. The death of his brother in 1884 caused his college life to be cut short and he went home to enter business life.

For a few years after this he devoted his energies to enlarging the agencies of The Massey Manufacturing Co., and for this purpose made a tour around the world in 1887-8. He was elected to the presidency of the Massey Harris Co. on the death of his father in 1896 and last year became president of the City Dairy Co. Besides these he held responsible positions in, and was an active worker for various philanthropic enterprizes.
The deceased was married in 1888 to Miss Susie Denton of Boston, Mass., who with three girls and one boy survive to mourn this great loss which has befallen them.
Among the students and exstudents of this college Mr. Massey's memory will ever remain fresh and green, and in the Hall and Library which he has erected here he will have a monument befitting one whose energies have been so much exerted on behalf of humanity.

In preparing for the international judging competition several visits to the leading stockmen, of this district, were made necessary. One of the most interesting and instructive of these visits was paid on the 2nd inst, to the farm of Mr. Jas. Watt at Salem. Leaving Guelph at 7.30
we reached Elora at 9.45 and enjoyed the sights about the Elora rocks before proceeding to Mr. Watt's farm. On our arrival Mr. Watt sus pended his farm operations in order to make the visit as profitable as possible to Professors Day and Cumming and the boys. Toronto Industrial and Pan Am. winners in cattle and horse classes were led out for inspection. As the hour of noon was at hand, Mr. Watt invited all to the house where Mrs. Watt had prepared an abundance of the best products of the farm.
After dimner Mr. Watt took us to his office and subjected to our inspection his many red and blue cards won in many a. live stock competition.

The greater number of the cattle and sheep being in the fields Mr. Watt took us over his farm were we saw the wide, deep, thick-fleshed shorthorns gathering the raw material to be converted into prime flesh. As we strolled through the pastures, and thought that here were produced such world famous animals as Young Abbotsburn, our responsibilities as young Canadian farmers were forced upon us, and we determined that our best efforts would be exerted in sustaining the reputations of the celebrated Canadian breeders.

The day having been thus profitably spent we tendered Mr. and Mrs. Watt our gratitude and felicitations, and proceeded home through eighteen miles of Ontario's best farming district.

Christmas presents are always in demand at this season, and we are now showing a fine assortment of neat and appropriate Ximas gifts and keepsakes in silver novelties. Stick pins, broaches, belt pins, hat pins and others too numerous to mention at Clark's the jewellers, 3 doors above post office, Guelph.

## Personals.

Jas. Stirton instructor in the farm Department from the time the college was founded until 78 called around a few days since. He is now farming in Manitoba.
W. Chadsey 'S4, of Prince Idward Co., writes that he will be here for the Union.

Mr. R. S. Shaw, of the Montana Agricultural College, formerly of Guelph, has published a very attractive and useful bulletin on Grazing and Feeding tests with beef cattle and lambs. The reports are concise and the whole is copiously illustrated with photographs of the animals before and after slaughter.

Jas. G. Brown '79, visited the college recently. His address is 1766 Notre Lame St., Montreal. At present he is interested in fruit growing.
A. M. High, B. S. A., ' 98 , is at Makinack and Ochre river with the lumber firm of G. B. Hauser \& Co. Part of his time is spent at Rat Portage.

In our last issne we neglected to note that R. D. Craig, B. S. A., who for the past two years has been assisting Mr. Reynolds in the physical department, has left to take the forestry course at Cornell Uliversity. He reports the course there both interesting and comprehencive. consisting, besides lectures and laboratory work, of tripes to typical forest districts.

Prof. A. M. Soule and P. O. Vanalter former students here but now of the Tennesse Experiment Station issued during the past summer a bulletin on "Winter Wheat." it is a very comprehensive work dealing with varieties, cultivation, y eld and the effects of the different manures upon wheat.
W. A. Kennedy passed through Guelph recently. He had been in the sanatorium at Battle Creek for two months and was on his way home.

Since leaving here a few weeks ago I. N. Beckstead B. A., has won a valuable scholarship at Queen's University. We understand Mr. Beckstead is taking theology at.Queen's.

During last June H. H. Hume 'g6, issued two valuable bulletins; one on the Top working of Pecans and the other on the Culture of Pomelos (grape fruit.) Mr. Hume is Botanist and Horticulturist at the Florida Agricultural Experiment Station.

Mr. A. Green (bony) was married on the 8 th inst. to Miss Annie Black of this city. The Review extends the customary felicitations.

Those new ideas in jewellery that you see and admire are always found at Clark's the jewellers, Upper Wyndham street, 3 doors above the post office.
S. P. Brown '86, proprietor of the Maple Grove cheese and butter factory at Birnam, Lambtor Co., writes that he is doubling the capacity of his plant and is doing a remarkably large business.
"Billy " Squirrel is now assist ing Mr. Zavitz in the Experimental office, John Buchanan having gone home sick.
"Ed." Mills spent the king's birthday at home. He is now attending the school of practical science, Toronto.

Mr. W. J. Stover 'So and 89 , called at the college on the 13 th inst. He had been in Jamaica for some time but recently located in Corning, Cal. Mr. Stover was accompanied by his sister. They both subscribed to the "Review."

Like other institutions whose frame-work is composed of unstable humanity, the staff of the college has been subject to a change in the loss of one of its best members. On the 18 th ultimo Prof. Shuttleworth tendered to the Provincial Government his resignation, which has since been accepted. During the past three or four vears Dr. Shinttleworth has devoted much of his time to the sugar beet question. While in Germany two years ago he acquainted himself with the industry there, and since his retwin has spent much of his time investigating the practicability of sugar beet growing in Ont. As a consequence, of the sitccess of his experiments thronghout the Province, a company has been organized to manufacture beet sugar with headquarters nt Berlis: Mr. Shuttleworth has been ap pointed chemist and agriculturist for the new concern. The Revicw wishes him every success in his new field.

Mr. Harcourt has been appointed Prof. of chemistry in Dr. Shuttleworth's stead. Needless to say he is filling the position to the satis faction of all concerned.

Mr. G. W. Morgan, assistant Canadian Superintendent of the Scranton Correspondence School called at the college on the 19 th inst. and did not forget to subscribe for the " Review. His headquarters are 43 Temple Building, Toronto.

The Review wishes to extend its good wishes to W. S. Hair '98, who on the IIth of last September was married to Miss Fedicia Watson.

To the many pleasantries of fourth year life the matron has added still another which is likely to prove one of the greatest incentives to third year students to pass their exams. On the evening of the 12 th inst., we, with several of Mrs. Crafig's friends from the city, whiled away the hours in games and jest until eleven o'clock, when a delightful lunch was served and we repaired to our respective homes. As a class we wish to put on record our most hearty appreciation of the efforts of our matron to make life at the college pieasant and agrerable. As a host Mrs. Craig discharged her duties with characteristic gentleness and tact and all agreed that the evening could not have been spent more pleasantly

Mr. E. J. Bell of Glanford Station, an ex-student of the dairy school, is now one of the general agents, representing the Petrie-Taylor Co., Guelph. Mr. Bell feels that the experience gained at the dairy school has very much assisted limi in obtaining the desirable position he now occupies.

Mr. Mr. G past 12 Princip ricultur position City D: with M siderabl Mr. Put as Dr. I worth o Agricult
Mr. P College, years' and the ceived in the 0 . A him in $g$ duties in he will ture frov regretted popular and in hi especially assume h next.

The sel will repr Stock $T 11$ Internatic in Chicag exception fourth ye: Messrs. F W. A. Dry Waters an

Comside our repre that tho month are ing under Prof. Dav men will

## Collese Reporter.

## Mr. Putnam Leaves the 0. A. C.

Mr. G. A. Putman, who for the past 12 years has been Secretary to Principal Mills, of the Ontario Agricultural College, has accepted the position of assistant manager of the City Dairy Company of Toronto, with Mr. W. J. Palmer, at a considerable financial bettermer.t. Both Mr. Putman and Mr. Palmer, as well as Dr. Hammond and Miss Shut le worth of this company, are of the Agricultural College.
Mr. Putman is a B. S. A. of the College, having taken the full three years' course, and both this course and the business training he has received in his valuable assistance in the O. A. C. management, will stand him in good stead in his responsible duties in the big concern with which he will be associated. His departure from the college will be much regretted, as he has been most popular with the staff. the students. and in his relations with the public. especially in Guelph. Fre will assume his new duties on January i next.

The selection of the students who will represent the O.A. C. in the Stock Judging competitions at the International Iive Stock Fxnosition in Chicago has been made. With one exception the team consists of fourth year men, and are as follows : Messrs. F. S. Jacobs, G. I. Christie IT. A . Dryden, I. A. Ta Pierre, B. T Waters and R. H. Willians.
Considering the great success of our representative last vear, and that those who are coine next month are receiving a snlendid train ing under the efficient instruction of Prof. Dav, we feel confident that our men will give a good account of
themselves, and will return with iresh laurels to add to the long list of victories already won by O. A. C. boys this year.

In the past, the facilities for satisfactory class work in the Poultry Department have been very limited. Improvements are now under way in which that part of the department containing Prof. Graham's office is being enlarged so as to contain a larger office and a judging room ol the ground floor, and a large class room on the upper floor. With these improved conditions, the study of poultry crait will in future be more satisfactory than heretofore.
In the past year Prof. Graham has conducted a series of very important experiments on the fattening of chickens for marketing. He sent a consignment to England and the favor they found there is amply expressed in the following extract from a letter which Mr. Graham received from J. Ruddin, the great English chicken buyer.
" In my long experience of over forty years I have never :het winh any man who can turn out poultry in such good condition as were the chickens I have had from your college. They are a credit to you in every respect-feeding. color, killing, etc. I only wish I could wet 500 or 1000 people in Canada to turn out poultry in the same fashion. I hope to have through your establishment at Guielph 5o,ooo head rext year of similar quality to those received this year." This letter coming from such a source, is one of the highest compliments ever paicl to an official of She Ontario Department of Agricultural, and Mr. Graham is certainly to be congratulated on the success
of his efforts to produce a quality of neat which pleases the tastes of the English consumer

In many of the best Ancrican residence colleges, students discipline is recognized by the college managements, and is a potent factor in the development of a true college spirit. Owing to the increasing attendance, of our college due to the growing population, the students here are hegimning to feel that the iniroduction of some system of student management would promote, in many ways, the best interests of the college. A short time ago the students were anthorized to investigate a matter involving the honor and discipline of several of their number and they were also asked to submit recommendations as to the best method of dealing with the affair. This was done; the matter was thoroughly sifted, and recommendations in keeping with the circumstances of the case were submitted to the one who asked it. Now it seems very unfair to the student body that their efforts to maintain right and justice among themselves have so far been ignored, but it is hoped that ere long a system of student management will be adopted here, which can hardly be other than productive of good results.
-J. M. M

Recently some twenty seven students, mostly freshmen, were fined for leaving their lights burning while they were at a meeting of the Literary Society. We think that this was not fair for several reasons.
Firstly.-We know of no announcement being made stating that lights should be turned out.
Secondly.-We cannot find anything about it in the notice on the room-doors.

Thirdly. - We know that men of the two senior years went to that same
meeting leaving their lights burning and that they were not fined.

This may seem right to the faculty and possibly to the senior students but the freshman's ideas of British fair play as meted out in this college have received quite a shock.
-(C. M. M.)

Every student should take home at Xmas a bottle of our fine Holiday Perfume. A large stock of the linest perfumes in the world to chroose from. Stewart's drug store.

## Exchanses.

The Review acknowledges the following exchanges. The "McGill Outlook," Montreal: "McMaster Monthly," Toronto ; "Trinity Uni versity Review," Toronto ; " Queens University Journal," Kingston : "Dalhousie Gazette," IIalifax ; "Students Herald," Kansas : "Rocky Mountain Collegian," Colorado ; "Industrial Collegian," South Dakota, Argosy, N. B. "Acta Victoriana," Toronto ; "M. A. C. Record," Michigan.

The M. A. C. Record of the 12 th. inst, publishes four comprenhensive articles on the question of debates in colleges. As in the O. A. C., the M. A. C. students do not devote sulficient time to the preparation of their debates owing to the presure of other work.

Acta Victoriana for October contains two leading articles from perusual of which we have derived much pleasure and benefit. The one deals with the ques)ion of "Higher education for Women," and the other is a paper on the "Lov life ol Mrs. Browing."

The first issue of Queen's University Journal contains an interesting review of the founding and development of Queen's University. Principal Grant, the present incumbent, was appointed in 1877 and has directed the course of Queen's since that time.

The Review is in receipt of the Atlas of Vestern Canada, issued by the direction of Hon. Clifford Sifton, Minister of the Interior. The Atlas is a neat and comprehensive work giving information regarding climate soil and other conditions in Western Canada and in New Ontario. It is copiously illustrated and contains maps of the new districts.
Gilbert Parker M. P., the celebrated Canadian novelist has presented Queens University with a series of pictures eighty eight in all consisting of portraits of the Governors of Canada, Acadia, and Newfoundland, from Christobal Colon to Lord Aberdeen, and others such as Cardnial Richelieu, and Prince Rupert, first governor of the Hudson Bay Company.
The Novenber number of the Acadia Athenium is to hand "The editors assume their respective duties with fear and trembling."

## The Experimental Union.

The Programme for the annual meeting of the Experimental Union has been issued, and has probably reached nearly all of the readers of the Review previous to this date.
The co-operative work has been quite successful during the past year along the lines of Horticulture, Agriculture and Poultry Raising. This system of experimental work was started in Ontario in 1886, with 12 experimenters. In 1goi, there were upwards of 3,000 Ontario farmers conducting the co-operative tests upon their own farms. The average number of experimenters cach year for the four years ending with 1889 was 73 ; with 1893,557 ; with 1897 , 2,059 ; and with 1901, 3, 157 . The experiments were located in both New Ontario and Old Ontario, on small farms as well as on large farms ; and the experimenters themselves comprised both men and women, highly educated and selfeducated, young and old, married
and single, rich and poor, who did the work for their own good, and for the good of others.
Both the financial and the educational influences of this work throughout Ontario are great. Tho benefits are not confined to the experimenters themselves, hut are shared by thousands of others who examine the growing crops, who attend the annual meetings, or who become familiar with the results through the columns of the public press, in the meetings of the Farmers' Institutes, and in various other ways.

Besides the reports of the co-operative experiments and addresses and discussions by ex-students, Dr. Wiley, Washington, D. C., is to speak on the sugar beet question ; J. A. Ruddick, Chief of the Dairy Division of the Department of Agriculture for Canada, on the dairy industry ; and $\overline{\mathrm{F}}$. W. . Hodson, Live Stock Commissioner, on the improvement of our agricultural exhibitions. As a sugar beet industry is an exceedingly important subject in Ontario at the present time, we believe that Dr. Wiley's address will be greatly appreciated. He will speak along the following lines : First, Agricultural conditions relating to the growth of the sugar beet, including character of the soil, fertilization, and especially climatic environment, i. e., temperature, sumshine and rainfall ; second, the influence of beet culture on general farming, showing the improvement which is always secured; third, the utilization of the by-products of beet sugar manufacture, i. e., the pulp and the molasses as cattle food : fourth, the technical principles of manufacture, including about fifty stereoptican views ; and fi'th, sugar as a food, consumption of sugar by various nations, and the great importance of the industry.

Not only should the ex students of the Agricultural College be leaders along the lines in which they are specially engaged, but they should
be well abreast of the times in agricultural work in general The agriculture of Ontario has changed considerably within the past iive years and it is likely that the ne it few years will bring about still further changes. Practical men, with good educational attaimments and with keen insight into the requirements of the new phases of Ontario's agrienlture, are the men who are sure to take the lead among the agriculturists of this Province. The ex students should do even steater work in the future than they have done in the past. Their opportunities are great.

## C. A. Zavitz.

## Nature Study and Manual Training in Public Schools.

In our last month's issue we had Nature Study diseussed by Prof. Lochhead and in the following will be found some thoughts on the same subject by Prof. Robertson of Ottawa. This is part of an article taken from the Winmiper Firee Press and are some sentiments expressed during a trip carly in the montis.

While in Winnipeg Prof. Robertson accompanied by Superintendent McIntyre and Mr. Warters, who is in charge of the mantal training classes there inspected the work being done. " I find that the education has been highly satisfactory in Winnipeg. I have found the same throughout the Dominion. We have now seventeen towns where this manual training under the Macdonald manual training fund is being and are giving instructions to over 7,000 boys. The manual training system is now in vogue under the used, with thirty cight instractors, direction of the department from Charlottetown to Victoria."
"Now, the idea is this, at each of the rural schools there should be a garden in connection with it. They could learn for themselves the various requirements of plant and soil
and would be trained to form a habit of examining for themselves. In England the improvement of rural schools has made a marked improvement in the practical education of the children. There a garden attached to the schools is part of the training. Before leaving school the pupils have been made competent to follow up rural pursuits successfully Competent teachers trained at agri cultural colleges should be added to the teaching stafi to help out this method of education.
-. The mischief is that coileges and universities have been specialized for the education of clergymen, lawyers and doctors for their occupation. These men, and others graduated from the colleges and universities, have wanted to specialize the elementary schools and high schools as well as the colleges in therr own direction. I do not suppose they have any intentional ill will to other occupations ; they don't know any better ocupations than their own ; since in their own experience education has been all concerzeed with literary or scholastic studies. These are the mere tools and symbols of intellectual power. The need of the time is men and women who can do things, not merely say things or wear things ; any ordinary savage can excel in those respects.
" Manitoba and Northwest Ter ritories, particularly the Territories are going ahead in having nature studies at the rural schools. I do not mean in referring to these studies to have them separate subjects ; but the study of nature as a reform in the methods of education. to secure the quickening and training of observation, to develop a love of labor and of study and to bring out a sence of responsibility suited to the age and strength of the children. In brief, to make the school a place and means of training for the after life of capabie citizenship in our own country. Now the school life is too often a thing apart from the home and growing life of
the child, so that schoo! attendance is thrown off or left behind as having served a purpose when it has given a pupil some knowledge of the mere shells and forms of intelligence in the language and figures
"The United States are leading the way in this better education in elementary schools; Germany is far ahead; England is following after, while the edacational authorities in Canada have been so busy shouting about their advancement that they have neglected to join the procession of progress.
"There are some exceptions, particularly in this western country and in Nova Scotia. The teachers of Canada are progressive enough, most of them chafe under bookish restrictions. They have done splendid work in training the children as far as school systems would permit. These systems have been too much of the book, bookish, and information to pass examination has been the goal instead of a training of children into practical and personal ability,
"However, a better state of affairs in education is dawning and the school house is bound to become more and more a centre and source of the influences, methods and training, which make for intelligence, practical ability and the righteousness of good citizenship.
"I hope ere long to see a large numbe- of rural schools each with a garden attached to train children into a knowledge of plant life and a love of managing plant life. At first that might be begum by having a competent itinerant instructor to visit ten schools giving half a day's time to each. A further need of Canada where teachers are actually engaged in teaching at rural schools is a place where they can be fixed for this work to give better class of education. Short courses in instruction are provided in Germany and in a few places in England. Such would be the most valuable help which education in rural schools
could have. Later on agricultural colleges would be the very greatest benefit for teachers in rural schools."

## Winter Fair Programme.

The Executive of the Provincial Winter Fair, to be held in Cuclph on the roth, 11 th, 12 th and 13 in of next month, met at Toronto Tuesday afternoon and made the final arrangements for the programme. The order of events will be as follows
Tuesday evening-F. W. Hodson, Ottawa, and Prof. G. J:. Day, Guelph, on the rising of bacon hogs, illustrated by living specimens.

Wednesday afternoon-Prof. ©. E: Day and Hon. Joln Dryden on beef cattle raising ; Messrs. J. H. Grisdale, Ottawa; A. W. Smith, Maple Lodge; and John Campbell, Woodville, on mutton sheep raising.

Wednesday evening - Public meeting, with speeches by Hon. (i. W. Ross, Hon. John Dryden, Hon. Sydney Fisher, and Dr. Jas. Mills.

Thursday forenoon - Poultry lectures and demonstrations by F . C. Hare, Ottawa; A. G. Gilliert, Ottawa; W. R. Graham, Guelph; I. Baldwin, Toronto; G. R. Cottrell, Milton; Sharp Butterfield, I,ondon; F. H. Smelt, Woodstock; I. G. Jarvis, Montreal, and Jas. Anderson, Guelph.

Thursday afternoon - Cattle carcases, addresses by Prof. G. F.. Day, Guelph; H. A. Foulds, Brantford; A. W. Tyson, Guelph.

Thursday evening-Swine carcases, addresses by F. W. Hodson, Ottawa: J. W. Flavelle, Toronto: C. F. Hodges, Brantford; C. C. L. Wilson, Ingersoli.

Friday forenoon-Dairy cattle, addresses by Hon. Sidney Fisher, Prof. H. H. Dean, Guelph, and Prof. J. W. Robertson, Ottawa. Sheep carcases - Addresses by J. H. Grisdale, Ottawa; H. A. Foulds, Brantford; and A. W. Tyson, Guelph.

Friday afternoon - A poultry plucking competition and an auction sale of cattle, sheep, and swine carcases and dressed poultry.

## Camera Notes.

Bad water is the cause of more failures in photography than it is given credit for. Distilled water is the best to use, and as it can be so easily obtained, no amateur should attempt to get along without it. in many places there is so much iron or lime in the water, that it is a wonder the chemicals produce anything.

When the corks of your chemical bottles become old and discolored change them for new ones, for old corks are depots of impurities.

Care in selecting scenes, exposing plate, developing, fixing, printing and toning will produce a good picture.

As a rule films give better cloud pictures than ordinary plates. But then, they ought to, for they cost twice as much.

The making of lantern slides is a most fascinating diversion. It requires some experience and a good deal of patience and perseverance. Get a dozen lantern slicie plates, go into the dark room with your negative, place the film side of the unex posed plate next the film side of the negative selected and put both in a printing frame. Then expose to any kind of a white light from one to ten or more seconds. You then develop as you would any other plate and fix in hypo. If one has no lanterns the pictures make nice hangers for windows.

With a little practice it will prove an easy matter for any efficient amateur photographer to make money with his camera during the summer months. Wherever a boy with a camera travels, he is always besieged with the requests to "Take a picture of me, will you ?" Young folks, as a rule, like to have their pictures snapped, and many are willing to pay for the same when completed. An industrious person, in a morning ramble through the park, will sometimes have a dozen opportunities to secure picnic groups numbering from ten to fifty persons.

The amateur has only to request the pleasure of taking a picture. Nine out of ten will answer "Yes, go ahead." The work of placing the group is something that requires experience, in order to do it with an eye to the best efiect, but a little care in this direction will help any boy to pose then properly.

After the group has been taken, secure the names of those in the party, and a few days later you can show proofs. An order is certain to follow, for there are always some in every group that desire to retain a memento of the day's excursion.


## BOARD AND ROOMS.

$F$ IRST-CLANS Board, close to the College. Special arrangements made for Students. Terms moderate.
N. MOORE.

