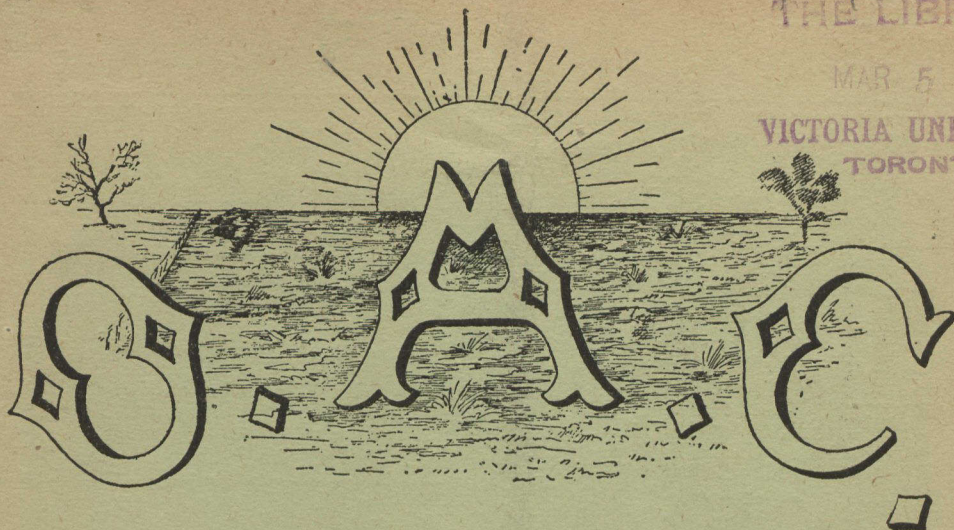


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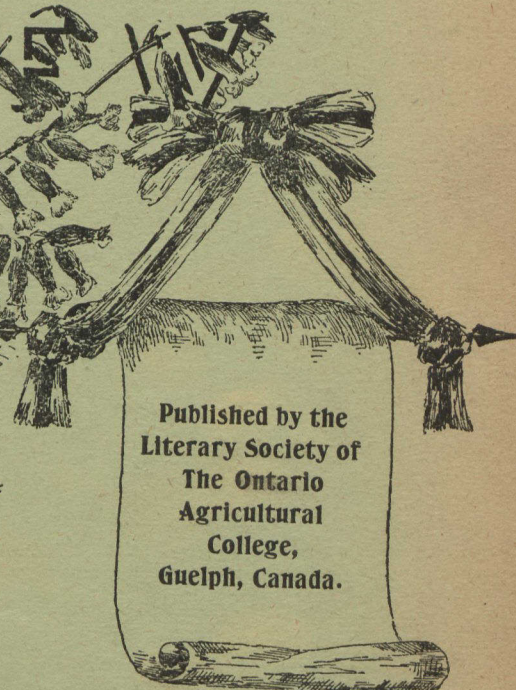
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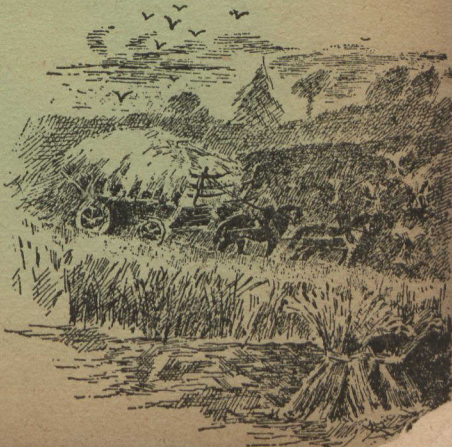


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The dignity of a calling is its utility.

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J. H. HOLLIS, Athletic. G. H. HUTTON, College Reporter.

The Specialist.

By P. Beveridge Kennedy B. S. A., Ph. D.

Many students now studying in our universities and colleges are confronted with the problem: "To what extent must I specialize during my college course." In this age of extreme specialization the dangers of beginning to specialize too soon in order to meet the demand for experts along certain lines are many, and if not carefully guarded against are apt to produce in one an unspeakable narrowness. How many scientists there are at the present time who have devoted their whole thoughts and energies to one subject, or worse still, to a small branch of a subject, until they have become utterly oblivious to everyone and everything else around them. In such persons one usually finds that their social instincts have disappeared, there being only one topic which interests them and about which they care to converse. This grows upon them more and more until we find that they have become fanatics, or, as frequently happens, entire loss of mind results.

Not long ago, while the writer was walking down to his office one morning his fellow pedestrian asked him what he

considered were the requirements of a well educated man. The answer was as follows : One who had a wealthy fund of knowledge on many subjects, with a large share of common sense and judgment, so as to be able to impart that knowledge, if called upon to do so, in the best possible manner. There are hundreds of men who have become famous by some discovery along certain lines, but in many cases this fame is only temporary, and their names are dropped out of the book of history at their death, unless they have been broad-minded, and their discovery has involved a liberal education. A certain standard of fame might be reached, but it could never be that of a statesman, a governor-general, a president, or even that of a senator or president of an institution.

At all the large universities the elective system is now being instituted, the students, as early as their sophomore or second year, being allowed to elect such subjects as they desire, and discard others, a knowledge of which would be highly beneficial to them in after life. The consequence is that many of our graduates are being turned out without the broad, fundamental, educational basis necessary for carrying on original work, and for taking a prominent part as citizens of their country in an intellectual manner.

My readers must not gather from this that there is not a place for "the specialist." Everyone should specialize, even while they are young, both before college, while at college, and when they are out in the world by themselves, but not in such a way as to interfere with their general education. Very early in life a young man discovers that there is some particular line of work which he really enjoys doing better than any other and which seems a pleasure to him. It may be cattle, horses, poultry, butterflies, plants, drawing, engineering, or one hundred and one other things. These are the fancies which the youth should nourish, because he will be able to acquire a larger field of knowledge with less effort along the particular line he is interested in than in any of the others. Portions of holidays, parts of evenings, reveries, parts of recreation hours and similar occasions should be devoted by the youth to his specialty, and not those hours which are set aside in school and in college for his general education.

In many ways the specialist is of great value in the origination of investigations, the accuracy of work, the saving of time and the rapid increase of knowledge. He has become so familiar with the scope and nature of his subject that at a glance he is able to tell what species of plant or animal he may have to deal with, and its economic value in the vegetable or animal kingdom. A few examples might serve to illustrate the point in question. Let us take the experimentalist, Mr. C. A. Zavitz, at the Ontario Agricultural College. By constant attention, interest, enthusiasm and careful observation he has become more familiar than anyone else in America, and perhaps in the world, in the best methods of experimentation with cereals and root crops, so that at the present time his methods are keenly watched by all agriculturists in the United States and Canada, as well as abroad. Without hesitation, the conditions of soil and climate being accurately given, he is able to name the variety of cereal or root crop that will give the best results in any locality in the Province of Ontario. The same might be said of Mr. Dick Graham of the poultry department. Another whom we might consider as a specialist is Prof. F. Lawson-Scribner, the chief of the division of Grass and Forage Plant Investigations of the U. S. Department of Agriculture. Grasses are generally regarded as the most difficult of flowering plants to determine, so that usually in the amateur and college herbariums of the country one will find more grasses unnamed than any other plants. The value of a specialist in this particular instance must be great. Prof. Scribner has, by many years of careful observation and close study along this line, become familiar with all the grasses in the United States, so that when a new one is discovered or sent to him by collectors, he is able to recognise and identify it at once. In consequence of this many thousands of dried and living specimens of grasses are sent to him annually by collectors for determination. In the same way we now have specialists in every subject, and still further in every order, or sometimes even on a single family or genus, although not quite to the same extent. Among the authorities living at the present time in America might be mentioned Ellis, Farlow, and Seymour, on Fungi, Howard, Comstock, and Packard, on Entomology; Cummings and Williams on Lichens; Barnes and Britton on Mosses; Bailey on Sedges, and Russell on Dairy Bacteriology.

Many others might be cited in every walk of life, but these will serve to illustrate what is meant by an authority on a particular subject, or in other words, "a specialist."

No longer do there exist such eminent naturalists according to their times as Linnaeus and Agassiz, who, besides having a very liberal education, were able to classify any specimen that came under the term "Natural History."

In conclusion the writer would suggest that a student during his college course should specialize as little as the requirements will allow. The time would be more advantageously spent by expanding on all subjects, and especially in reading outside of the lectures as much as circumstances will permit. Many students will not get out a book from the library because they feel that they cannot possibly find time to look at it. This is a great error. Secure all the books and pamphlets you can on the subject in question and see who the authors are, turn them over, and in this manner you will become familiar with it, and should occasion arise you will know where to seek for the desired information.

Very rarely is a student able to specialize to any extent during his undergraduate course, and therefore, if, when he has graduated, he feels strongly interested in some special line, he might then gratify his desires by taking a post-graduate course and doing original work.

Essentials in Draft Horses.

By A. G. Hopkins, Veterinarian, Wisconsin Agricultural College.

The expert horse breeder has a certain well-defined type in his mind when judging, which may be more or less influenced by his fancy. The average man, however, may, by observing certain essentials, reach nearly as satisfactory conclusions. The purpose of the draft horse is the moving of great loads at a maximum speed, therefore we must have in such a horse good feet and limbs. An old and trite saying, "no foot, no horse," is as applicable now as when first uttered. As the load is great, weight and size are indispensable in the draft horse. Action is

also an essential. Good feet are of large size at the hoof, heads and heels, they have the sole concave, the bars strong, the heels strong, the frog well developed, the lateral cartilages mobile, the horn dense and covered with the hoof varnish or peicople. There is no brittleness, no flatness of the sole, no well marked rings or cracks in the first-class hoof. The limbs being made up of bone and muscle are of a size corresponding to the needs of the animal, not tied in below knee or hock; the joints are large, square and clean, the tendons are large and well defined, and the skin covering these parts should be in good condition, no greasiness or doughiness to the touch. Hair on the legs (or feather) when present should be fine and silky, with no evidences of a scabby condition at the roots. In fact the bones and tendons should give the lower limbs a shape resembling a razor blade. The term, flinty bone, means just what it says. Weight and size, sixteen hundred pounds and upwards; height, sixteen hands and above, yet the animal should be massive and close to the ground. Large girth, well sprung ribs, deep wide chest, strong well muscled loin, powerful croup, thighs and gaskins are all-essentials. The limbs should not be placed outside of the body or the action will be rolling. The shoulder and pasterns should be oblique and of fair length, thus minimizing concussion. Upright short pasterns give a stilty gait and predispose to side-bones, one of the bugbears of the draft horse breeder. Head of medium length, broad between eyes and at muzzle, a vigorous eye and an alert, fair sized-ear are prized. The tail set well up and the stifles strongly muscled. In fact the horse should be "a thick un!" which he will be if he has a deep well sprung rib and close coupling. Action at the walk, the draft horse gait—fast, long, smooth, straight and powerful; no rolling, no interfering or there will be loss of power. At the trot, action like a Hackney—square, fast, with good knee and hock action, the soles of the feet showing at the walk and trot. To get these the limbs should be straight and planted squarely under the animal, the hind legs with the toes out and heels together, thus bringing the points of the hocks somewhat together, the stifles are thus able to work more freely. It must never be forgotten that power, beauty and soundness are all desirable in the draft horse.

Common Errors in Feeding Dairy Cows.

In the feeding of dairy cows, the quantity and quality of the food consumed are two very important factors. Good foods and poor judgment, or lack of good cow sense on the part of the feeder, are frequently a combination which produce a poor yield of milk. While a great deal is said and written about the quantity of food which a cow should consume, it is safe to say that but little food is actually weighed, most of it is dealt out with a fork and a four quart measure. Right here arises one of the most common errors in feeding, that is error in judgment as to weight and volume of feeds. The old rule, that a pint is a pound, etc., will not hold in regard to weight of feed. If a four quart measure is dipped into a bran bin and the bran is not pressed into the measure, about two and a-quarter pounds of bran are obtained. If the four quart measure is dipped into the oil meal bag it brings out six pounds, and from the shorts bin there will be five pounds. It makes a great difference whether you feed four quarts of bran or four quarts of shorts. The four quarts of bran weigh two and a-quarter pounds, and the four quarts of shorts weigh five pounds. Not only is there a difference as to bulk and weight, but there is also a great difference as to what there is in the materials. The six pounds or four quart measure of oil meal contains .35 pounds of digestible fat and 1.40 pounds of digestible protein—that is the nutrient required to repair the body. The four quart measure of bran contains .30 pounds of protein and .07 pounds of fat. Some cows can economically consume eight or ten pounds of bran per day, which would in bulk be equivalent to over fifteen quarts of loose bran. A ration ought not to contain over two pounds of oil meal. That is, while it would be safe to feed a good cow fifteen quarts of loose bran because of its bulk, it would not be wise to feed much over two and a-half pints of oil meal. The fact is there should be a pair of spring balances in every feed room. Weight is a much safer guide than is bulk. This illustration, I think, brings out the fact that good foods and poor judgment in dealing out the foods make a poor combination. It is to be feared that it is a combination which is met with too frequently. A few hours in the feed room with a measure and a spring balance, and a few evenings studying the composition of foods, together with the

use of a fair amount of common sense, will make a combination that will increase the creamery or cheese factory check wonderfully.

Corn weighs from one-and-a-quarter to one-and-a-half pounds per quart. If the four quart measure is filled with corn meal it will ordinarily contain about five pounds, while if it were shelled corn it would weigh about seven pounds. Barley feed is also deceptive as to volume and weight. A quart of ground barley will weigh about one pound, while a quart of the grain will weigh a pound-and-a-half.

Bulky and Concentrated Coarse Fodders: It frequently happens that about the same sized pile of hay is fed regardless of what the material is. If the feeder has some early cut beaver hay and some that was cut late, over cured and bleached, it generally happens that when it is fed the same sized forkfuls of each are used. If timothy hay or clover is fed too frequently the amount given the animal is the same. While such practice results in a waste of fodder, it also results in bringing about an unbalanced state of affairs in the animal system, which is not conducive to a large flow of milk. It is just as reasonable to expect to get from a stove by burning green poplar as much heat as by burning the same bulk of hard maple. When a cow is giving a full flow of milk, if a balance sheet is made, it will be found that it would require seventy-five pounds per day, beaver or prairie hay, to support the cow and produce the milk. There is no cow that can consume seventy-five pounds of hay in one day. This is twice the capacity of the ordinary cow. If it were clover hay that were being fed, about forty pounds of clover hay would contain as much of the most important food constituents as seventy pounds of timothy.

Too frequently the cow is expected to produce a good yield of milk from poor materials. This is an impossibility. Although a cow may have all the good hay she can eat, it is impossible for her machinery to consume and digest enough hay to meet the demands of her body and produce milk. The demands of the body are met first, and then milk is produced out of the balance. Excessive amounts of bulky foods are objectionable. A certain amount of bulk in a ration is necessary, in fact some rations lack bulk. Either extreme—lack of bulk or an excessive amount of

bulk—is objectionable. If the ration lacks bulk, the cow does not have an opportunity to bring into use all of her digestive powers. An interesting demonstration showing the necessity of materials to impart bulk was conducted here, (at the Illinois Experiment Station) by not allowing a calf to have any hay or solid food other than milk. In three months, with plenty of milk and no hay, the calf made seventy pounds of gain. From this time on the calf began to show signs of weakness, and there was a natural craving for solid food. Some days as high as fifty pounds of milk would not satisfy the calf's hunger. At the end of six months the calf showed indications of stiffness. At this stage it was given hay, and a pound of hay per day made a wonderful improvement on the animal.

Bulk is necessary, but a ration should not contain more than thirty-five pounds of dry matter and seventy pounds of water.

Palatability and digestibility are two factors that are worthy of much attention when formulating a ration. Many of the rations which are proposed do not work well in practice because they are lacking in palatability, and consequently the cow will not consume a sufficient quantity of the food to give good results. Some also are lacking in digestibility, thus unsatisfactory results follow their use. A ration can be made from over-ripe hay, whole corn and whole oats, but it will not give as good results as hay, cut when in prime condition, corn meal, and chopped oats, because the first combination would be both slow of digestion and less digestible than the second ration.

Many people have mistaken ideas regarding the value of some foods. For instance, corn fodder by some is underestimated, while others go to the other extreme and over-estimate it, and consider it a perfect ration for a dairy cow.

Roots and silage, both valuable foods when properly combined with other foods, are oftentimes fed in excessive amounts. Every ration should contain either roots or silage in order to secure the highest degree of both palatability and digestibility.

The remark is often made, let the cow decide what food she wants. Some cows, it is true, would exercise better judgment than some men, but it is not a good policy to let the cow decide the matter entirely. Many cows at first object to fodder like oil meal, gluten meal, silage, etc., but in a short time cultivate a decided taste for these foods.

In conclusion I may say that nearly all errors in feeding arise from the use of unbalanced rations. The food is not suited to the needs of the animal. The subject of feeding must be more carefully studied. Then many of the common errors, as, having the ration too bulky, or too concentrated, or too one-sided, would be avoided, and the result would be a much larger yield of milk at a greatly reduced cost.

The Canadian Exhibit of Fruit at the Paris Exposition.

By M. Cumming, B. A.

One of the finest exhibits which has been sent by the Canadian Government to the Paris Exposition of 1900 is the fruit exhibit. Some fifteen hundred bottles, filled with nearly all the representative kinds and varieties of fruit grown in Canada, are included in this collection. As a large part of the work of the preparation and preservation was done at the O. A. C. under the supervision of Mr. Hutt, Professor of Horticulture, it may not be uninteresting to the readers of the Review to learn something of the methods used.

At the early period in the year fixed for the opening of the Paris Exhibition, April 5th, it would not be practicable to show many of the fruits of Canada in a fresh condition. For this reason it was very desirable that, during the past summer, a large collection of good representative specimens of the different classes of fruit grown in this country should be collected and preserved in suitable antiseptic solutions. Dr. Saunders, of Ottawa, member of the Canadian commission in charge of the exhibits of cereals and fruits, took charge of this work for the Dominion. He sent to various stations in Canada printed directions and formulas of antiseptic fluids which had proved most satisfactory in experiments conducted by himself and Mr. W. T. Macoun, horticulturist, and Mr. F. T. Shutt, chemist at the Central Experimental Farm, so that uniform solutions were used at all the Dominion stations.

The fruit, which was preserved at Guelph, was sent here by fruit growers and managers of the experimental fruit stations in various parts of Ontario. Only the finest specimens were chosen, and these were carefully handled, packed and shipped by express, so that they arrived in almost as fresh a condition as when picked.

Four preservative solutions were used for the different classes of fruit. The formulas were as follows :

Fluid No. 1. Formalin (Formaldehyde) 1 pound, water 44 pounds and alcohol 5 pints. This is a two per cent. solution of formalin and a fifteen per cent. solution of alcohol.

Fluid No. 2. Dissolve 1 pound boric acid in 45 pounds of water and then add 5 pints of alcohol, *i. e.* two per cent. boric acid and fifteen per cent. alcohol. In using this solution considerable difficulty was experienced with impure acid, which would not thoroughly dissolve, and therefore made a murky solution. However, after one experience with impure acid, the solubility of new lots was always tested before using, and no further difficulty was experienced.

Fluid No. 3. Dissolve one-half pound of zinc chloride in 15 pounds water and add one and two-third pints alcohol, *i. e.* a 3 per cent. solution of zinc chloride and 15 per cent. alcohol. Zinc chloride has such a tendency to form insoluble basic salts that a part will always remain undissolved. Being very heavy these salts soon settle to the bottom and the clear fluid can be decanted.

Fluid No. 4. Sulphurous acid 1 pint, water 8 pints, alcohol 1 pint.

The formalin fluid was used for the most part on the dark and red colored fruits, as strawberries, cherries, plums, red currants and grapes. Of the four fluids it was the most satisfactory, as fruit preserved in it retained the most natural appearance. It could not however be used on the lighter colored specimens, as it produces a dark stained appearance.

So far as mere preservation of form is concerned the sulphurous acid fluid was even more satisfactory, but, as it is a powerful bleacher, it could only be used on the whitish and yellow colored fruits. White or yellow raspberries, cherries, currants, apples, plums, peaches and grapes were almost perfectly preserved by it, and presented a very fine appearance.

The zinc fluid was also good, but could only be used on the green or russet colored apples or pears, as it will gradually make a somewhat russet colored deposit on the fruits.

The boric acid solution was effective in the preservation of blackberries and black raspberries and currants. It was also recommended for more or less red colored apples. However, neither this nor any other of the solutions proved very satisfactory in the preservation of this most important fruit, and were it not that collections were being preserved in cold storage to be shown in a fresh condition, our exhibit of apples would be rather poor.

When possible, fruits such as raspberries, gooseberries, currants, cherries and plums were preserved on the branch, and so will be exhibited in a most natural condition. Other similar details were attended to, so that, so far as possible, the fruit will appear as when it was picked in the orchards.

The value of sending such an exhibit to Paris cannot be doubted. In the first place this collection of fruits will be surprising to those who think of Canada merely as "The Lady of the Snows," and will no doubt be the means of bringing to our land more settlers and capital to assist us in developing one of the most resourceful and finest countries in the world. And it will also be the means of opening up larger markets for our fruit. Here the Review would join with other magazines and papers of the Dominion in sounding a warning note to those packers who have manifested such an indifference in packing and classing fruits. It is well enough for us to exhibit fine specimens at the great exhibitions of the world, but so long as the top, middle and bottom of our barrels of market fruit are not of the same first-class standard, we can never reap the full advantage of the magnificent advertisement which we have sent to the Paris Exposition.

Song Competition.

A prize of \$10 is offered by the Literary Society for the best O. A. C. song. Competition open until October 1st, 1900. Watch for further particulars next month.

The O. A. C. Review.

Business Managers.

F. S. JACOBS, Secretary. P. G. MILLS, Treasurer.

Subscription Rates.

Annual subscription, 50 cents. Single copies, 10 cents.

Advertising rates on application.

Ex-students are requested to contribute to our columns.

FEBRUARY, 1900.

Editorial.

We are pleased to acknowledge a revival of interest on the part of the ex-students towards our paper. In the present issue are no less than three articles contributed by ex-O. A. C. men, which, we feel certain, will be highly appreciated by all our readers. Thoughtful men will peruse with interest and profit Mr. P. B. Kennedy's remarks on "The Specialist," while all agricultural students will derive great benefit from a careful study of Mr. W. Kennedy's article on "The Feeding of the Dairy Cow," and of Mr. A. G. Hopkins' short but striking description of a draft horse.

The excitement caused by the war news tends to make us overlook events of a more peaceful nature but of greater importance to our Alma Mater than the capture of a Boer laager or the re-killing of General Joubert. The question of erecting a new building which would provide a suitable hall for the Literary Society, and ample accommodation for students, will ere long be discussed at the Ontario House, and in all probability this important amelioration will be voted. Future seniors may look forward to more peaceful and comfortable lodgings than are enjoyed by the present third year, and the efforts of our speakers or electioneers will no longer be reduced to naught by the echoes of the gymnasium. The agitation which has been created of late over the establishment of a school of Domestic Science also gives us strong hopes that next year this long wished for innovation will no longer be a mere speculation but an accomplished fact. Then shall we, as well as all ex-students, say, "We were at the O. A. C. too early."

Athletics.

W. O. H. A. SERIES. BERLIN VS. VIC-O. A. C.'S.

On Thursday, February 2nd, the Berlin team with a couple of hundred ardent supporters came to the Royal City to cross sticks with the Vic.-O. A. C.'s. The Berlin boys have never been beaten as yet in any of the league contests, and it cannot be denied that they are a speedy aggregation; but in the Vic.-O. A. C.'s they found their work all prepared for them, and only by a very narrow margin did they obtain another victory. The game was one of the fastest witnessed here this season, especially the latter half.

The first goal was scored by Squirrel in four minutes, the second and third by Berlin in eight minutes. Then our boys added two in succession and Berlin followed with four more, leaving the score at half time 6 to 3 in Berlin's favor. In the next half Berlin scored one more goal and the Vic-O. A. C.'s three, still leaving the score at the finish in the visitors favor by one goal. Berlin 7, Vic.-O. A. C.'s 6.

Squirrel, although hard checked, played a fast game, while "Bill" Dryden at cover and Gifford at point during the last half proved to be a very strong defence, stopping the visitors brilliant rushes and lifting the puck out of danger.

The Vic.-O. A. C.'s are considerably weakened owing to the loss of Johnston and "Tom" Petrie from the forward line.

The inter-year games are proving to be as interesting as ever, and as yet it is doubtful whether second or first year names will be inscribed on the trophy as the champions of hockey for '99. The freshmen have already won the distinction of being the first to have their names inscribed on the trophy as winners of Rugby. But in hockey the Sophomores are determined to even matters with the Freshies, and judging from the result of the first game in this series (4 goals to 2 in favor of 2nd year) they stand a good chance of accomplishing their aim. The following men represented the two years :

2ND YEAR.		1ST YEAR.
Broude	goal	Ross
La Pierre	point	Summers
Weir	cover point	Dryden
Hallman	forwards	Suckling
Rowat		Dunning
Parker		Barnes
Woolverton		Lawson

Although the third year were not strong enough to enter into the inter-year games, they have nevertheless shown their hockey spirit by arranging petty strifes among themselves. Some two weeks ago the Agriculturists challenged the Dairymen and Chemists to a game of hockey. Of course such an event brought large crowds, but if their object in turning out was to see hockey, no doubt they were disappointed, yet, although a good exhibition of hockey was not witnessed, the slashing was very brilliant and the tumbles numerous.

Mac in goal for the Chemists and Dairymen proved to be a veritable find for the Agriculturists, as the latter team had eight shots on goal and Mac allowed seven to clear him. The same, however, cannot be said of the "hay-seed's" goal keeper, as he only allowed three to pass between the flags.

The next game was marked with the same slashing as the former. Each side succeeded in scoring five goals, thus leaving the Agriculturists the winners of the round by four goals.

College Reporter.

The delegates sent by the Y. M. C. A. to the convention at Woodstock, gave the Association on their return a very interesting report. The convention this year was the best ever held by the provinces of Ontario and Quebec, and all those having the interests of the organization at heart felt greatly encouraged by the evident enthusiasm of all the delegates. The Association may well be proud of the work done by the men who represent the movement in the field of battle. Dr. Barrie has won the confidence of the men and is doing good work, while Mr. Best, who was sent with the second contingent, will doubtless be of invaluable service to his comrades amid the horrors of war.

The work of the Bacteriological department is to be continued by Dr. Hammond, a graduate of McGill University. Mr. Hammond took his degree in Veterinary Science, also paying special attention to Bacteriology. He lectured at his Alma Mater for a time in Histology and Physiology. Going from there to Salem, Mass., he engaged in special laboratory work for some time. Dr. Hammond came to this country some six years since from the Isle of Wight.

The Dairy class of 1900 are hard workers and cannot take time to prepare a literary subject for debate before our Society. In former years we had enjoyed the evening's entertainment with which it has been the custom of our friends of the milky way to favor us, and we are disappointed to learn that we are to be deprived of our old time pleasure this year. It has been said that there are two sides to every question, which is true, but there is no question about some things, and these are recognized as facts and are not debatable. Ordinarily no one proposes to discuss a fact in debate, but our friends have accomplished the extraordinary, and have suggested to our representatives the following subject without option: "Resolved, that Dairy farming is more profitable in Ontario than Grain farming, allowing one cow for the grain farmers." This is the reason we are not to enjoy the public presence of the Dairymen this year.

On Saturday evening, 17th inst., the members of the Literary Society, with a large number of friends who were present by invitation, assembled in the gymnasium to be entertained by the O. A. C. Minstrels. The programme commenced at 8.30, and for two hours the audience was kept busy digesting jokes, listening to the orchestra, and to the singing by the men in black. Songs that cheer the heart of the darkey in the cotton field were so well given that, had it not been for the echo of the building, the hearts of the audience would have been equally stirred. The entertainment was very good indeed, and the special thanks of the Literary Society is due Mr. A. B. Cutting, whose indefatigable labors contributed so largely to the success of the entertainment.

The second Canadian contingent has landed safely at Cape Town, and judging from the activity which "Bobs" is displaying, the guns of E and D batteries will soon roll over the veldt in the direction of Pretoria. The eagerness with which the movements of the first contingent have been watched will, if possible, be yet greater for the second, owing to the fact that it includes several O. A. C. men. With the poet we wish them "all speed over veldt and vale," remembering that

. . . . Should they fall
By ridge or wall
Who dies for country dies for God.

Personals.

It affords us a great deal of pleasure to announce the valuable work being done by Mr. Wm. Rennie, a recent ex-officer of this institution. He has just completed his book, "Successful Farming," a well illustrated volume and one which will be of untold value to farmers, stockmen, students, and those engaged in agricultural pursuits. Mr. Rennie resigned his office as farm superintendent early last fall, after having had charge of affairs for six years. During his term of office great improvements were made and success attended his efforts in all lines. A book coming from a man of such wide experience, and written while the author was still engaged in the work, is not often found. Mr. Rennie's great aim while connected with the College was to show by actual experiment that scientific methods can be successfully applied to agriculture. The book is still in the publisher's hands, but will soon be given to the public.

We are also pleased to announce that Prof. Thomas Shaw, who held the position of farm superintendent and lecturer in agriculture previous to Mr. Rennie, has just completed a book entitled "Forage Crops Other Than Grasses." Mr. Shaw is at present Professor of Animal Husbandry at the University of Minnesota. Prof. Shaw's work is well illustrated, and deals in a practical way with the culture, harvesting, and uses of forage crops. The aim of the writer has been to adapt it to the needs of the farmers, stockmen and students of Agriculture. Such books as these will no doubt lead to improved methods of farming.

The College was favored last week with a short visit from Mr. E. R. Lewis, '97, who has had the management of the live stock on a large farm at Morocco, Indiana. Mr. Lewis is at present at his home in Burford, Ont., visiting his father who is in ill-health. As soon as possible Mr. Lewis intends going back to Morocco, where his position will be somewhat enlarged, and we hope that success will continue to attend his efforts.

F. R. Marshall, B. S. A., '96, called at the College on his way to Ames, Iowa, where he will continue his studies in post graduate work.

E. Beam, B. S. A., '95, has also gone to Ames to take post graduate work.

It will be of interest to our ex-students to know that two very valuable bulletins have recently been published by this station. A special bulletin by Prof. Reynolds, "Books for Farmers, Stockmen, Dairymen and Fruit Growers,—The Farm Library." This is a very valuable bulletin, and should be in the hands of every progressive farmer. Bulletin 110, by Prof. G. E. Day. experiments in "The Feeding of Live Stock." This bulletin contains valuable information for stockmen.

During an encounter with Cronje's rear guard, which took place on Sunday, February 18th, a number of Canadians were killed and a larger number wounded. In the list cabled to the Toronto Globe appeared the name of "Findlay, of Toronto," killed. There is little doubt that this is J. H. Findlay of the First Brigade of Field Artillery, Gueiph, who enlisted at Toronto with the first Canadian contingent. Mr. Findlay was an associate graduate of the College in '94, and for two terms was instructor in the home dairy department. The news of Mr. Findlay's death will be received with great sorrow by all of his friends and old associates.

Locals.

A PARODY.

Then up spake noble Shylock
 Who feared nor small nor great,
 "Lo, every man in this here place
 Is tapped or soon or late.

Get down to Hunt you fellows
 With all the speed ye may,
 I, with two more to help me
 Will hold the foe at bay."

They sat him in beneath the taps
 And would not let him go,
 It cheered the hearts of those who fought
 To hear the water flow.

O Shylock, noble Shylock,
 For whom the first year pray,
 A place high in the roll of fame
 Thy deeds have won, this day.

—Selected.

NOTES FROM THE LIT.—

Discussion—The proposed school of Domestic Science at the O. A. C.

- (1) Who would have to eat the experimental cooking of this school?
- (2) A dire thought—Suppose, O suppose the O. A. C. kitchen should exert an influence on the School of Domestic Economy!
- (3) Which of our professors could think of giving a young lady less than full marks on an exam?

Dr. Stewart to Lynd, a new student:

Have you been anywhere in contact with any contagious disease lately?

Lynd—Yes sir; about three years ago.

CONUNDRUM—

What was in Woolverton's trunk on Sunday morning?

Ans—Woolverton himself.

Dryden in poultry lecture:

Do you give condition powders, tonics, etc., as rations?

Class in Geology:

Prof.—At the time of the great dark day all people became very good; there was no swearing then, and if Baker had been there he wouldn't have been cussing either.

Rush in indignation:

Do you suppose that I would give a second year man a chance to go home with a first year fellow's girl?

Prof. Hutt—For what are mushrooms grown?

Student—For the officers of course.

Mrs. Craig to Army, who is setting a mouse trap:

What's that for Mr. Armstrong?

Army—The mice are eating Dunning's socks; they are not doing well on brown sugar.

IN THE CLASSES—

Dr. Reid—What's this your name is, Mr.—ah—

Suckling—Suckling, sir.

Dr. Reid—Oh! I thought so.

Hobson asked a chicken man whether it was not very wrong to tamper with show birds!

All students taking the poultry lectures should provide at least two scribblers for extra notes.

We should like to ask the first year what they did with the oysters they had ordered to celebrate their expected victory over the second year at hockey last Saturday.

"The dining hall of the O. A. C. would kill any one." Statement made by President Mills in No. 1 class room on Feb. 2nd, 1900.

Opinions of Dairymen on the 3rd year Dairy course:

Livingstone—That d— dairy course is not worth a d—

McIntyre—If they don't give me any more work I'm going to kick.

Anderson—It's all right. All the time you want to read Hardy's novels.

Skating Rink—Delong—Will you accept the pleasure of my company for a skate, Miss ———

Third year Agriculture:

Prof.—"Judging these animals from a butcher's standpoint, to what point should you give a particular attention, Mr. Ross?"

Ross—To the size of the nose.

"O what a pity! Such a good natured looking young man," exclaimed a young lady when "father" dashed his smile on the ice in attempting to cut a corner gracefully. Undaunted he rose and showed once more his 32 little white teeth—so well sharpened by constant exercise—in all their splendor. But a shadow suddenly came across his face as he heard a discreet laugh behind him. "Oh! I am afraid," said he, "I have drawn some eyes upon me!"

Hutchison and Wagg have gone into the grocery business down town; they take turns minding shop and displaying sweets. Too many irons in the fire, boys. 'Tis hard on agriculture. Hutton has been offered a position in the same shop.

Exchanges.

At the present time nearly all College Journals contain articles on the relation of Canada to the British Empire. Whether Canada is to remain as she now stands or to be drawn into an Imperial Federation remains for the future to decide. As we stand today side by side in England's battles, there is a drawing near of the Colonials to the Motherland. Canada as the first and greatest colony of the Imperial Empire, and the colony in closest touch with Great Britain, should be, and is loyal. Canada's position in the empire is one of which we as Canadians should be justly proud, and we join with our Motherland in defiance to all that is oppressive and unjust.

"Come, the three corners of the world in arms,
And we shall shock them; naught shall make us rue,
If England to herself do rest but true."

The Guelph Mercury published lately a letter from M. N. Ross, B. S. A., who is with the second Canadian contingent in South Africa. We congratulate Mr. Ross on being promoted to the rank of sergeant of artillery.

Among the more noteworthy articles of the last month in College Journals received are: "Canadian Literature," *Acta Victoriana*; "John Ruskin," *McGill Outlook*; "Nipponi," *Industrial Collegian*; "William Shakerpeare," *Albert College Times*; "What a Modern Woman Should Know," *Rocky Mountain Collegian*; "A Few Rogues," *Dalhousie Gazette*.

Recipe for Kisses.—To a piece of dark piazza add a little moonlight. Take for granted two people. Press into two strong ones, a small soft hand; sift lightly two ounces of attraction of romance, add a large measure of folly; stir in a floating ruffle and one or two whispers. Dissolve one-half dozen glances in a well of silence. Dust in a small quantity of hesitation and two of yielding. Place the kisses on a flushed cheek or on two lips. Flavor with a slight scream and set aside to cool. This will succeed in any climate if directions are carefully followed.—Life.

We acknowledge the following exchanges: "*McGill Outlook*," "*Acta*," "*Queen's Journal*," "*Dalhousie Gazette*," "*Canadian Horticulturist*," "*Rocky Mountain Collegian*," "*M. A. C. Record*," "*Albert College Times*," and others.

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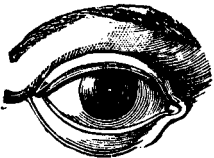
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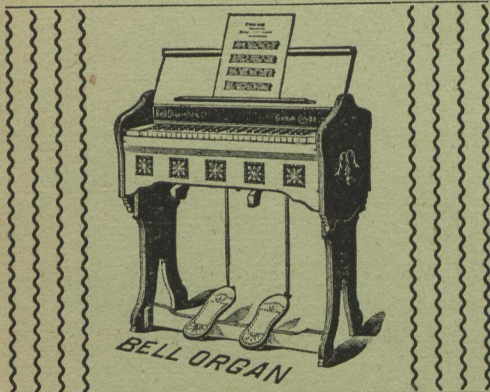
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