

## The Noted Tea Store and China Palaceつ~,

Is the place to buy Choice Candy, Fruit and Oysters. Our China Palace is crowded with articles suitable for wedding and Christmas presents.
J. A. TMCCREA.


## FINE TAILORING.

Early Fall Suitings for Gentlemen are beginning to arrive.
Exclusive designs which are confined to our high class trade in Guelph.

Drop in to our "Draperie" and have us show you the Autumn Styles.

## GOLDEN FLEECE.

## THE <br> 

## Burgess \& Son.

HIGH GRADE PHOTOS ONLY.

## Foster \& Cosblan

 DENTISTS.Office and Surgery-Corner Wyndham and Macdonnell Streets, over Dominion Bank.
Mr. Foster's residence, "Sunset," Paisley St.
Dr. Coghlan's residence, 98 Glasgow St.
Telephone 14.

## IT ISx

to your interest to buy supplies of
Mounting Sheets, Microscopic Slides, Pencils, Art Goods, Frames and Pictures at WATERS BROS.,

Wyndham Street, Guelph.

## HEPBLRV \& Co.

Dealers in all kinds of
BOOTS
SHOES and RUBBERS.
33 Wyndham St., Guelph.

## AGRICULTURAL COLLEGEか

## The Ontario Agricultural College Will Re-open Sept. 26th, 1900.

Full courses of Lectures, with practical instruction in Agriculture, Live Stock, Dairying, Horticulture, Poultry, Beekeeping, Veterinary Science, Chemistry, Geology, Botany, Entomology, Bacteriology, English, Mathematics, Book-keeping, and Political Economy.

Year Shortened to Suit Farmers' Sons.
Send for Circular giving terms of admission, course of study, etc.
JAMES MILLS, M. A., President. GUELPH, ONTARIO

## Can supply you with first-class

Writing Paper and Envelopes with the College Crest Stamped
neatly thereion, at about the same price as you pay for the unstamped article.
(Phone 278.

# Parisian <br> Steam Laundry Office, 

F. P. MOONEY, Mgr.

R
FIRST-CLASS WORK GUARANTEED.
'Phone 69.

Always on hand, Choice Cream Candy, 20c per Ib. Figs, Nuts, Oranges, Apples, Oysters, Fancy Biscuits, Etc.
T. P. HEFFERNAN.

Agent for Mann's Cut Flowers.
The Popularor
Waterman Ideal Fountain Pen
and the Lincoll Pen.
Text Books, Note Books.
Books Procured on Short Notice.

Special Low Prices to Students at
Day's Bookstore.
Day Sells Cheap.

## Faculty, Students and Friends <br> of the Ontario Asricultural collese. OR

 attention to the advantages of our
## Clothing and Men's Furnishing Department.

## We Cater for Every Branch in this line.

Ordered Clothing.-Tiailor made by first-class cutter and work people, at most moderate price. Materials to select from almost unlimited.
Ready-made Clothins.-Our famous "Fit the Form" brand of Suits and Overcoats, made of reliable materials, in many respects equal to ordered work, at prices that enable every one to dress "well and cheaply."
Men's Furnishings. -The newest Hats and Caps, the best brands of shirts, the best Underclothing, the Nattiest Neckwear, the Cheapest Hose, the best value in Gloves, Sleeping Gowns, Pjamas, Sweaters, Braces, Handkerchiefs. Everything at lowest prices.
We solicit your patronage.

## E. R. Bollert \& Co.

## ANTISEPTIC TOOTH POWDER

makes the Ceetb Pearly white. SOLD ONLY BY
ALEX. STEMVART, CHEMTIST, Next to Post Office, Guelph.

WE KEEP THE BEST BRAND OF

## Ready Made Clothing

That is made in Canada. We Guarantee every garment, and if anything should prove unsatisfactory we will cheerfully refund your money. If there is nothing in stock to please you we will take your order at our regular prices and deliver in one week. We have the most Stylish Stock of GENTS' FURNISHINGS in the city and would respectfully solicit a PORTION of YOUR PATRONAGE.

## Fit Reform Wardpobe,

28 Lower Wyndham Street.

# Che O. A. C. Review 

Published monthly during the College Year by the Literary Society of the Ontario Agricultural College, Guciph.

The dignity of a calling is its uitility.
Voz. XI. Ontario Agricultural Gollege, Guelph, January, 1900. No. 4

## EDITORS.

E. J. Macmillan, Managing.
C. E. MORTUREUX, Asst. Managing.
E. C. DRURY and J. M. READE, Agricultural.
B. S. PICKETT and F. S. JACOBS, Local.
J. K. HUTCHISON, Personal. J. B. ANDERSON, Exchange.
J. H. HOLLIS, Athletic. G. H. HUTTON, College Reporter.

## The Ex-Student.

Iast month it was my privilege to return to the College and take part in the celebration of her 25th birthday. I have been back every year or two since graduation, and yet $I$ experienced quite a shock when I was confronted with the statement that the Ontario Agricultural College was in truth and in deed 25 years old. Notwithstanding the fact that I have kept in touch with her men and her work I seemed for a moment to forget all things new, and with the touch of the hand of the bearded man, whom I had last seen as a boy in the field, in the barn or in the class room, my mind reverted to earlier and ruder days in the school's history:

A quarter of a Centūry! "Surely," said $I$, "this camnot be." Three incidents immediately following my cogitations, however, convinced me that the calendar must be right. In the first place, the whole history of the College as outlined by Dr. Mills at the meeting in the gymnasium the first night impressed me deeply. When he had finished tracing the development of each department from its inception to the present ligh state of
efficiency, my only wonder was that so much had been accomplished by one institution in so short a time.

The second impression I received was during the informal social remion of "old boys" in the upper class room on Thursdzy evening. We were reviving old memories ofthe "eighties," each telling his story as to the mamer and customs of his time, and each trying to prove to all the others that his class iruly. contained the wildest scamps that ever frightened a matron, or outwitted a professor. Then one arose and in a quiet easy manner described life as he knew it at the Ontario Agricultural College in 1874. That settled it-the 25 years had rolled around.

The third proof of the flight of time came upon me suddenly as I walked down next morning to the place of meeting. One whom I had not seen since we had swapped coal oil on Upper -Iunt street, reached oint his hand and arrested me. His real name I could not recall, but "Rubber Stamips" flew to my brain and I remembered why we called $\mathfrak{z i m}$ so. I made enquiry as to how the world had used him since last we met. His reply was that since that time he had been through the trying ordeal of seeing all of his buildings burned to the ground, and had in addition followed to the grave his father, mother and two wives. I stood convinced.

Yes, the Ontario Agricultural College is out of her teens and into the full fruitage of niatured womanhood. Her sons have gone from her protecting roof and cheerful hearth into the great rough world with its untempered winds and clouded skies. How have they fared? Have they been provident sons and loyal, and do they now' return to thank thicir Alma Mater for lessons learned at her knee? From all I could learn a very large proportion of the ex-students have been successful. Those of the earlier years spoke well of those in their neighberhood who had of late years returned from the College to take charge of their own or their father's farmis. Ex-students of recunt times whom I met had nothing but words of the highest praise to say of "old .boys" in their county, going so far in many cases as to say that said "old boys" were "model farmers" in: deed, and were envied and consulted by all the neighbors.

That there were few failures I was pleased, but not surprised to hear, and this leads me to say a few words in reference to our profession. Canada is comparatively a new country, and
yet it is a fact that most of the professions are overcrowded. There are lawyers today in the cities of Montreal and I'oronto, who, after being trained in our public schools, our high schools, our universities, our law schools and our law offices, find the competition so keen that they are willing and anxious after 15 years of apprenticeship to quit the profession and take municipal or legislative clerkships at from $\$ 600$ to $\$ 1000$ a year.

When the last contingent (to which I learn the College contributed nine loyal men) was called for South Africa, I am informed that between three and four hundred doctors from Ontario alone signified their desire to be allowed to serve their comntry and go to the front. Yet there is no doubt there would still be enough M. D.'s left to attend to the sick at home.

Every year sees a number of the brightest University graduates enter the school of pedagogy at Hamilton to be finished in the art of teaching, More accomplished men and women pass out of this school each year than can possibly be accommodated with good positions in our province. An honor graduate of Trinity in 1898 and a last year's graduate of the school of pedagogy, a man whose ambition it has been to teach ever since he left the public school, has, after trying in vain for a high school or Collegiate Institute mastership, accepted a position through a teacher's agency and has gone to take charge of a school on Manitoulin Island at $\$ 35$ a month. Then whither vre we drifting ? I believe we are surely and swiftly getting back to the farm. A month ago the public school trustees of the city of Toronto met and after calm deliberation placed the subject of agriculture as a compulsory study in the curriculum of the public schools of that city.

The main question seems now to be, how to make a good living. The average farmer can do that and raise a family besides. Everybody on the farm has plenty to eat, and the work is not slavish as it used to be. Further, while the other professions are crowded there is a greater demand for scientific agriculturists than ever before, and the student who seriously takes up the study of scientific agriculture in aimost any of its branches, is pretty sure of a position of trust and compensation commensurate with his ability. There are fewer failures among farmers than that of any other calling. The leading educators in this country are now calling attention to the fact, and as the
men of commerce and those int the crowded professions come to realize that higher education also inchudes the theory and practice of agriculture, many more will take to rural life, both for pleasure and profit. I woider if when the 50th amiversary rolls around we will hear discussed "why the boys leave the city for the farm."

Kayentohkwi.

## Maximum Production in Crops.

The lighest ideal that confronts any producer of a finished product is to attain the maximum result both in quality and guantity, governed by the least possible ontlay for the article produced. In dealing with this idea from an agricultural standpoint it is not easy at first thought to gret at the exact method that might be generally adopted. It would not be wise to suggest even a rule or method as absolute in attaining our ideal. Principles alone must be regarded, and then with each person's proper exercise of reason and judgment any rule or method may be adopted to suit the circumstances. Observation and perception also come in as important in working out the plans adopted.

What then is the first pract:cal principle to be applied in bringiug about a maximum producing power in an arable soil ? The answer may be given in one word, Humes. Until the average farmer or agricultural scientist more fully recosnizes both the chemical and physical importance of humus, there can be ne real value obtained or progress made by any other means of soil expariments. For a means of supply in obtaining humus apart from animal manure, the most economic source the world over is clover or some member of the Leguminosx family. As a source of nitrogen as well as humus no artifical fertilizer can reasonably take the place of the legumes-clover, peas or tares. The supply of nitrogen existing in the atmosphere over an acre of land, amonnting to twenty tons, is surely sufficient for any farmer's needs without bringing it artificially in fertilizers. Yet this element by a somewhat strange incongrnity is the most expensive to buy and the hardest to hold in a fertiliger. It is
worth about fifteen cents a pound, as compared with five to seven cents a pound, the commercial price of potash and phosphoric acid, the two other important fertilizing constituents in manure and mived fertilizers.

The prevalent idea, judging from the reports of many experiment stations, farm journal discussions and farmers opinions, has been simply to increase the amonnt of plant food in the soil. The statistics of the fertilizer industry on this continent give a still more forcible emphasis to the principle of supplying plant food.

The statistics for tire United States shov an investment in 1598 of nearly $\$ 7,000,000$, and for Canada ne: rly $\$ 3,000,000$ for artificial fertili\%ers. This may seem as an argument in favor of fertilizers as a source of increasing the maximum production of crops. But on a superficial enquiry into the actual conditions under which the average farmer uses fertilizers these statistics may also show a gross waste of money, and all due in most cases to a lack of knowledge as to the principles underlying fertilizers, their composition, combination and application. In this connection there is much yet to ise accomplished by experiment stations in more fully enlightening the farmer on the question of soil fertility and crop production.

A chemical analysis of the soil was at one time thought the only true source of finding ont the fertility conditi, of soil. Now, with the more recent introduction of soil physics as a special branch of arricultural science, a physical analysis of soil is recognized as more important. This latter method, by showing the percentage of humus matter in the soil, more nearly expresses the fertility condition of the soil than the amount of chemical constituents present.

The stase at which humus matter should be applied to the soil is also important. This evidently is in the blossom or pod stage. At this time the plant has reached its maximam capacity in assimilating the fertilizing constituents of the soil. These constituents, now in a more highly organized form, and a somewhat predigested state, serve as the only true food of the future crops.

This is the unde sing principle of humus in the soil, and is the same principle, evolutionary as it is, that courses all though the plant and animal world. The highest form of life
depends for its existence upon some lower form that has been sacrificed, so to speak, for the maintenance of its superior, and so on ad infinitum, down to the lowest order of microbes, and thus is seen another principle, the survival of the fittest.

Humus, or organized plant food, in its incorporation with the soil, combined with an intelligent system of cultivation, in which the surface cultivator should be foremost as a pulverizer and liberator of plant food, rather than the more wasteful method of the plow, is undoubtedly the "keystone" of agriculture, both in practice and science. With humus having gained its proper place in economic soil tillage, our experiment stations may then proceed to show more clearly and forcibly the true standard of artificial fertilizers, from an agricultural instead of a commercial basis. The reported yields of eighty bushels of wheat by Wooley in Shropshire, England, and of ninety bushels by Stewart of New York, with the principles of humus and proper tillage in mind, may then be readily credited.
W. J. T.

## Intellectual Development of our Native Indians.

BJ G. H. Clark, R. S. A.
Our native Indians have never been looked upon as a productive people. The fish and fur industries, which, at the beginning of this century, were their principal sources of income, have, especially among the tribes residing in Ontario, become a thing of the past.

The thoughts which produce these deep sighs with ine more ancient Indian as he sits by his rustic $\log$ sabin, looking first at his old flint-lock musket and then across the white man's grain fields, need no explanation to the person who knows something about his earlier habits whereby he obtained subsistence.

The average Indian, fifty years ago, was almost incapaible of transacting business with his white i. ighbors. He suffered considerable losses at the hands of unscrupulous settlers, who
availed themselves of every opportunity to take ad rantage of his ignorance. Necessity compelled him to adopt the white man's methods, but, being unable to calculate, his stores, at the onset of winter were invariably suall. He used no means of fostering his forests. The small towns in the neighborhood of Indian reserves were well supplied with cheap green wood while his forests lasted, although it may safely be said that. no Indian ever applied labor to the cutting and hauling of wood, except for bare subsistence.

Their first efforts toward providing food where some knowledge of agriculture and labor was required, were very limited. It was scarcely expected of them that they would readily adapt themselves to the enviromment which was forced upon them, and become thrifty and industrious tillers of the soil. By intermingling and intermixing with the early white settlers they gradually obtained ideas re the cultivation of land and the production of some farm crops. Their horses, the descendants from which may still be found on their reserves, and are yet known as Indian ponies, were soon made to assist them materially in clearing and cultivating a small plot of land. Only such crops were grown as were suitable for their own consumption in a crude state.

Until about sixty years ago little indication of civilization could be found among the tribes other than the replacement of their wigwams by $\log$ huts, which roughly imitated those of the early settlers, and the small patches of Indian corn, which formany years formed their principal food stuff.

Their meat diet, which had originally been secured by strategic instinct, demanded some prearranged calculation. Their first efforts at stock raising were indeed very disappointing to them. The pigs and cattle which they obtained from the white settlers were usually far from being select specimens, and the treatinent to which these were subjected was such that only the "fittest could survive." Their ideal cow or pig was the one that could vanish in the scrub with the greatest agility. Their cows were never known as record brakers, except when speed was considered, but once a year-at the time when the beechnuts were falling-specimens of porkers, such as would reach the standard of perfection for the modern bacon hog, according to the conception of a few of our anti-bacon-type men, might be
had for a bottle of poor whiskey, providing that the purchaser could secure the prize.

The assistance which they received from their government allowances prevented their hopeless collapse, although their semi-yearly allowance, which now amounts to about five dollars per capita, tended to encourage indolence. Educating them through the medium of established schools proved to ie a very slow process at first, but as the few who received some training grew into manhood, and their increased abilities became more apparent, the benefits that were to be obtained from even so linited an education became more appreciated by the older nembers of the tribes.

The Indian institutes where the boys were tanght to follow proper methods of agriculture, and the girls to care for a home, prove ${ }^{-1}$ to be very effective in gradually improving their systems of farming and habits of living in general. They gradually increased their cultivated lands and kinds of crop. The building and maintaining of a grist-mill and a small saw-mill on the reserves materially assisted them by encouraging the growing of wheat for bread, and the use of lumber for building. As our common farm crops became more general with them, and as threshing machines grew into use, their cattle were afforded better feed and care. Many of them, who, when boys, attended the Institute, hrie built small barns and stables, fenced their farms, and are now practising the more modern methods of growing farm crops, and breeding and caring for live stock.

Education has, so far, proved the most effective factor in the improvement of the tribes. They are not called upon to assist in maintaining their schools, and the only compulsion to which they are subjerted by the government is the performance of statute labor.

The expenditure for educational purposes last year did not, among the Ontario tribes, exceed ten dollars for each pupil who has reached the age at which he should attend the rural schools. This amount is certainly wo small to give them an opportunity of obtaining a trainms equivalent to that which may be had in our common schools. Again, when we consider that the Indians still demand that, because of their ignorance, the white man shall not be allowed to seize their property in payment for contracted debts-a plea that should scarcely be used
by their rising generation-it might be wise to withdraw from their younger and more enlightened members, a part of their seni-anmity in order to increase the allowance granted for edncation, and give the present generation an opportunity of receiving a bre ader and more practical training.

## The Social Position of the Farmer.

It has been the custom in the past, in our own country and the United S:ates, for those engaged in urban occupations, to affect a scorn for farming and the farming classes. The typical farmer hayseed is rarely seen outside the pages of the cornic paper, yet he is very often taken as the type of farmers generally, and these ridiculed in his person. It would be unjust to say that all those engaged in trades or in professions have assumed this attitude, for the time has never been when the best or these did not recognize the dignity of the profession of agriculture. The customs of England in this matter have aided greatly in giving the farmers of this comntry a social standing, for there agriculture is looked on as one of the most honorable of vocations, :.'d the higher classes of this comntry, following the lead of the Old Land, have recognized the profession as honorable in itself, and have refused to shut any man out of the highest circles because he is a fanmer. Yet, though this is by no means miversal, it is true that many, and, in fact, most of those engaged in city occupations, do look down on the famer. The city people, who, when the hat of midsummer makes life unbearable for them hunt up their country relatives, very often show a certain lofty pity for their host and his occupation. This scornful fecling is shown most strongly perhaps by the white-handed and often shallow-pated young man who stands behind the comuter and serves out dry goods, but it is not at all confined to him. We find it, indeed, spread very widely among the pop,ulations of cities and iowns.

The reasons for this are many. Many of them, and perhaps the must potent, are entirely superficial. The farmer often wears rough clothes, and is gencrally not very clegnent in lis dress, and therefore the "Poet of Cloth," dame fashion's votary,
who makes it the chief end of life to follow the various vagaries of her fickle ladyship, finds it in his heart to scorn him. The farmer's face is browned by sun and wind, and his hands are hard with gripping the plow handles, and so the soft-handed, lilyfaced clerk looks down upon him as a serf. He has not the latest "quibs and cranks," the latest slang, and the newest "gag," and so is styled "green" by the smart Alec who makes it his business to know all these. These are some of the more superficial reasons which sensible people, whether of the town or the country, do not consider for a moment, but which, nevertheless, help to produce a general feeling that farming is an occupation to be looked down upon. There are, however, other reasons more sound than these which have helped to produce this effect. It is true that the farmers of this country, as a class, have lacked culture and refinement, and have not been able, on this account, to take a place of equality with the better classes of townspeople, though just as worthy as these. They have not had the opportunity to acquire the etiquette demanded by good society. This has lowered them somewhat in the eyes of the cultured classes of townspeople, and the lower classes, aping those above them, have affected this attitude, and have gone farther in it than those among whom it originated.

Yet, while it is true that in the past the farmers of this country have not acquired that culture which is more readily attainable in centres of population than in the country, there are many reasons for pardoning them in this matter. Our country is a new one, and so far our farmers have necessarily found life rather rough. Heroic work had to be performed to clear the land of the primeval forest and prepare it for agricultural usefulness, and the noble men who were the pioneers of this country, and performed this labor for us, found life too serious a thing to have much time for its lighter graces. The pioneer had to endure many and great hardships. Cut off from his fellows, with his world often bounded by the forest walls of a backwoods clearing, was it any wonder that he should be found lacking in those little things that go to make a country man's life pleasant? Here too another potent factor, which has not ceased to operate in the present day, came in, The pioneer's life was a hard one, and so it was but natural that he should seek an easier life for his sons. Consequently the more clever among these were edu-
cated for the learned professions, leaving the dullest at home to work the farm. This was the case with the greater number of our farmers, though there were always some who did otherwise, and this stripping of our farms of their best men has done much to harm the reputation of agriculture, by taking the best men away from the farm and leaving the poor ones.

The farmers of Canada have not yet attained their rightful position. Agriculture in itself, where once the hardships and isolation of pioneer life have been overcome, is an enobling occupation, and we should find our farmers not looked down upon, but looked up to by the rest of the community. Our farmers should be the leaders of our nation in all that is best, and until this is attained they should not rest content with themselves.

This will be realized just as soon as the farmers of our country say it shall be. As long as they are content to be inferior to other classes in education and culture, and no more, they will find themselves occupying an inferior place. When they open their eyes to the truth, when they begin to see that they should clain equality with the best, and when they begin to educate their sons and daughters with this idea in mind, then this fancied inequality will disappear, and the farmer will find his rightful place in the world. There are many signs that this movement has already begun. Our farmers are beginning to give to their sons who intend to remain on the farm, the benefits of a good education. Slowly they are beginning to realize that farming is a worthy occupation, good enough for the best of their sons. As a consequence we find a larger proportion of the best sons of the farm returning to it, at the present day, than ever before in our history. May we not hope that this is but the beginning of a larger movement which shall raise the farmer of our country from the position of a mere drudge, and place him on that higher plane of life which it is his right to occupy.

> E. C. D.
" He alone is great, who by a life heroic, conquorers fate."
Everybody ought to develop the faculty of work, but not of working the faculty. - Ex.

Study books to know how things ought to be; study men to know how things are.

# The O. A. C. Review. 

Business Manaíners.
J. MrA. RLSSSFIL, Secretary. I. G. MILISS, Treasurer.

Subscription Rafcs.
Amual subscription, 50 cents. Single copies, 10 cents. Alvertising rates on application.
Ex-stulents are requested to contribute to our columns.

JANUARY, 1900.

## Editorial.

It is encouraging to find that our efforts in arousing the interest of ex-students in our college paper are meeting with success. This month we are pleased to be able to publish several articies contributed by ex-sturdent subscribers. With good prospects for a large ex-student department in future iscues, we hope in a measure to meet the demands of those who find nothing to interest hem in local reports.

The past month has witnessed the departure for South Africa of a second Canadian contingent, coamposed of over one thonsand of Comada's hmeest and most loyal citizens, eager to uphold the honor of the old Flags, which to them, as to all of us, is representative of the hest the worid affords in liberty, justice, and good sovermment. Nearly all stations of life have contributed their quota in making up the force. Nen have left remunerative positions and homes of luxur to enlist by the side of fortune's less favoured though none the less noble disciples. The colleges of our land, too, have responded to the call to anus with scores of volunteers, and we are proud to say, our own dhan Mater has not been behind in bringing forth men, alle and willing to foght the bathes of their commes. diane stahmatd representatives of the O. A. C. were inchuded in the Guclph section of lantery $r$, which left on the Sth of Jamary for Ottawa.

Na greater pronf of true patriotism ean be suduced than a man siving up his restiar veration bo face the hardships and dangers of a militars ca:upagn in a alistant clime. Surely the
old fighting spirit of the British nation is not dead, but has only been slumbering, requiring but a warning note of impending danger to stir it into renewed activity and call up amies, strong and defiant.

May our brave boys find ample opportunity of demonstrating their comrage and ability, and may it fall to their lot to participate in the funal trimmph of the British arms in South Africa.

We are always pleased to chronicle the success of $O$. A. $C$. men and particularly of classmates as in the present instance. At the meeting of the Western Dairymen's Convention, which has just closed at Stratford, Mr. J. M. Livingstone, of the present third year, was awarded the first prize of $\$ 50$ for the best essay on " Buttermaking." Mr. A. J. Wagg, also a third year student, carried off the second prize, amounting to $\$ 25$, for essay on "Cheesemaking." This, considering the large number of competitors in each division, gives us just reason to feel proud of our "boys," who thas bring honor to themselves and to the institution, where they have received their training.

## Athletics.

As one change produces another, hence, owing to winter we find a complete change in our athletios. The skates and puck have taken the place of the " pigskin," thas enabling the "slashers" to get back at the "kickers." Some who are not proficient ennugh in stick handling to compete for honors attend the rink for reasons kuewn only to themselves, while others again spend their leisure hours in the gymuasium. To encourase the latter, the exceutive committe have decided to give prizes at the next indoor sporks. which will be held about the begimang of March. Whether this important event will te a succesis or not depends largely on the competitors. Isi order to make it a success they must commence in train at vince. Furthenuore, regular evergday training is more beneficial than is severe training for two or three weeks before the everts.

The hockeyists of the college favored an amalgamation with the Victorias of Gneiph, thinking by so doing they would be able to place a stronger aggregation on the ice. This has proven to be true, for the Victoria-O. A. C.'s have entered a junior team in the O. H. A., and are also repesented in the W. O. H. A. by a very strong team, captained by W. Squirrell.

The intermediate team played their first league match against Galt in Petrie's rink on Jan. 15th. The game was an exhibition of very fast hockey, and up to within fifteen minutes of time the home team looked to be sure wimers-the score being 4-1 in their favor.

The ice getting soft at the last, however, gave the visitors, who were much heavier, a decided advantage, and they scored seven goals in quick order, while the home team succeeded in adding only one more goal to their number, thus giving Galt the game by three goals.

## College Reporter.

When "far from home and heather," Christmas is for all a somewhat dreary season; at college, however, there are many things to enliven the time. Usually the number of boys who do not return home for Xmas is sufficiently large to make things lively. This is especially true if those who remain are remembered by their home friends in a substantial way in the form of a "box." A "box" home-packed is a strange thing; it might be compared to the fakirs lat from which he takes inmmerable and entirely unexpected articles. When these boxes came this year, and the boys met to witness the umpacking process, the skill of the fakir in producing articles was put to shame by the dexterous and mysterious manmer in which the contents of the boxes were seen to disappear. As is common at such times, the music of the party was forthcoming always toward the finish of the " feed," and songs and cat-howls cheered the appreciative ear. The holidays passed without the peace of the staff being disturbed by the frolics too frequently attendant upon times of high living.

In the recent competition, which was organi\%ed by the Cheese and Butter Association of Western Ontario, Mr. J. M. Livingstone, and Mr. A. J. Wagg brought honor to themselves and the College throngh their essays. Mr. Livingstone wrote on the Butter Making Industry and won first prize (fifty dollars). Mr. Wagg won second place with his essay on the manufacture of Cheese, obtaining a check for twenty-five dollars. We congratulate our boys on their success, which was achieved in competition with a large number of men having a wide experience in butter and in cheese making:

Answering to the call to arms which resomuded through the Empire, a mumber of O. A. C. students and ex-students have donned the military attire and left to uphold England's cause in South Africa. Among those was M. Ross, B. S. A., fellow in Bacteriology, now sergeant in D Battery. Owing to his departure and to the absence of Prof. Harrison, now in Germany, the Bacteriological department is left without a head.

A building has recently been completed by the Poultry Department, which will be specially devoted to the raising of broilers and shippers. This fall, Mr. Graham experimented with the crammer on a number of chickens, intended for exportation to the Old Country, with fairly satisfactory results. The great difficulty experienced by Mr. Graham was to secure a suitable lot of chickens for a start, as the large majority of fowls bred in the country are not of the stamp required for this purpose. The new house is intended to give accommodation for a sufficient 2, imber of birds to allow for the more satisfactory contimuation of the experiment this year started, to breed for early broilers, and to test the efficiency of the crammer on poultry for the home market. The building will accommodate a large number of incubators in the main division, while in the wing seven or eight brooders can be placed without crowding. A newspaper report in "ridiculous excess" of the truth was current to the effect that ten carloads of dressed poultry were shipped from the Department this fall. This report, though far from correct for this year, may be taken as a good omen for the future, and gives us hopes of a large increase in this industry.

## Personals.

The great crisis in South Africa is at the present time creating a universal sensation, but more especially is it of an exciting nature to Great Britain and her colonies. We are grieved to see so many of Canada's noble sons leaving the borders of our fair Dominion, yet our pride and admiration is aroused by the loyalty, patriotism and courage, which characterized our young men.

The matter becomes of even greater interest, when we know that some of our fellows are already in the field of battle, and that others have left for that place of conflict.

At least two of the ex-students went out with the first Canadian contingent.

$$
\text { Jno. Findley, '94. } \quad \text { D. H. Whigham, '95. }
$$

We have a much larger representation in the last contingent. Five ex-students:

> G. B. McCalla, B. S. A., '95. $\quad$ C. Kidd, '97. W. C. Semple, '97. B. Bancroft, '97. J. H. Greenfield, '98.

Our representation also includes five who were in attendance at the College when the call came. Their names are as follows:

$$
\begin{array}{ll}
\text { D. H. Russell, } & \text { W. Bapty, } \\
\text { A. S. Richmond, } & \text { M.S. P. Williams, }
\end{array}
$$

J. Mc. A. Russell.

The last mentioned, Mr. Russell, was a good student and general favorite. He will be greatly missed at the College, particularly by the Young Men's Christian Association in which he was an active member.

This large representation of students and ex-students in the national army gives to the struggle an added interest for us.

Mr. Malcolm Ross, B. S. A who had charge of the Bacteriological Department during Prof. Harrison's absence in Europe, accepted the post of Sergeant in the last contingent. Since entering the College in '94, Mr. Ross has been connected with the College Battery, and has proven himself a good soldier, and one who took a great interest in the various drills.

We have no doubt that Mr. Ross will do credit not only to himself, but also to the Battery, which has held such a high standing in the Dominion.

We hope that the war will be brought to a speedy and satisfactory termination, and that our men will soon be permitted to return to their native land with rejoicing.

Jno. G. Donaldson, '75, is farming at Broadview, Ass.
T. A. Wiancko. '95, is one of the instructors in the Home Dairy Department of the Dairy School.

Geo. Wm. Meyer, '75, is practicing law at Grimsby, Ont.
J. C. McDonald, B. S. A., '95, is Agricultural Editor of the Mail and Empirc.

Hugh Thomson, ' 97 , since leaving College las been farming at Magnetawan, Ontario, and is meeting with good success.

Sydney P. Palmer, '75, is engaged in the mercantile business in Toronto.
N. M. Ross, B. S. A., '94, is at Baltimore, North Carolina, taking the full course in Forestry. The class with which Mr. Ross is taking instruction will visit the forests of Germany during the coming summer.

## Locals.

Another year is upon us. It seems scarcely just that we should pass over an event of such importance as the beginning of a new century, without noticing it specially in the local column of the O.A. C. Review. Yet it is much the same in many ways as the approach of any other year. Past are the temus of Ninety-nine, past the miseries of the Fwams. and past too, are the glad times of the holidays.

Avothe: year has come, but some faces are missing. Who will now consume the prunes since Plamsteel is not here? How can the cows at the fam be best disposed of since Ikey has gone? Who, but Forrester can cook the beef so micely, in theory? Even the 'King' himself has left the farmer's realm. But a word will answer all these questions and set at case all minds. Sangster, the new farm manager and Modern Remie. foreseeing dire misfortume, has returned to render the College his valued assistance. But don't worry Sang., the house is supported by its foundations.

Another year has come and with it the dairy men and dairy maids, and anong the many whose minds were filled with good resolves, was one gentleman who proposed to combine exercise with study, so, thinking in the imocency of his heart, that the Gym. would be the best place for this, he accordingly began operations there. He could swing on the rings and even hold to the bar, using both hands, and moreover he could play football. The punching bag was 100 large for our friend's particular taste, but Armstrong's hat was handy, so he soon quite amazed
all the spectators by showing them how to play the game. But alas for this clever young man. All at once some mysterious, all powerful force drew him steadily toward the swimming bath down stairs. The thought of a cool delightul bath in Jamuary fascinated him, and he planged in, never even stopping to undress. The astonishment of the spectators was wonderful to behold. "No wonder," said the milk and water man; " that's just where I surprised them, they didn't know I could swim!!"

So life goes on, ever changing, and so may the locals of the O. A. C. Review, ever changing, and may we all hope, steadily for the better.
Conundrum :
To what might Father Bran be compared, if seen walking with a young lady on the street?

Answer-To a bran mash.
Scene from Julius Caesar:
1st Citizen-Your name, truly sir?
Cima H.-Truly my name is Cimna H.
2nd Citizen-Tear him to pieces, he's a conspirator.
H. - I am H., the third year poet, not the conspirator.

3rd Citizen-Tear him for his bad verses then.
Brouse-How many cubic feet of gas are required per hour for a ten horse power candle light?

Pipes-Hello Rive, what did Mr. Beckstedt ask yout that night the chairs were shoved around the flat?

Rive-O! just wanted to know if I were going to South Africa.
Overheard in the Reading Room:
"O! thank you Mr. Shylock."
Second year class in Agricultural Chemistry :
How many have ever had occasion to eat the beef of old animals!!!

Poultry L.ecture:
AIr. Graham-Incubators have been used in Germany for a long time.

Rive-Examining an egg at the time. What, this one sir ?
Whats the matter with the steak today, inquired the anxious student with the tired jaws.

Probably it was cooked by Christian Science. Oh! for the school of Domestic Economy.

On the River:
Lady Skater-Doesn't that fellow over there look fumny? See how he skates; is he from the College?

Poor Sharp! it wasn't his fault that he was at the ontside end of the whip that time, or that there was a convenient stick frozen fast in the ice, just where he slid along in a sitting posture.

The Athletic Editor of "Tine Review," begs us to amolnce his death. Indirect cause: 2 loaves of bread.

Anderson-The best ponm that Wordsworth has ever written is " Ode to Shylock.'

Extracts from an "Ode to Father Bran," which recently appeared on the bulletin board:

His Resolntion-
If bran be good for forming bone In moo, and grunt, and blatter, It shall not be for them alone But shall make me big and fatter.

The other day two loaves had gone, None knew where or how,
lie said, a wistful look upon his face,
"O for a double stomach like a cow."
O Nitrogen, O Father Bran, O Great Attache of the Mill, Chou art a very mighty man, [When comes thy stomach for to fill.]
When dawns the day when thou shalt think According to thy eating,
Solomon shall see his glory sink And pilgrimage repeating.

Respectfully dedicated to Druar by

## Exchanges.

Among our best and brightest Christmas exchanges is Acla Victoriana with its lithographs and literary, socialogical, scientific, and poetic contributions. Perhaps its leadiarg article is by Sir Jolm Bourdinot on "The United Empire Loyalists of Canada." Among others of.special m.te are: "Relations of Uiniversities to National Life," by Adam Shortt; "A Vagabond of 1790," by C. C. James, and "Tissot's pictures," illustrated, by G. F. Salton.

Oh! let it rain if it will rain;
Yes! let it rain full force,
For when its rained 'tis plain
The rain will stop-full of course.-Ex.
Among our exchanges we acknowledge: McGill Outlooki, Sucen's Journal, Dalhousic Gazelle. Mcrchistonian, Canadian Horticulturist, Argosy, Rocky Mountain Collcgian. Industrial Collegrain, M. A. C. Record, Student's Herald, Trinity Reaieu, Clarion, Albert College Timet and others.

## Chemistry of the Farm * $\mathrm{BY} \%$ <br> R. Warrington, F. R.S. English Edition.

## Also

## American Dairying

*BY*

H. B. Gurler.

* AT


## W. J. GREENSHELDS,

20 Lower Wyndhan St., Guelph.

EVERYTHING FOR THE
Garden, Farm and greenhouse.
The Best Seeds that Grow CANADA'S GREATEST SEED HOUSE

For Size and Ouality Our Bulbs are Unequalled,
Our Stock of Roses and Plants is Unsurpassed,
Clematis, Vines, Shrubs, Small Fruits, Etc. Illustrated Catalogues Free. Send for One Now.
The Steele, Briggs Seed Co.
LIMITHED.
TORONTO. ONTARIO.

> MANUFACTURER AND DEALER IN

Saddles, Harness, Collars, VALISES, SATCHELS, Whips, Bells, Combs,
Brushes, Horse Cloihing, Harness Oll, Etc.
Repairing done with neatness and dispatch. All orders promptly attended to.

## A New Suit.

If you want one made of the best English or Canadian Tweed, with latest style and a tip top finish, go to
HASTINGS,
The Up-to-date Tallor, Wyndham Street.
Fit and Finish Guaranteed.

## Wood's Fair.

Dear Old Santa Claus is with us once more. He has looked all over Guelph and has concluded to make Wood's Fair his headquarters, as we have the Largest and Cheapest lines in Xmas Goods.

## Come and See Him.

T- These instruments are fully illustrated and described in our free catalogue.
bell organ and pana coi. Limited, GUELPH, - CANADA.

## The Central Book Store.

See our stock of Text Books, Note Books, Fountain Pens, Note Paper, Etc.
C. ANDERSON \& Co.

## Robt. Mitchell, the Grocer.

Fancy Groceries, Fruits, Brushes, Etc.
No. 21 Lower Wyndham St.

## Take a Straight Tip to so

And get your Hair Cutting and
Shaving done at
C. A. MarkIe's Barber Shop

Opposite City Hall, Guelph, one door from Wyndham St.
Cigars, Cigarettes and Tobaccos.

## EUY YOUR

Hardware, Lamps and Cutilery from
G. B. TM®RRIS, And Save Money.

## GUELPH and ONTARIO

INVESTMENT AND SAVIIGS SOCIETY
savings bank department.
Deposits of $\$ 1.00$ and upwards, taken. Highest current rates allowed.
J. E. McELDERRY, Sec.-Treas.

## STUDENTS,

For an Easy Shave and a Neat Hair Cut, go to COMMERCIAL BARBER SHOP, Macdonnell Street.
J. H. GOLLINS, Next Dominion Bank Razors honed-a specialty.

## FRANK NUNAN, BOOKBINDER,

Upper Wyndham St., Guelph, Ont.
Jos. Pequegrnat, The Jeweler
Diamonds, Jewelery, Watches, Silverware, Clocks, Spectacles.
The Finest Goods. The The Largest stock. The Finest 23 Lower Wyndham St.

## HURNDALL,

The 0.A.C. Photographer
95 Upper Wyndham St.
SPEGIAL RATES.

## Do You Want Drugs

Perfumes or Toilet Articles; and as well, careful attention to your wants? e stand to serve you.
L $\mathcal{F} \mathbf{N}$, The Druggist, 95 Upper Wyndham St.

## You

Are invited to inspect my stock of Hats, Caps, Ties, Gloves, Shirts, Collars and Cuffs, Pyjamas, Night Shirts, Underwear, Umbrellas, and all Men's Furnishing Goods. They are up-to-date and correct in every way.

## Ordered Clothing

is a specialty with me. One of the most select stocks in the city to choose from, and prices and styles are right. I guarantee perfect satisfaction. All my goods marked in plain figures and only one price to all and that the lowest.

Give me a call.

## R. E. Nelson, Merchant Tailor and Furnisher.

## Dentonia Jersey Herd．

Two handsome bulls for sale．fit for service． Also heifer and hull calves at all times．

## Dentonia Ayrshire Herd．

Comprises seventeen choice animals from best Canadian herds．Our stock bull，Silver Prince，was sweepstake bull at＇rorouto and Iondon．
Dentonia Poultry Yards． Figgs in season．Stock for sale
Dentonia Trout Pends．
10，000 healtly fry ready for delivery．Prices moderate．
W．E．H．MASSEY，Proprietor，
East Toronto（Coleman P．O．）Ont．
Does Your Watch Run Well？
If not，take it to
CLARK，THE JEWELER．
Upper Wyndham St．
Giving personal and prompt attention to watch repairing，satisfaction guaranteed or money refunded．

## Central Hotel，rie neets．finer day house

Opposite City Hall，Market Square，Guelph．
W．H．SANDERS，Proprietor
Meals at all hours．


Good Stabling and
Good home for College Students．
Attentive Hostlers

## TRY OUR $\quad$ ？ <br> Maple Cream，Taffy，Nut Candy，Etc． <br> Second to none．Fresh Every day． <br> Oysters Served． <br> d．H．SMITH， Opp．City Hall． <br> SAVAGE \＆CO． Fine Watch Repairers，

Will Do Your Watch Right．

## McMILLAN \＆DUNBAR，

Barristers and Solicitors．
Office－Douglas Street，Guelph，nearly oppo－ site Registry Office．
Hugh McMillan．
C．L．Dunbar．
A Home－Like Place for Professionals．

## COMMERCIAL HOTEL，

 C．REINHART，Prop．Macdonnell Street，－Guelph．
This Hotel has been remodelled and refurnished， Aud offers the best accommodation to its patrons of any house in the city．

## When You Wantor

Plows，Harrows， Turnip Seed Drills， Scufflers，Land Rollers， Horse Powers，Root Pulpers， Ensilage and Straw Cutters，

Agrict 1 ural Furnaces，Bag Trucks， Also Repairing done on short notice， Call at our factory or write us
The Gowdy Mfg，Co，Guelph
Alva Farm Guernseys．
Awardcd First Prize at Moutreal for Breeders＇Young Herd．
Young animals of merit for sale．Pedigrees and particulars to parties wishing to purchase． Address－SYDNEY FISHER，Knowlton，Que．

## BOYSった。

The Advertisers who use our columns are Reliable．

PATRONIZE THEM

## ＂GLENALLAN FARM，＂ BARRIE，ONT．

Breeder of Shorthorn ai． 1 Jersey Cattle． Berkshire Hogs and Shropshire Sheep．

Up－to－date Stock．Correspondence Soliciicd．

S．DYMENT，Proprietor．

## Thorion \＆Douglas，

 CLOTHERS．
## J. TKI. DOOLEY, Grocer, Baker, Etc.,

Market Square, GUELPH.
Come and see us.

## Neill dridnellen

## JOHN DAVIDSON,

Steamship Agency.

```
Allan,
Beaver, White Star, Anchor, Lloyd,
```

Dominion, Cunard, American, French Mail, and all others.

Office-Market Square, - GUELPH


Rah! The

## Rah! Big

The
Student's
Rah! Bookstore Paradise Chas. L. Nelles,

Upper Wyndham street.

## CITY BARBER SHOP.

Three first-class Barbers in attendance. Running hot water for shampooing.

JAS. A. WORTHINGTON,

Come to the J2,

## Kandy Kitchen

 For Choice Taffies and Bon Bons. Oysters, Raw or Stew, 15c, a Dish.(WE'LL be pleased to show you our Ready-to-put-on SUITS and OVERCOATS, as well as a grand range of CLOTHS for Suits or Overcoats, made to your measure. An ever-growing business recommends us.
D. E. Macdonald \& Bro., The Golden Lion.

## The White House.

Clothing and Gent's Furnishings are to be found to suit all tastes and pockets, at
J. A. Duggan's, 77 Upper Wyndham.
O. A. C. Boys $x$ These Frank Dowler Co.
sells everything you need to wear.


## Boots, Shoes, Rubbers,

 slippers, Etc., ${ }^{\text {at }}$ Goeti's Shoe Store.You can always get what you want in Boots and Shoes, and Rubbers to fit your Shoes-no matter what shape they are. He is also a practical Shoemaker and his staff of first-class workmen are at your service. Repairing always done while waiting, if desired. Open evenings from 8 to 10 .
WZ. C. GOETZ.

Coffee Block, opp. G. B. Ryan \& Co,
Upper Wyndham Street.

