

**PAGES**

**MISSING**

# THE O. A. C. REVIEW

"THE PROFESSION WHICH I HAVE EMBRACED REQUIRES A KNOWLEDGE OF EVERYTHING"

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## ACHIEVEMENT.



*Trust in thy own untried capacity  
As thou would'st trust in God himself. Thy soul  
Is but an emanation from the whole.  
Thou dost not dream what forces lie in thee,  
Vast and unfathomed as the grandest sea.  
Thy silent mind o'er diamond caves may roll ;  
Go seek them—but let pilot-will control  
Those passions which thy favoring winds can be.  
  
No man shall place a limit to thy strength :  
Such triumphs as no mortal ever gained  
May yet be thine if thou wilt but believe  
In thy Creator and thyself. At length  
Some feet will tread all heights now unattained.  
Why not thine own ? Press on ! Achieve ! Achieve !*

—ELLA WHEELER WILCOX.

## Are We Prepared?

### A Message for the New Year.

By J. B. REYNOLDS, M. A., President of Manitoba Agricultural College.

A HUNDRED years ago, a great British poet, in times of war and danger and uncertainty much like the present, wrote these lines:

Bliss was it in that dawn to be alive,  
But to be young was very heaven.

Through the storm and the stress he saw the new day, the sun of righteousness arising with healing in his wings.

We need like faith now, and if we believe, and act upon our belief, that the new day is rising, it will surely come to pass.

I am writing this for young men and young women. This new day will be yours, to make or to mar, according as you think nobly or ignobly, and act wisely or foolishly.

The new day will need strong men and women, strong to do the things that are worth doing, strong to oppose vain and foolish counsels, strong for fair play and equality and social justice.

The things that will be worth doing are to provide food for those that otherwise will go hungry, and clothing and shelter for those that otherwise will go naked and homeless; to establish right ideas of duty and social relationship and politics; to give just dealing to all, and especially to the

soldiers returning from the battle-field where they have made secure our treasured Canadian liberty.

There will be a time of upheaval, not only in Europe, where crowns and thrones are perishing, but also here in Canada. There will be much confused

thinking, and many unpracticable counsels. There will be neglect of the primary duties and scrambling for place and power and privilege. There will be also, it is devoutly to be wished, much clear and sane thinking, much unselfishness and dutifulness and faithful honest work and heroism. For shame be to us if we forget soon the heroisms the war has taught us.



J. B. REYNOLDS M. A.

Are we prepared for the great tasks that lie before us? And if not, are we getting prepared? Do we see clearly what will be wanted of us? The Colleges have their opportunity now as never before, to preach and to practice the doctrines of individual capability and efficiency, of service-ability, of giving rather than receiving, of clear thinking, of high ideals, and of devotion to the common weal. For the Son of Man came not to be ministered unto but to minister and to live His life a ransom for many.

## A New Year's Message

FROM NEIL M. LECKIE, B. A.

THE latest freshman to arrive within the halls and class-rooms of the Ontario Agricultural College is a youth who, like the beast in the Apocalypse, is known by a number instead of by a name. His number is One Thousand Nine Hundred and Nineteen. He is taking all the classes, and from various hints it looks as if he intends to do all his work, and take all his prizes within the space of twelve calendar months, and then depart again. He is quiet and diligent, and never sleeps. He visits all his fellow students, and reminds them that hours are few and precious. He takes a strange interest in clocks, and in the ringing of the bells which send the classes to their tasks. He is forever muttering formulas about the brevity and uncertainty of time; and is altogether a personality and a presence with which every one in some measure has to reckon. He comes of an old family of years, and those who have been with us longest can remember many others of the family who have come and gone, all following the same mode of life and playing the same part amongst us.

This new year which has come into college rooms seems to have arrived elsewhere as well; and has indeed, like Fafnir, spread itself over all the land. It is to be a new year in many ways. It promises to be a year of peace, a year full of the sense of a great task accomplished, and of new and even greater duties opening out before us. To win a war is to reassert our claim to a place upon the surface of the

Earth, and to go on to show that we are better able to use and adorn that place than those who tried to take it from us. The last four years have witnessed the attempt of one group of peoples to dislodge another, and the year just gone has seen the failure of this enterprise. We are to remain, in the meantime, undisturbed in the possession of our altars and our hearths, our fields and homes. We have been at least strong enough to hold off the aggressor. Now we are to be wise enough, skilful and industrious enough to show that we are better able than our enemies to occupy and use the plot of land upon which we have retained our hold.

We have, it may now be claimed, proven ourselves superior to the aggressor in arms; we have outdone him in the quality of mercy and of human kindness; we have outrivalled him in the art of arranging and governing without the help of kings to tell us how to do it. But there are other excellences to which in the meantime we can lay no such claim. In knowledge and the arts we are not supreme. The free movement of the mind which we have attained in the business of governing ourselves has not been gained, has hardly even been claimed in other departments of our life. Even in the one region in which we may be said to have excelled, that of making governments express the will of many, our success is only partial and immature. In Canada, in many an instance, our people are unlovely and self-satisfied; our towns and cities are often squalid

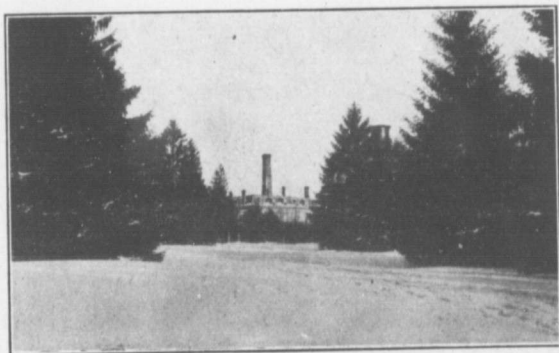
and our fields uncouth; and thus far in our country's life we have not given to the world one shining name in art or letters.

In the flush of victory we may be pardoned for having fixed our gaze upon the head of gold; but with a new year and a time for quiet contemplation we presently discover the feet of clay and prepare to accept our new duties and new stewardships.

In a school book on geography used by young pupils in German schools there are two pages which it would be well for us to study here also in Canada, learning from them a deeper lesson than merely that of a little information regarding the surface of the Earth. On one of these pages it is stated that North America is a continent inhabited by Indians, Negroes and German emigrants, while elsewhere in the book there are maps of the various countries of the world in graded colors from white to black, according to the state of culture which the several countries possess. Germany, of course, is white, but Canada, like Cen-

tral Africa, is painted black as darkness. A most inaccurate text-book doubtless, but one in which the very blunders are impressive. Some day there will be a new school-book in geography for German pupils, and the publishers will be compelled to give their students the truth concerning lands other than their own. Our part in such an education is to show to the bystanders in the world that there is a race of people in this land fit at least to be mentioned along with Indians, Negroes and German emigrants; and that if the colour of maps is to be an index to the spiritual life of nations, the new geographers must paint Canada white and glistering.

There are two great schools on a hill beside the town of Guelph, Ontario, and to the students of these schools there is being given the task of making for our lands beautiful and fertile fields, and likewise beautiful and cultivated homes. To the students of these schools there has been committed a share in the remaking of the map of Canada.



## Feeding Fat Into Milk

By NORMAN JAMEL, B.S.A., Lecturer in Dairy Husbandry, Manitoba Agricultural College.

"MILK, Milk and more Milk if our race is to be reared in vigor and health." This is the cry that at the present time goes out the world over as a challenge to all dairy men. Especially does it call to those in the countries far distant from the ravages of war, whose herds and whose homes have been left unmolested by the fearful but now covering Hun, and whose duty and privilege it is not only to feed the armies and children of the Allies, but to provide the surplus cows—the foster mothers of the human race—that will rehabilitate the war-ridden portions of Europe. The farmer then, must ever be on the alert to better his output of this, the food that is both Meat and Drink. He must practice economy of production, and also make application of any experimental data that show him how he can serve better his country in this particular need and also better remunerate himself—a consideration too often made secondary by the tiller of the soil, and especially so in the line of dairy production.

Among the various factors which tend to vary the fat content—and, consequently, the food value of milk, namely:—(1) application of the principles of sound breeding practice; (2)

Breed; (3) Individuality; (4) Stage of Lactation; and among a few others often quoted but of minor importance, there is the Feed Factor—one which more than any other is responsible for

maximum production in the individual, which is the product of wise and careful breeding. It is with a view of pointing out to what extent feed actually does affect the quality and the yield of milk produced by the cow, that these few thoughts are expressed.

### 1. Feed Affects the Quality of Milk but little.

Since the cow might be considered as a machine which converts grains and roughage into a palatable, nutritious, and wholesome food for humans, one would think that the kind of food produced by this living machine could be governed by the kind of feed put into it. Reason alone, however, cannot explain the intricacies of life, and in this, as in many other cases, has to be superseded and supplemented by actual experience, and by experimental evidence.

Although quite a large number of men are not conversant with the fact, the experienced stockmen knows full well what hard practice has taught him, that very little change of the kind of milk produced can be had as a re-



NORMAN JAMES, B. S. A

sult of feed. To substantiate such a belief, we must needs rely upon the work of the scientific man, the investigator who has spent long years governing conditions so as to find out exactly what the actual facts are. In a recent work (1) published by Cornell University, the conclusion is drawn that liberal feeding and hitherto poorly fed cows increased the quality — percent. of fat—in milk only to the extent of  $\frac{1}{4}$  of 1%. Four cows in very poor condition and poor surroundings were selected, and a test covering four years was made, the first of which was carried on at their former barn. Tests were made and accurate records were kept. Subsequently, the cows were removed to the University stables and fed liberally for two years, while the test was running. At the end of the third year the cows were returned to their former quarters and the test was continued for another year. Such a finding, which verifies previous experimental work, and also the contention of our present day cow men, ought to have some weight, and should do a great deal to relieve the farmer of the doubt that is cast when he says: "Well my cows ought to test better; they're getting better feed now."

## 2. Feed Affects the Quantity of Fat Produced.

That the percentage of fat does not increase materially with liberal feeding, however, does not prove that it is not a good policy to feed well. The real proof of the question is found when other factors are considered. In the same work referred to above, results show that liberal feeding increased the total yield of milk, and with it of fat, by 50%, and also that the same increase was produced economically. In fact, every feeder knows well that he is well repaid for

liberal feeding. This is quite easily understood when we consider that body life must be maintained in the cow, and a certain portion of the feed consumed must be utilized to that end. A cow that is being fed barely a living ration then, is using all to sustain life. What extra she consumes is converted into milk if she is the proper type of dairy cow. Or putting it in other words, the maintenance factor is practically constant; and the amount of milk produced and with it the amount of fat, is wholly dependent upon the extra given, or the amount of feed consumed above maintenance. Missouri Agricultural Experimental Station (2) reports that:—

Cow No. 1—On a milk ration consumed 8241 C. of food per day; On a maintenance ration, consumed 4783 C. of food per day; and therefore had available for milk production 3448 C. of food per day.

On the other hand:

Cow No. 2—On a milk ration, consumed 14614 C. of food per day; on a maintenance ration, consumed 5535 C. of food per day; and likewise had available for milk production 9079 C. of food per day.

Or Cow No. 2 had 2.63 times as much food available for milk production as Cow No. 1. In actual fat production, Cow No. 2 produced 2.77 times as much as No. 1, which agrees favorably with the ratio obtained by the food value—above—maintenance comparison. Deducting cost of maintenance, either cow produced milk as economically as the other; but No. 2 produced 8522 lbs. of milk compared to 3188 lbs. for No. 1, and is, therefore, a much more desirable cow. It is therefore, quite clear that the amount of fat produced is a widely variable factor and one that is controlled to a

large extent by the feeder. Liberal feeding always pays if a cow is worth keeping at all.

### 3. Good Condition at Calving Time Affects the Yield of Fat.

There is, however, another phase of the feed question which has an indirect bearing upon the quality of milk production. The practical stockman has his cows in good condition before freshening, and breeders who are striving for production records know the value of such a practice, one which, in so far as the long test is concerned, no one can very justly criticize, since it is only normal and natural that the cow would put on flesh during the period when she is dry. The system when applied to a short term test, however, does not lend itself to such commendation. The cow that is in good condition has a peculiar faculty — a phenomenon which our scientists at present cannot very well explain—of being able to draw upon the fat of her body to sustain life and thus to allow more of the food consumed to be turned into milk. This seems to be the case at any rate, as the cow gradually loses her body fat for a period at the beginning of her lactation period, varying in length from two weeks to as many months, and at the same time she gives a milk richer in fat, which decreases slowly until her normal is reached. On the other hand, it is accepted generally (3) that cows in thin condition produce milk that decreases in fat for the first month, and then gradually increases throughout the whole lactation period. To confirm the policy and belief of our best stockmen we have the results of

Eckles (4). Too, in a recent work (5) put out by Storrs Experimental Station, the tests which averaged the test of seven Holsteins over twelve lactation periods, showed a decline as follows:—3.7%, 3.69%, 3.46%, 3.23% and 3.15% for the first five ten-day periods in the lactation. These figures show that the percentage of fat in the milk then, is at the highest at the time of maximum yield of milk, and, consequently, a good record is insured, for which every feeder is aiming.

In conclusion, the writer wishes to emphasize the fact that while feeding will not materially affect the percentage of fat in milk, it has its bearing in the two relations mentioned, (1) a slight increase as a result of liberal feeding, and (2) a slight increase at the beginning of the lactation period, as a result of good condition at the time of parturition. At the same time, feeding does not affect variation in the amount of fat produced, due to increased production of milk. The practical feeder can make wise and careful application of the data proven by experimental investigation, and be rest assured that, in so far as the individuals of his present herd are concerned, feed more than any other factor will help to increase his profits.

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1. Bull. 222 1904 Cornell University.
2. Research Bull. 2 1910 Missouri.
3. Van Slyke.
4. Bull. 100 1912 Missouri.
5. Bull. 94, 1918 Storrs, Conn. Agr. Exp. St.





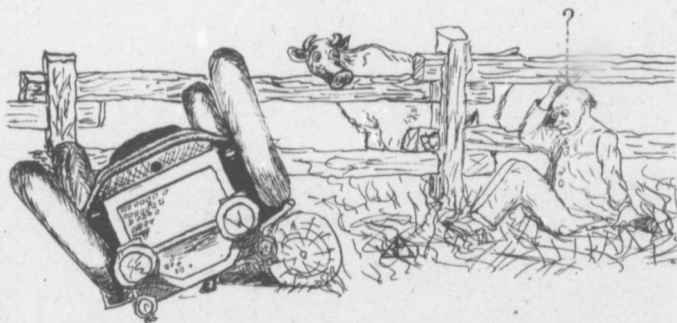
## A Lapse of Memory

*Second Prize Short Story, Review Competition—By Mens Nunc Sana.*

I SAT up, rubbed my eyes, and looked around. I was on a country-ditch-bank, and within a few feet of me was a Ford car lying on its side, slightly damaged. My head was aching badly and I could feel a large "goose-egg" on the top which was bleeding slightly. Rising to my feet, I found no further injuries beyond a few bruises and a general stiffness. I was still dizzy, but my head was clearing as I looked about me.

My first impression was a vague

would not come. Then I sat down, thinking that my head would clear in a minute; I had received such a shaking up. My head, however, was clear, for I could figure out the best way to get my car up into the road. Then all at once the truth burst upon me. I had in some way affected my memory when I was thrown out of the car upon my head! I confess I was not terrified by the thought. There was something novel and amusing about it. Of course, thought I, everything will come



feeling that something was wrong. Of course, the car was upset—but something else was the matter. It must be that I would not be able to get to my destination. But where was I going?—I considered for a few seconds, but the thought would not come to me. No matter, I would go——, was I going to say "home." Then thoughts crowded on me pell-mell. Where was "home?" Where was I going?—Then finally: Who am I anyway? This dazed me for a few minutes, for the answers to these mental questions

back to me in a few minutes.

At this juncture I saw a farm wagon and team approaching, and my thoughts turned to getting the car righted while help was at hand. While waiting for the wagon to come up, I went over to the car and examined it. The wind-shield was broken and the fenders were somewhat bent, but I could find nothing more serious. Stopping his team a short distance from the overturned car, the farmer came forward to inspect the situation and to offer his assistance. This I gladly ac-

cepted, and the two of us, with the help of the team, succeeded in getting the car back on the road again. Just then I was assailed by a new fear. Had I forgotten how to run the car? My fears were soon dispersed, however, for I had the engine humming in a few seconds.

I thanked my new found friend for his assistance, and he informed me that he also owned a Ford car. There is a sort of Freemasonry between Ford owners — it must be that they are "brothers in affliction." Waiving my thanks to one side, my friend invited me in to dinner, for his place was just across the road, the house being visible amongst the trees. I was glad to accept his kind invitation, and leaving the car at one side of the road, I climbed into the waggon. A new fear struck me as I pulled out my watch; but I achieved another mental triumph — I could tell the time!

As we drove into the farm-yard I resolved not to say anything about my lack of memory until I had time to think the situation out. The farmer explained my mishap to his wife, who was a kind, motherly woman. She helped me bathe my head and put a soothing ointment upon the contusion, which was rapidly becoming less swollen. After an excellent dinner, I was ready to take my departure. My host suggested that I could get my car fixed up easily at the Ford Garage at Kempton, three miles further down the road. I thanked him for his kindness and proceeded to the road, where I climbed into the car. I then mentally examined the queer situation in which I found myself placed.

It seemed that I was in perfect possession of my faculties, except that I was unable to recall any person, place or incident prior to the crash. I next

turned out my pockets and found there, among other things, a pocket-book containing a little over thirty dollars in bills, an automobile driver's license card, and a letter addressed in a feminine hand to

Mr. Robert F. Collins,

R. R. No. 2,

Sanford, Ont.

Surely, thought I, this must be my name since it is from a lady correspondent. Yet it was with a somewhat guilty feeling that I opened the letter. It contained a note and several snapshots of a group of young people taken in what appeared to be a park of some kind. In several of these groups I recognized myself. Looking back at this event it has seemed somewhat strange to me that I recognized myself so easily in the pictures, but at the time it did not strike me as unusual. The enclosed note was short, and was signed "Edith." It expressed having enjoyed "the trip," and said that several pictures of "the bunch" were enclosed. The automobile license gave the number that was on the car, and stated that the owner's name was Charles Collins, whose address was the same as was on the note from the nebulous "Edith." From this documentary evidence I concluded that my name was Robert Collins, that Charles Collins was my father, and that we lived on a farm near Sanford, wherever that was.

The more I considered the situation I was placed in, the firmer became my resolution to "see it through." It gave copious scope for the imagination. Many people would give all they possessed to forget their past life; but here was I, in blissful ignorance of any event in my past, at the cost of a bad crack on the head! Was it a career

of crime that lay behind me, or was I on the high-road to fame? Was I at this moment fleeing from justice, or was I simply going to town to buy a pair of shoes? The possibilities that, in this case, lay behind me were ilimitable. I could now leave the country and start life over again in the very truest sense. However, my curiosity soon dispelled this suggestion. I would go and find out who I really was, whether famous or infamous. I felt sure that as soon as I reached the "scenes of my childhood," the very familiarity of the places would sweep aside the veil that hid my past. I resolved, however, to test out my powers of acting by trying to behave in a perfectly normal manner as though I was in perfect possession of my memory, and see how far I could carry the farce without giving myself away. I fully realized that it would tax my powers of observation and reasoning to the limit, but there was something novel and romantic about the schemes that attracted me.

Remembering the advice of my late host, I headed for Kempton. It was a small country town, and I had no difficulty in locating the Ford Service Station. While the car was being repaired, I made a few careful inquiries, and found that the town of Sanford lay about ten miles distant along the road I had been travelling, and that my "home" lay two miles beyond that. In a few hours I was headed for Sanford and soon passed the scene of my accident. As I neared my destination, the difficulty of the project I had in mind assumed greater proportions. I could not inquire of my neighbours to find where I lived without giving myself away. Yet I must be sure of the place and not go to the wrong farm by mistake.

I was considering ways and means of overcoming this difficulty, when I found myself entering what must be Sanford. I saw that it was a smaller town than Kempton, having only one main street. As I crossed the railroad tracks and entered the town I slowed down. Realizing that my home lay only two miles distant, I decided to reconnoiter. I also realized that I was probably more or less well known in the town, and that I must be very circumspect as to my enquiries if I wanted to carry my part through successfully. I was getting less confident of success by this time, for it was getting dusk, and my head was beginning to throb again quite uncomfortably. However, Providence came to my rescue at this stage.

As I stopped at one side of the street I was overtaken by a young man carrying a suitcase, who saluted me with a cheery "Hello, Bob!"

"Hello, there!" I answered in a friendly but non-committal manner.

"Are you going out home soon?" he asked. "I have just got in from Detroit to spend the week-end, and if I could get a lift out as far as your place it would save me calling up to have the folks send and get me."

"Sure," I replied, "I am just heading for home now. Jump in."

As he arranged his suitcase in the back seat I quickly formulated a scheme that would help me out of my difficulty. When my friend jumped in beside me, I briefly described to him my accident, but did not disclose my present mental condition. I told him (and quite truly) that my head was aching badly from the blow I had received, and asked him to drive the car to relieve me a little. He gladly assented to my request, and we were

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## Back to the Land

By GEO. E. DELONG, B. S. A.

SOME people are naturally farmers, some farm because they have to, while others have drifted into farming as an occupation because it was the line of least resistance. Whether the graduate of an Agricultural College farms or not depends to a large extent upon his own choice. The education he has received covers such a broad field that it is possible for him to make good at practically anything he cares to turn his attention to. In the past the majority of graduates have followed branches of Agriculture other than practical farming, because the opportunities offered in them have been greater for young men without capital. This has caused the following question to be asked: Is the education for a B. S. A. degree "too much" for the practical farmer, if we wish to keep the boys on the farm?

Theoretically a farmer cannot be too well educated; but past experience has shown us that the business of farming does not offer the same inducement to the graduate as other branches of agriculture, consequently we find very few of them have gone back to the land, and many of those who did go back, gave it up when offered positions with salaries ranging from one to two thousand dollars per annum.

The Agricultural College has been accused of turning out theoretical and not practical farmers! The fault does not lie in the curriculum of the college. It is far deeper than that. It

is simply a matter of dollars and cents. The graduate puts his services on the market and they go to the highest bidder. The market is glutted with practical farmers. There are more of them in the world than there are men who are employed in all the other trades, and industries, consequently it is possible and quite probable that the graduate would be of the least value to his country as a

practical farmer. It naturally follows that he would not receive the same remuneration if he were to confine his technical knowledge to one farm as he would if it were spread over a community as is the case with an Agricultural Representative.

There are two classes of students who attend an Agricultural College. Those who have made their own way in the world and are paying their own expenses, and those who are sent by their parents. The majority of the graduates belong to the former class. The hard school of experience has taught them to make good use of their time and money. Money has come easier to the latter class, and many of

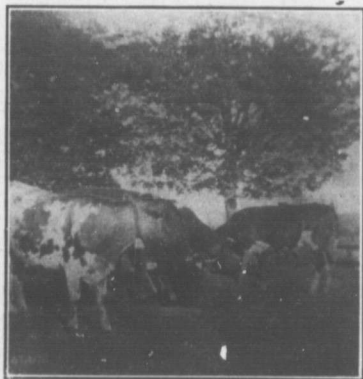


GEO. E. DELONG, B. S. A.

them do not make as good use of their opportunities at school, and we see them dropping out at the different mile-stones along the course, comparatively few of them being in at the finish of the race. We find practically all of this latter class back on the land, the few graduates, as well as first, second and third year men, every one of them making good. The mere fact of having gone to an Agricultural College seems to have made good farmers of them. Even the fellows who were the

Many of these fellows are naturally farmers. Their parents have been farmers for generations; in many instances the farm has been in the family since it was deeded from the crown.

Things are different with the fellow who has his own destiny to work out. He has had to earn the money to pay his college expenses, and by the time he graduates he is a financial wreck. What chance is there for him to get a start as a practical farmer? Simply none. It is true he can sell his servi-



Look at these and then mentally picture a grimy lathe, a stacked counter or a dusty tenth story office.

despair of their lecturers are the leading men in their community, and are usually prouder of their connection with their Alma Mater than is the full-fledged graduate. They know that their neighbors are watching the way they do everything, and are criticizing them behind their backs; that more is expected of them because they have gone to College—even if they were “kicked out” during the course—and they just naturally have to try to make good, which they generally do.

ces to a farmer or take a farm to work on shares, but at best he will not receive much over five hundred a year, and will be ashamed of his job.

At present the chances for the graduate who has no capital of either renting or buying a farm are absolutely nil. If he rents a farm he needs from three to five thousand dollars to purchase his equipment. If he buys a farm he needs an equal amount to pay down on it before he can borrow the balance of the money to pay for it.

In both cases he is working under a heavy handicap. He has been taught at school to use only the very best animals for foundation stock for his herds and flocks, the most up-to-date machinery, etc.; while in actual practice the fellows who are starting on farms usually pick up stock and implements that other farmers have partially discarded, gradually working into a better class of stock. There is no definite proof to show that this is not the best and most economical method, as nobody has either enough money or inclination to try the experiment. The graduate, without capital, in making his start on a farm, has to "keep up with the Jones." Ring-boned and spavined horses, grade cattle, old harness and machinery are not conducive to either good temper or pride in a man's calling. The need of available capital or credit is fully appreciated by the fellow desiring to make a start on a farm.

The Rural Survey shows us that when the interest on the investment and the depreciation of the machinery are taken from the income of the farm, the average farmer does not receive a common laborer's wages. The farmer has to work both hard and long. When a young man knows these things, is it any wonder that he turns to some other kind of work that commands bigger money, more respect among his fellow men, as well as less hard work in connection with it?

Because the average farm cannot or has not held the services of the graduate, the expression, "If you want to keep your boy on the farm don't send him to college," is quite common among farmers. The graduate does not give up farming because he cannot make good at it, or because the education he has received unfits him in

any way for the work. Oh, no. It is simply because the graduate up to the present time is of more value to the human race when he is employed at some other phase of agriculture. His pathway through life, as a farmer would be a hard, uphill climb before he could distinguish himself at any of the many different branches of farming, and he usually takes what offers him larger, more easily acquired, immediate returns—a Government Job.

With the new Era of Agriculture opening up—with its extensive system of farming, with its greater chance for men with good sound business ability—the prospect for the farmer is certainly more enticing. The farmer with a good technical education will be more common, and the college graduate will be more in demand to manage these large farms. Their salaries will compare favorably with our Lecturer's, District Representatives, etc.

Farmers are beginning to realize the need of a better education, and that the gospel as preached by our Agricultural College is not all "tommyrot." It is a common thing now to hear hard-fisted old farmers who a few years ago were averse to anything that looked or seemed like education, to express the wish that they could have gone to an Agricultural College when they were young. If our colleges have made converts of these men, it is only a matter of time until every farm boy will receive an Agricultural Education.

It is both pleasing and surprising to note the change in the attitude of the average farmer towards technical agricultural education. Instead of the graduate being scoffed at now, he is supposed to know far more than any one man could possibly learn in an average life-time. He is supposed to

turn a neater furrow than any of his neighbors, to make his cows give more milk on the same feed, to make his grain yield more per acre, to obtain more eggs from his hens, in truth there's no limit to what is expected of him. The mere fact of him having a degree should make "the eye of the master fatten his stock."

The outlook for the graduate who goes back to the land is brighter than ever before. Farmers are looking for leaders, men to represent them at the different Agricultural Boards and Societies, as well as to look after their interests in politics. Who is so well fitted for these positions as the farmer who knows both practical and scientific agriculture, whose vision has been broadened by a good Agricultural Education. This—with the independent life on the farm, when it is possible to have all the modern city conveniences in the home, when distance is measured in time not miles by a motor—is a proposition that is very hard for anyone who has farming in his blood to turn

down, even when he knows it may be years before he reaches the goal of his ambitions.

Practical farming at the present time offers to the fellow who has some capital and good sound business sense far greater opportunities than any other branch of agriculture. It is possible for him to climb higher on both the social and financial ladder than he can by any civil service position as offered by the Department of Agriculture. The future calls for well educated farmers to take their places on the tribunals which solve both the political and financial questions of the day. Farmers are tired of sending lawyers and doctors to represent them in parliament. The old farm gives her sons a warmer welcome than ever before. The education for a B. S. A. degree is not too much for a farmer. Education only develops what is in a man; if he is a fool he will remain a fool, and if he is a farmer he will remain a farmer, in heart at least, no matter what his occupation may be.



## Conditions Requiring Drainage

By THOMAS COOPER, B. S. A.

THE excessively wet seasons of the past two or three years have shown that in Ontario there are large areas of valuable land which are not producing to the maximum extent. Their production is curtailed because of the presence of stagnant water due entirely to the lack of facilities — either natural or artificial — of removing the surplus water quickly and efficiently. In all such circumstances drainage is necessary.

The places most requiring drainage are the natural watercourses, the small depressions or pockets. The springy areas and those portions of the land which, because of the fineness of the grains, such as clay, offer so much passive resistance to the free movement of water that artificial means must be provided to facilitate the transit of same.

By the natural watercourses are meant those small runways which carry off the surplus water during times of freshet. Through the soil are so-called lines of cleavages. These form channels for the water. As the channels all tend to the natural watercourses, it necessarily follows that they will be wet, and therefore cold and acid until the upper regions of the area draining into them are dry. These courses are to be found on every farm,

consequently are the sources of much loss, not only financially, but in time and labor, because of the small production obtained therefrom. Through these courses should be placed the

larger size tile, so that in the event of constructing a complete system these lines would have sufficient capacity to assume the increased burden.

On many farms are depressions or pockets. The contour of the surface is such that when water becomes enclosed, it must either seep or evaporate away, there being no outlet for it. After the drains have been construct-



THOS. COOPER, B. S. A.

ed through the natural watercourses, the pockets should have at least one line of tile laid through them. These lines should not only enter but extend the full length of the depression.

However, Ontario is not altogether a rolling country. Large areas have been deposited by the receding waters of lakes long since disappeared. These sections are practically level. Being deposited this land contains a high percentage of humus or organic matter. Organic matter acts like a sponge in that it holds water very tenaciously. These areas must be drained.

In addition to the above there are sections which are springy. Undoubtedly this is due to the peculiar geo-



logical formation of the impervious stratas of rock, shale or hardpan immediately beneath the springy section. The source of the springs may be in the hills of the surrounding higher portions. Be that source where it will, the tendency of water is always downward in response to the ever constant and incessant force of gravitation. Eventually the descent is checked by an impervious strata. However, the

ing less than a complete and thorough system will produce satisfactory results. However, when such are properly installed, that land is the most fertile and therefore productive of our banner province.

In the above there has been set forth those conditions where drainage is required. Not all conditions are herein mentioned, by any means. As these vary with the different localities and



The Ditcher is a big factor in improving agriculture.

movement continues along the rock and at last seeps out to the surface near which the impervious layer is to be found.

The first two instances—natural waterways and depressions—were efficiently drained by single lines, but unfortunately, more expense is entailed to produce satisfactory results in the last two mentioned conditions. Noth-

ing various soil conditions it is difficult to give detailed conditions. Needless to say, however, no section in Ontario can do without drainage and hope to reach maximum production. This fact is slowly dawning upon the public mind and, even now, if the labor and machinery necessary for the work were available, there would be thousands of miles installed within the next decade.

## How to Secure a "Baby Chick"

By J. C. McBEATH, B. S. A.

A FEW years ago when some of us were still quite small we were fortunate enough to go to the minstrel show occasionally and hear the funny things, and among all the old chestnut jokes was the one:

If an egg comes from a chicken and a chicken from an egg, how did they start? It is not the purpose of this article to solve that deep and mystic problem; rather we will leave that to the biologist, and go about the question on getting the chicken, once we have the egg, or in other words "Incubation."

Before going right into the subject it might be well to understand just a little of the make-up of an egg. It is composed of a porous shell, two thin membranes separated at the large end of the egg which forms the air cell; under the membranes and surrounding the yolk is the "white" or albumen, which is high in moisture and protein. The little masses of dense albumen attached to the yolk are called the chalazae and function to suspend the yolk in the albumen and regulate its position in the egg. The germ spot is a small round semi-opaque spot about 1-8 inch. in diameter, and is always found at the uppermost surface of the egg.

In order to have good results in

hatching, strong shelled fertile eggs are of prime necessity. Such eggs may be procured only from stock properly mated and kept in the very best condition of health.

Over-fat hens do not produce eggs of the right sort. If the breeders are confined they should be fed liberally on varieties of feed, receiving plenty of green feed. Eggs from range stock show a much higher hatching power. If breeders are closely confined, from eight to fifteen females may be mated to one male, depending upon the breed of chicken, age, vitality of male, and system of yarding. Birds on range



J. C. McBEATH, B. S. A.

may have a larger proportion.

Do not use any but well-shaped eggs. Discard all thin shelled, or porous eggs. Set eggs as soon as possible after being laid, it not being advisable to set eggs after they are two weeks old. Where possible, select large uniform eggs, but refrain from wetting if at all possible, although wetting does not appear to injure duck eggs. Collect eggs several times a day to prevent chilling or broody hens from sitting on them, keeping the eggs in a nice cool, sweet smelling room. Be sure and give the eggs good care, as neither a hen nor an incubator will hatch good chicks from weak germs or poorly handled eggs,

In case eggs for hatching are to be shipped to some distant point, it is absolutely essential that they be properly packed. By that is meant that they shouldn't be allowed to roll around or knock against each other, but should be packed firmly. It is a wise plan on receiving eggs that have been shipped some distance to allow them to rest on their side for about 12 hours, to allow the germ to regain its natural position before they are put in the incubator.

The period of incubation varies with different species of poultry, that of the hen being 21 days and the ostrich 42 days, showing the extremes. But the period may vary as to length within the species depending upon the way the temperature is controlled during incubation. A hatch may run two to three days over time due to a low temperature, or it may come off a day or two early due to a high temperature. This is where the incubator is used. Where eggs have been injured or chilled, it is always wise to continue the hatch as some chicks may come out.

As to the time of year of hatching, it is up to the individual to determine that. February, March, April and May are the best months, but some difficulty would be met with by the average farmer who tried to raise chicks hatched in February or early in March, so for the average farmer probably about the best time to hatch would be late March, April and up until May 15th or 20th. Early hatched pullets are the best layers.

Where natural incubation is carried on, system and care in the management of the "cluckers" will produce a large number of healthy chickens. Such hens as Reds, Wyandottes, Rocks and Orpingtons all make good setters and mothers, while the heavy Asiatic

breeds as Cochins and Brahmas are good setters, but are clumsy, where as the light breeds, are very nervous and do not make good mothers.

There are several good ways to set a hen, but a box of fair size is about as good as anything, say 15 in. to 18 in. square. In the bottom put a piece of nice green turf, and on the turf place the nesting material, which may consist of such stuff as chaff, straw, hay or anything of the sort that may be convenient. Make a slight hollow in order that the eggs will not roll from under the hen and get chilled. The sod supplies moisture to the eggs during the hatching period. Select the hen to be set, dust her thoroughly with insect powder, at the same time sprinkling a little powder into the nest. Have the nest in a nice quiet place, where setting will not be disturbed. Put the "biddy" on the nest at night and leave her until the next evening, and then feed her, and if she goes back on the nest in which have been put some china eggs, she may be given some "real" eggs, and allowed to go about her business. If the nests are slightly darkened the setting hen or hens are not so apt to become restless.

Plenty of good wholesome feed, such as corn or wheat, or both, should be supplied to the setting hen as well as plenty of good pure water. She should come off the nest once a day for feed and water, and if she shows no signs of coming off, she should be taken off. While the old hen is off, the eggs and nests should be examined and cleaned, all broken eggs being removed and soiled eggs washed, and, if necessary, fresh nesting material being put in. If the old hen does not return to the nest in a reasonable time, she should be put back in order that the eggs do not become chilled. Considerable time

can be saved by setting a number of hens, and at the end of seven days, testing the eggs and determining their fertility, and dividing the eggs that are good among a certain number of hens, taking all the bad eggs out, and using the other hens again on fresh settings. The number of eggs put under a hen varies according to the season, but 10 eggs in the winter are best, increasing the number as the season advances and the temperature raises. Also the number depends upon the size of the hen.

Where artificial incubation is used in place of the natural, other factors come into play and the success of such venture depends upon the general efficiency of the person operating the incubator. As for types of incubators, and a general discussion of such things, it is not within the limits of this article. It is for the individual to use his own judgment when buying a machine. Before buying an incubator it would be well for the prospective purchaser to look into the merits of several machines before he makes his final decision. A few hints in selecting an incubator might be helpful. As there are so many reliable makes of incubators it would be unwise and unfair to recommend any particular machine. Due to extensive advertising in some sections certain machines have become popular in that district, but they may not be necessarily the best machine. Cheap machines are less reliable than expensive machines, and when one stops to consider the value of the eggs hatched in a machine during its natural life as compared to the value of the machine, it is small economy to buy an unreliable machine. Always try to select an incubator that is giving good satisfaction in your district, thus benefitting by others' experience.

The lamp of the incubator should be large enough to hold oil to last 36 hours. The lamp should be easily removed and cleaned. The machine should be placed so that the egg tray is easily handled and the lamp is at a convenient height. Always follow the manufacturer's rules unless there is a good reason to do otherwise.

One of the main essentials in running an incubator is to have the machine in a room that is not subject to a great variation of temperature. It should be well ventilated so that the air is fresh and clean and sweet. Full directions for setting up the machine, the correct temperature, care of the lamp, care of machine at hatching time and cooling and turning eggs, will be given with the machine, and should be carefully followed. Moisture and ventilation are two factors that are closely related, the amount of each depending upon the other. Moisture is an uncertain factor and no hard and fast rules have been laid down to cover conditions, as the intending purchaser will see when looking at machine. Some are run without moisture, and some require moisture, both types giving good results under the same conditions. The moisture and ventilation should, with proper heat, produce a normal chick, but too much moisture may prevent normal evaporation, thereby hindering the formation of space in the egg to allow the chick to turn over or too little moisture may cause the chick to stick to the shell and become dried. Many methods are used for applying moisture, such as sprinkling the eggs with warm water at about 100 degrees F., or putting moist sand or damp cloth below the egg-tray. A good method of supplying moisture is to sprinkle the floor with water or by putting a pail of water

just below the lamp. The question of location of machines has a great deal to do with the application of moisture and the operator must learn by experience. Moisture on the glass door of the incubator during the hatching time is a good indication as to the right moisture conditions during incubation.

An egg, whether it is fertile or not, has a little round spot called the germ spot, and as soon as the egg is placed under a hen, if it is fertile, development of the chick begins. All eggs should be tested at least twice during the hatch, on the seventh and fourteenth day, although white eggs can be tested as early as the fourth day, while brown eggs may have to be left considerably longer. Infertile eggs are perfectly good for baking and cooking and all culinary purposes.

Egg testers may be made in any way that will permit of a spot of light coming into a dark room. The eggs are tested with the large end up, so as to ascertain the size of the air cell as well as the condition of the embryo. If when the egg is held to the light it is perfectly clear, similar to a fresh egg, it is infertile. But if the germ spot shows up as a spider like structure with a dark centre and blood-line radiating from it, it is a fertile egg and should not be exposed to the light for too long a time. If the embryo is dead the blood settles away from dark spot and forms an irregular circle of blood called a blood ring. The eggs containing strong living embryos are dark and well filled up on the fourteenth day and show a clear distinct line between the air cell and developing embryo. Dead germs show only a small development and do not show the clear cut line.

There is much discussion regarding the causes of poor hatches, and this depends upon a variety of circumstances. Poor handling of eggs previous to incubation is more liable to give bad results than incubation. If eggs fail to hatch look to the flock conditions, taking into consideration the number of infertile eggs and dead germs. Keep a daily temperature record which will be of value in succeeding hatches.

When the hatching season is over, clean and disinfect the incubator and store the parts in the machine. Oil left in the lamp in the proper place in the machine will cause trouble for a while so do not leave oil in the lamps. If possible clean and disinfect the machine after every hatch. There are eight rules that must be followed in order to obtain success with an incubator.

Follow the manufacturer's directions in setting up and operating the machine.

See that the incubator is running steadily at the desired temperature before putting in the eggs. Do not add fresh eggs to a machine containing eggs undergoing incubation.

Turn the eggs twice daily after the second day until the nineteenth day. Cool eggs once daily from seventh to nineteenth day.

Turn eggs before caring for lamp.

Attend the machine carefully at regular hours. Keep the lamp and wick clean.

Test the eggs on the seventh and fourteenth day. Do not open machine after the nineteenth day until the chickens are hatched.

## Educative Features of Live Stock Shows

By C. F. MACKENZIE, '19

EDUCATION is not confined to schools, colleges and universities. The possibilities of live stock shows from an educational standpoint can hardly be estimated. They have an exceedingly strong hold on the attention of the public. This is evidenced by the fact, that a large part of the crowds at these shows are made up of people from towns and cities, who are really not directly connected with the live stock business, but they realize the necessity of being well informed concerning one of the major industries of the country.

### THE VALUE TO THE SPECTATOR

In order that a live stock show may be counted a success, there must be a large, creditable exhibit of animals. On the other hand, financial success comes only when the ticket office does a land office business. The people who attend these shows are there to see the animals exhibited. Here, they see the ideal type in each class of live stock. They see the choicest individuals of the live stock world brought together in competition, fitted to show the most perfect form and quality.

There are also many opportunities to gain direct information and instruction. Quite frequently spectators have the opportunity to discuss some of the classes of stock with the judge. These discussions are very beneficial because they give the judge a chance to explain just why one animal won over another. Many who disagree with the placing of the judge would change their minds if they knew the judge's reasons for his placing.

Furthermore, we find that valuable, authentic information may be obtained from the breeders who are exhibiting stock. These men are always ready to answer questions and give their opinions in regard to their own particular breed. The ideas expressed by men who are engaged in the live stock business are valuable and dependable.

Another notable feature is the student judging. This is gaining in popularity each year, and is a feature that is stimulating interest in the study of live stock. These competitions develop the faculty of observation and keenness of vision. The young men learn to size up quickly any class of animals which may be brought in; balance up the different points on each one and make their decisions. Such work is bound to prove of great benefit in later years.

Again, we can scarcely fail to notice, in looking over a group of prize-winners, that they are all the result of years of careful, systematic breeding.

Hence, the value of pure-breeding is brought to our attention. No animal can be trusted to produce progeny similar in form to itself, unless it is from a long line of ancestors that have been bred to an accepted standard.

Live stock exhibitors serve to intensify the utility of proper selection in breeding. In champion herds we see the result of years of work along definite lines. Successful breeders have an ideal to which they cling tenaciously until they attain it.

### THE VALUE TO THE EXHIBITOR

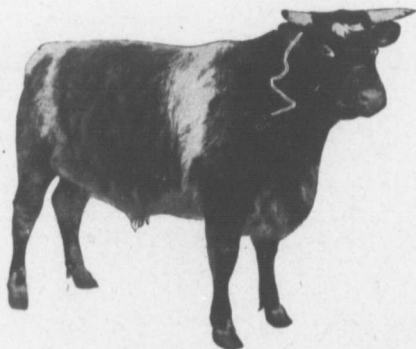
The exhibitor, also, gains valuable information and experience in many ways. In fitting animals for the show, the owner has a constant opportunity for the study of the development of animal form and condition. He must calculate carefully in order to have them in just the right condition at the time of the show. Much is thus learned regarding the development of the animal during growth and fattening, and the breeder soon learns to select individuals that will develop to the best advantage. In competing in the show-ring he is forced to pay strict attention to the popular type in demand, otherwise his chances for winning soon vanish.

### THE VALUE TO THE FARMER

The farmer who attends these shows cannot help but be impressed with the fact, that the cull and scrub are not

desirable. As he follows the judging he sees the ideal, popular type winning. How great the affect is, has never been estimated, but object lessons like these cannot fail to drive the point home. No doubt, as some farmers see the production of our best breeders in the show ring, they have visions of a herd of razor-backed swine, a flock of non-descript sheep or a herd of cattle—just plain cattle, and among them one of those free lance scrub-sires that no ordinary fence will stop. But these attractive well-bred individuals are an incentive to most men, to go home and improve their live stock.

The county fairs and all other live stock shows should be boosted. They serve to raise the standard of live stock men and inspire others who are not in the business to begin. They create a lively, healthy competition among the breeders, and to the public in general, as well as the country, they are sources of knowledge and power.



## To the Spirit in a Violin.

BY "VIVIETTE."

First Prize Poem ---- "Review" Competition.

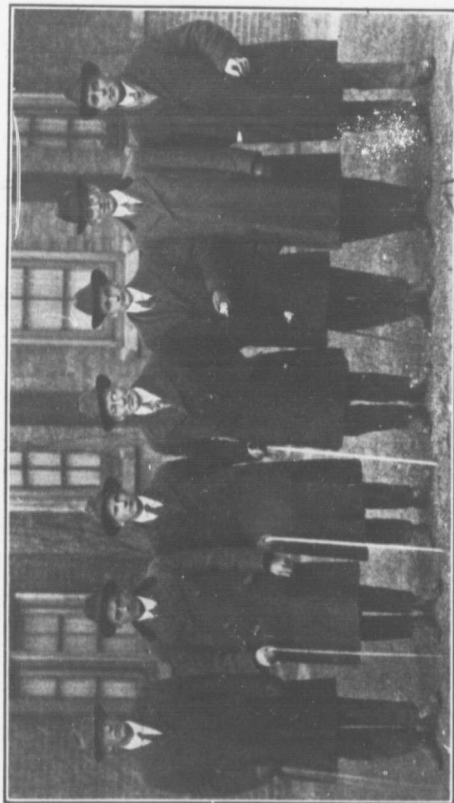
*Low you start, quivering heart,  
 Dreaming, softly dreaming!  
 Music floats, poignant notes,  
 Bring the memories teeming.  
 All the tears of all the years  
 From your golden heart sings!  
 Low and long, sad the song,  
 Tearing at our heart-strings!  
 Goddess of all Melody!  
 Queen of Music, sweet,  
 Here we fall a-worshipping,  
 Beloved, at your feet.*

*Now how bright, full of might,  
 Swells your wakening chorus,  
 Bringing them, flinging them,  
 Dreams of power before us!  
 Ideals high, in the sky,  
 Thus your notes inspire us!  
 To climb the heights, taste the delights  
 Of conquerors you fire us.  
 Goddess of all Melody!  
 Queen of Music, sweet,  
 Here we fall a-worshipping,  
 Beloved, at your feet.*

*Light and gay, your merry lay  
 Seeks now to amuse us.  
 Notes that dance our hearts entrance,  
 In melody you lose us.  
 Sweet and low, in even flow,  
 Your notes---ah! How they still us!  
 Forgot the care in the world out there,  
 With peace of mind you fill us!  
 Goddess of all Melody!  
 Queen of Music, sweet,  
 Here we fall a-worshipping,  
 Beloved, at your feet.*



*“The Maiadores”*



B. E. BEGG, D. F. AYLESWORTH, D. J. MATHESON, PROF. TOOLE, C. LAMONT, W. C. CALDWELL, C. F. MACKENZIE

*Courtesy—"The Farmers' Advocate"*

## Ontario First

**I**N the Inter-College Livestock Judging Competition at the Chicago International Livestock Exposition, November 30th, 1918, Ontario "came back."

Since 1907, when the Bronze Bull trophy which stands in the college library was finally won, Ontario has been an "also ran" in the competition. It remained for the team selected from Class '19 to break the spell and place Ontario at the top again.

The Bull they brought back is a splendid trophy donated by the Union Stock Yards and Transit Company. We are proud of this new addition to our college herd. The two trophies make an admirable team. It will be necessary for teams from the Ontario Agricultural College to win the new trophy three times before it becomes the property of the institution. We expect to do it. The livestock men in all class at the college are thoroughly alive to their work and we know they will make good.

In the contest Iowa got second place. Nebraska whose team won first place in 1917 was third this year. The men of all teams were good livestock men.

Professor Toole and the boys on the team, accompanied by numerous supporters from the senior year, went to the States a few days before the contest. They visited the Truman Pioneer Farm at Bushnell, Ill., and became better acquainted with the American

types of Draft Horses. Also a couple of days were spent inspecting the hogs which differ from our Canadian specimens.

The men composing the team were: R. E. Begg, Bruce County; C. F. MacKenzie, Bruce County; C. Lamont, Middlesex County; D. J. Matheson, Huron County; and W. C. Caldwell, Carleton County. Accompanying the team were: D. F. Aylesworth (spare man); W. R. Gunn; M. F. Cook; G. W. McCall; G. F. Hunter.

R. E. Beggs was high man of the competition, winning the coveted gold medal, and stood second on sheep. C. F. MacKenzie was third, being high man on cattle, having to his credit three perfect placings. C. Lamont was fifth and was high man on swine. D. J. Matheson was third in sheep and eighth in the contest. W. C. Caldwell was fourteenth in the list, but highest Ontario man in horses.

The success of the team was partly due to the other members of the year who gave their hearty support to the team. The members of the Agriculture Option who did not get a place on the team were, nevertheless, competent judges, and until the last day it was a question as to who the chosen ones should be.

The Ontario Agricultural College recognizes the honor the team and Professor Toole have done the institution and the Province.

## "The Live Stock Situation"

By GEO. B. HOOD, '20.

"THE next five years will be a critical period in the history of Canada, and especially on the efforts of the farmers will depend whether or not Canada is to take her place as a world-power in trade.

"Something is needed to arouse the interests of the breeders and farmers generally. Canada entered the war to take her part in the world conditions, and now she has to take her place in world trade. Our future is mortgaged, and we have to make good. It is a question of whether Canada will take her proper place, or be content to remain a second-rate commercial nation. Therein lies a condition we must regard as grave, unless we take advantage of our opportunities in the next few years, they will be lost to us.

"Every farmer should be determined to produce as he never did before. That is the justification for every bit of advice that can be given. It is the big job which, when completed, will place Canada in the same proud position as regards trade as she now occupies as a result of what her soldiers have done."

Uttered by Mr. H. S. Arkell, Dominion Live Stock Commissioner, a man in a position to know existing conditions, and backed by all prominent students of the present situation, this challenge will, without doubt, be accepted by every breeder and farmer.

Naturally, the signing of the armistice fomented in men's minds a great uncertainty regarding the future. What does the post war period hold for agriculture was the question on every farmer's lips. In answer comes the injunction to produce as never before.

Canada is an agricultural nation. If she is to possess a recognized position in the world, it must come through agriculture. During the past decade Canada has been known as one of the chief granaries of the world. To a certain degree this condition is passing. It must pass. The most fertile soil in the world naturally loses its fertility by continually being cropped. The only sane agricultural policy is one in which live stock is the chief product marketed from the land. Just as the nation which manufactures its raw materials into the best grade of finished goods gains commercial supremacy over a state that does not, so the farmer who turns his grain and fodder into fat animals, dairy and poultry products, forges ahead of the farmer who does not.

The tremendous demand for all cereals has caused these to increase greatly in price. Many farmers took advantage of this fact and will now be slow to change their course. However, though an increased production of live stock will tend to maintain grain prices, yet the cereal situation will be the first to right itself, not only because such countries as Argentina and Australia will be able to unload their wheat in Europe, but from the mere fact that grain produces ten to thirty fold in one year.

This is not true of the live stock industry. It requires years to build up a herd. It will require several years to rebuild the world's herds. The war has caused a tremendous reduction. The meat-producing animals alone have diminished by over 116,000,000 head, consisting of 28,000,-

000 cattle, 55,000,000 sheep and 33,000,000 hogs. The European herds are in many instances totally destroyed. In America the situation is not altogether favorable. The export trade has prevented this continent from increasing her breeding stock. Moreover, drouth during the past summer caused a great scarcity of feed in Western America, so that ranchers were forced to market vast numbers of cattle and sheep, including breeding animals. "At the conclusion of the 1919 round-up west of the Missouri River, from Texas to the Saskatchewan River, there were fewer mature cattle than any time since the industry gained a footing."<sup>1</sup>

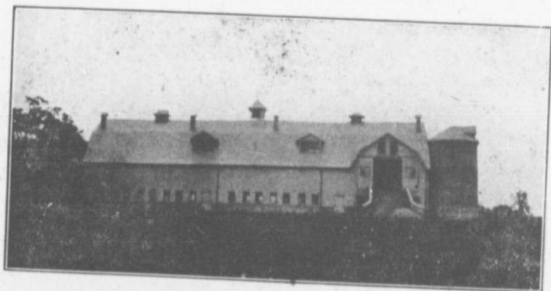
What is true of other live stock holds in the case of horses. The big Belgians have, through German vandalism, been largely destroyed or scattered through Germany. In England and France the demands of war have caused a great scarcity of horses, with resulting high prices.

Conditions, then, are such that the breeders and farmers of Canada are safe in striving to greatly increase the breeding stock, in order that the demands for meat and dairy produce may be met. However, a program of careful breeding should be followed. No doubt, with such prospects, there will

be many engage in stock breeding who will lose money. But this will be the result of ignorance in breeding. Farmers in general must study breeding if they hope to make a permanent success of it. After equilibrium is restored greater competition than ever will be experienced and then only those men who have been carefully building up, by selection, herds of early maturing, rapidly gaining animals and heavily producing cows will be successful.

Breeding alone cannot realize for us our ambitions. Dairymen must co-operate to secure more uniform products and improved methods of marketing these. The packers' profits, if necessary, must be controlled. Increased facilities for storage and transportation must precede the increased exportation of meats and dairy products. Also, Canada requires strong, conscientious men in Britain and on the continent, not only to insure Canadian produce being advantageously brought before the European public, but to thoroughly acquaint Canadians with the class of goods required. The Dominion and Provincial Governments must act as well as the breeders and farmers.

<sup>1</sup> From James E. Poole's Livestock Review, in Farmers' Magazine.



## Eggs in January

By R. C. FRITH, '21.

IT is not by luck, but by intelligent care, that some poultry-keepers can induce hens to lay during the month of January. Flocks that lay in winter are rare, but these serve to prove that it is quite possible to produce eggs in winter, almost regardless of the breed and weather conditions. Success or failure depends largely upon the attendant—don't place all the blame on the breed or the extraordinary weather.

The hen lays to capacity in spring. Conditions at that season are peculiarly suited to egg production. Winter conditions are to a great extent opposite to those of spring, and consequently the yield of eggs is inclined to drop to the minimum.

The maternal instinct plays a large part in egg production, but aside from that it is not beyond the power of man to bring into the hen-house even in January, many spring conditions; and the more spring-like it is made for the hens, the greater will the egg production be.

As examples, three essentials for high egg production, which are naturally occur only in the spring may be discussed here.

1. The variety of feeds obtainable in spring.
2. The exercise involved in searching for these feeds.
3. The long period of light during the spring day.

From the first mentioned the conclusion can be drawn that a variety of feeds must be supplied to the laying hen. In spring, grain and mash

makes up only a part of the diet. Green food in the form of succulent grasses and animal matter in the form of insects, worms, etc., constitute a large part of the feed consumed. To manufacture eggs the hen requires these. Green feed and animal matter should be supplied in similar quantity to what the hen consumes in spring. Without these the ration cannot be properly balanced to correspond with the constituents of eggs.

Special attention must be given to exercise. In spring the hen is roving all day long in search of food, while in winter quarters she is inclined to become sluggish. When this condition occurs the hen tends to fatten and the egg producing organs become dormant. It should be the object of every poultry keeper to see that the hen is working in the litter from morn till night. This can be induced by providing a deep dry and clean litter, by keeping the appetites of the birds keen, and by making provision for plenty of light in the hen-house. In many poultry houses the litter is allowed to become damp and dirty; or the hens are overfed with grain and mash; or the house is dark and dreary. Any one of these conditions will seriously check egg production.

The spring day has four to five hours more of daylight than the January day. During the long day the organs of egg production perform their function with regularity. During the short winter days they are not regular in production, and the hen cannot adjust herself to such a variation. Until the

Continued on page XVII.

# THE O.A.C. REVIEW

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C. F. LUCKHAM, '19, *Poultry.*

J. A. HALL, '20, *Query.*

A. W. MEAD, '20, *Alumni.*

W. L. CURRIER, '20, *Athletics.*

W. C. HOPPER, '20, *Col. Life.*

K. MACARTHUR, '21, *Locals.*

M. C. JAMIESON, '21, *Artist.*

M. BARBARA SMITH, '19, *Mac.*

MISS OLIVE GARDNER, '20 *Junior Representative.*

## EDITORIAL:

### Farewell

IN January of each year a fresh editor-in-chief assumes control of the destinies of the O. A. C. Review, until the following December number is bound and distributed. During the year 1918 the Review was favored by being under the management of a certain tall, sandy-haired, capable '19 man, known to the student body as "Munnie," and to the world at large as John B. Munroe.

During the past year J. B. has set a pace that will be hard to duplicate by the unfortunate editor who is called upon to succeed him. Setting out with the idea of publishing a Review decidedly worth reading, Jack Munroe has compiled, each month, a magazine full of highly interesting and educative articles.

Not only has the editor of 1918 turned out a Category A. magazine, but he has with great success aroused the interest of rural educators in the O.A.C. students' paper. As a result of his propaganda, carried on when the teachers were at the O. A. C. this summer, the Review is now subscribed by a great many rural schools.

"Munnie" has been a pleasant editor to be associated with. His generous, good-natured manner accounts for this. Nor, during his reign as supreme dictator, was he filled with such an unpleasant amount of egotism that he was above seeking the advice of his associates. His successor was thus enabled to come into the possession of more of the fundamentals of editing than he otherwise might have.

J. B. Munro now busies himself in fulfilling year duties and in squinting through a microscope at the minute little "bugs" that scientists call micro-organisms. In other words, "Munnie" Munro hopes to corral, before April,

1919, enough facts about those "contemptible" bacteria to graduate in Bacteriology. In conclusion it may be said that John B. Munro has by no means forgotten his old love, "honey" apiculture.



### *Every Agriculturalist Requires a Thorough Knowledge of Gas Engines.*

THE present period has been so often heralded as "The Motor Age" that the term has become trite. Still, the mere fact that the expression has become trite plainly indicates that there are strong reasons for using the phrase. Certainly no one will deny the fact, that the present extensive use of gas engines has revolutionized agricultural conditions.

Everywhere, farm machinery is propelled by gasoline engines; automobiles chase each other along rural roads; and during the past year, tractors have forced themselves into prominence as effective instruments for increased production.

What does this mean from the viewpoint of the agriculturist? It means that the practising farmer and the student farmer must obtain a practical working knowledge of farm motors. No man would think of driving horses unless he could harness, hitch and guide them properly. He should, moreover, possess a knowledge of the proper feeding and some of the ordinary ailments of horses. The agricultural student learns the care, anatomy and pathology of horses—Why? Because horses are necessary to carry on farm operations. It naturally follows, therefore, that with motors forming such an ever growing source of farm power, every

agriculturist must understand the operation and troubles of motors.

Last summer a student had occasion to come in ten-hour daily contact with a gasoline engine. If it had not been for the superior knowledge of an associate who had been coached by a "professor" of gasoline engines, the ignorant chap would have had the surrounding territory covered with engine parts, while investigating the causes of its many sudden indispositions.

Ontario farmers now have an opportunity of coming into the possession of such knowledge. Last year many took advantage of the Farm Power Short Course held at the O. A. C. Without doubt many more will attend the course this year. However, the student must not neglect to obtain information on farm power. Whether, in the future, he intends to practice or preach farming, he ought to be capable of ministering to gas engines; otherwise he will be a somewhat obsolete agriculturist.

Yes, the gas engine is here. It is here with carburetter, battery and other mechanical parts, a source of swearing annoyance to the amateur, but a big factor of advanced farming in the hands of a man equipped with the proper knowledge.

*Better Breeding Required*

FARM surveys show us, first that success in farming depends more upon good live stock than on good crops, secondly that on most farms the grade of stock kept is poor. This means that until the majority of farmers increase the quality of their live stock, agricultural conditions are not going to improve materially. Since the average farmer is slow to take advice, it will be a long time before agricultural conditions will be bettered—unless advice is hurled at him in such a vigorous manner that he is forced to awaken.

Heavy guns, concentrated on one point, resulted in great advances during the war. Big advertising schemes achieve great things in the manufacturing world. The campaign for greater hog production and later for great-

er crops were very successful. At the present time a campaign for increased stock-breeding is being waged. With this there could be sandwiched a propaganda for a better quality of stock.

Statistics prove that well bred stock soon repay the extra cost incurred in making the start. The department of agriculture has proved this and has spread the knowledge among farmers, but they are slow to heed. Perhaps a louder, more concerted, incessant dinning of the fact into their ears might help, as it has done before. Therefore, let all interested in scientific agriculture arm themselves with facts about the matter and attempt to drive a wedge into the ranks of unprogressive farmer-breeders.

*The New Year Sermon*

BETWEEN the hours of eleven p.m. December 31st, 1918, and the breaking of 1919's shell, there was no doubt the usual ephemeral crop of resolution-makers. With mock sobriety, these artists present their annual farce under the direction of that excellent stage-manager Custom.

True, say some optimists, these good people may not maintain their fine intentions long, but, still, they are the better for having at least resolved to climb the mountain path. In other words, those good-hearted gentlemen who so regard these irresolute resolvers attempt to varnish the fact that the average human specimen is an invertebrate—to a certain degree.

Any individual possessing a minute particle of brain, can make a dozen or

more resolutions; but only a man in the happy possession of will-power can make one of these resolutions mean anything. Some have more than others; but all may, by great effort, gradually work enough starch into their brains to rule their own persons, which faculty is the most necessary of any the human species possesses. Of course, the eradication of parasitic habits and the execution of various desirable schemes are excellent things; but these are easily performed if the necessary will exists.

Nor is a person forced to wait until the old year is about to pass into eternity before he suddenly decides to treat some chronic troubles or "float South Sea Bubbles." Any time is seasonable. Throughout the whole year a



grand opportunity is offered everyone. The orchard may not have been pruned for ten years; a fence may be an excellent training medium for a spirited colt; even on scientifically operated farms there is always a place for a few resolutions backed by determination. In one's college life there may be some chance of reform—for instance, a few might resolve to do some "plugging" during the term, instead of scorching their brains two days before and dur-

ing the terrible period of examinations. It is possible. Indeed, we occasionally find an example around the college. Also, there is a slight possibility that there are people who possess undesirable features in their characters, not only injurious to themselves but somewhat offensive to others, which might be divorced with good results.

Turn off "the road of good intentions;" it is a dangerous path to travel.



THE ex-Editor has just been given a letter from Mr. F. E. Webster, who was an associate of class '90. The letter was inspired by the "Historical Sketch" which appeared, in the December Review. Mr. Webster suggests that the writer of that article did some promiscuous guessing and he backs up his remarks with facts. We were not aware that complete volumes of the Review for the years 1889, 1890 and 1891 were in existence, hence there was difficulty in securing complete information regarding the Review in those early days.

Mr. Webster owns and prizes complete volumes of the Review for the first three years of its publication, and we appreciate the information he has given us. He has also sent along an extra copy of the June, 1891, issue

which is of interest nearly twenty-eight years later. We regret that no complete volumes of the Review prior to 1903 are in the college library. That was our excuse for the meagre sketch we presented in the Christmas number. We told what we knew—perhaps more—but there was much left out because of our ignorance of facts.

Is it not possible for us to even now secure the missing numbers of the Review? Surely there are many of our readers who have odd copies of issues from 1889 to 1902. Do not hesitate to let us know if you have them. We will appreciate any of those old numbers you can send in. We are justly proud of our college library, but we feel it will be improved when our complete set of volumes of the O. A. C. Review dates back to November, 1889.—J.B.M.



*The Logic of Events is forcing us to discard old ideas and form new ones so rapidly that it is unwise to take one's self too seriously. The thing about which, to-day, we are cocksure, may be the subject toward which we will be forced to reverse our attitude to-morrow.*

J. ARTHUR REID.



The Honor Roll, which appeared in the Christmas Review, has been gratefully received by our many readers. Many expressions of appreciation have been received by the Editor. The committee responsible for the preparation of this Roll of Honor wish to thank all those who contributed names and particulars regarding boys who enlisted. It was the united efforts of these supporters of the Review that enabled us to present the list, and that lightened our labors. We thank you!

R. Innes '11 is in charge of the agricultural education of returned soldiers under the Soldiers' Settlement Board.

The special course for returned soldiers, which is being provided at the O.A.C. this Winter is under Innes' direction.

W. J. Black, B. S. A., is Chairman of the Soldiers' Settlement Board.

John Hempson '18, who has been an Instructor in Wireless Telegraphy in the R. A. F. for several months past, has received his discharge, and is at present in Beamsville, Ont.

J. Laughland '10 is with the Mond Nickel Co., Cranston, Ont.

We heard recently from R. B. Cogan, who has been for several years past in charge of County Agent work in the State of Washington.

H. B. Webster, B.S.A., is raising Dairy Shorthorns and Registered Seed Grain at Aldersyde Farm, St. Mary's, Ont.

The following are two of the most interesting of the many letters received in answer to our appeal for names for our Honor Roll:

6th November, 1918.

Jas. A. Neilson, Esq., O.A.C. Review, Guelph, Ont.

Dear Sir,—In reply to your recent letter regarding students who have enlisted in any branch of the British or Allied Forces, I regret that I am not as fully acquainted with the doings of my own classmates as I would like to be, but the following comes to mind and if I get further information of others I will let you know in the course of the next few days:

Of the class of '09 there are Major N. D. McKenzie, whose home, I believe, is somewhere in the neighbourhood of Hespeler or Galt; Acting Captain C. A.

Laurence, Canadian Artillery, home about three miles outside St. Catharines; Captain Alfred Eastham, M. C., on active service since the beginning of the war, and is now on his way for duty in Siberia. He won the Military Cross, I think, in 1916. His home is in Lancashire, England.

There are several other old boys with whom I have been at one time or another intimately associated, and I give you their names and such information as I have to date regarding them. Perhaps you have secured this information from other sources:

Lieut. O. C. White, formerly assistant to the Dominion Field Husbandman, Experimental Farm, Ottawa, went overseas with the Blue Cross, mentioned in despatches and secured a Commission in the Canadian Artillery, with which he is now serving.

Lieut.-Col. H. L. Keegan, M. C., Legion d'Honore. Pat Keegan, who will be remembered by several hundred of our students as a fellow we all greatly admired, helped me with my work for two years, and I feel particularly proud that he has done so well. He was a member of the Dominion Seed Branch at the commencement of the war, joining the Canadians at the start as an officer he has steadily climbed and has brought considerable honour upon himself and his Alma Mater.

Several of our boys have been killed, amongst them Neilson, of whose initials I am not sure, and H. H. Lindsay.

Other Ottawa boys who are also O. A. C. men and are to be found amongst our Canadian or Imperial Forces in France, are Tommy Clarke, Charlie Neal and Dickson of the Forestry Service. Amongst others that I know in the 56th Battery, were my brother-in-law, Sergeant C. C. Duncan, Lieut. Ruthven Wilson, Captain Les. Burrows,

M. C., and Bombadier Winslow, who was killed shortly after the Battery reached France, also several others that I cannot at this moment recall. but doubtless you have the names of the whole personnel of this Battery.

I shall be pleased to secure any further information for you if it is in my power to do so.

Yours very truly,

ARTHUR J. LOPDAIL,

Assistant in Plant Breeding.

November 5th, 1918.

Mr. Jas. A. Neilson, O.A.C., Guelph, Ont.

Dear Sir,—In reply to yours of the 29th.

H. F. Hudson, B. S. A., '07, enlisted in artillery, wounded, returned, now in charge of Entomological Laboratory, Strathroy, Ont.

J. C. Shipton, '14 or '15, enlisted from O. A. C. in Princess Pats, died of meningitis in France. I think that he was awarded the B. S. A. before leaving Guelph.

G. A. Good, B. S. A., of '12 or '13, left post of Assistant Provincial Entomologist, Truro, N. S. Enlisted Lieutenant in 85th, promoted in Canada and England, and is now a Major somewhere in England.

Have a faint recollection of an O. A. C. graduate named Lindsay, who was in the employ of the Botanical Branch, Department of Agriculture, Ottawa, at the beginning of the war, and who left them to enlist. Particulars re him can probably be obtained from the former Dominion Botanist, H. T. Gussoy, Central Experimental Farm, Ottawa.

O. C. White, B. S. A., Acting Dominion Field Husbandman, enlisted, I do not know when or what with.

L. M. H. How, Associate '07, enlisted 1915 Co. Q. M. S. in 40th Inf., served 10 months in France, returned to

Canada. Attached to Depot Battalion, Aldershot, N. S., in spring of 1918, promoted to Lieutenant, discharged on account of tubercular trouble, now under military treatment in Kentville Sanitarium.

Mel. Greenshields, Associate '07, enlisted Lieutenant, killed in action.

Yours very truly,

G. E. SANDERS.

C. W. Hoard '18, who was in France with the 8th Brigade Ammunition Column, has just returned to Canada on the S. S. Regina. Hoard was at the O. A. C. for a few days at the New Year on his way back to Stirling, Ont., where he will again take up farming.

W. A. (Bill) Townsley '15, who went overseas as a Lieut. in the 16th Battery, is now Major of the 30th Battery still in France.

C. W. Nixon '17, who went overseas with the 56th Battery, and was in the 66th in France, has returned to Canada on the S. S. Regina.

Gus. Edwards '18, went overseas with the 56th Battery, and transferred to the 55th. He spent over a year in France and has now returned to Canada with a recent draft.

Gordon Hill '17 is reported home from France.

George Arnold '18 has been invalided home from Vancouver, and is now awaiting his discharge at London. George had a severe attack of Spanish Influenza, but is recovering from the effects.

Gareick '16 has returned to the college. He went overseas in 1914 with

4th Brigade, Annm. Col., and has seen his share of active service in France.

Dean W. J. Rutherford, of the College of Agriculture at Saskatoon, and F. M. Quance, recently returned from England, formerly of the Normal school staff in Regina, will be the Saskatchewan representative on the staff of the Khaki University.

This is the plan of Premier Martin, Minister of Education, who is now awaiting word from Dr. Torey, head of the Khaki University. Dr. Torey was informed of the Government's choice by cable, and word is expected from him within a few days.

It is expected that Dean Rutherford will not remain overseas for more than six months, and at the end of that time Professor John Bracken, of the College of Agriculture, will succeed him.

We received a letter recently from R. J. Motherwell, who is farming at Abernethy, Sask. He sends his best regards to the boys of '13.

G. H. Cutten '09, Professor of Field Husbandry at the University of Alberta, wrote us recently to supply us with several names for our Honor Roll, and wishing us continued success in the publishing of the Review.

Major L. D. MacKenzie '09, of the 111th Battalion, C. E. F., stationed at Brandon, Man., kindly supplied us with several names for the Honor Roll.

Geo. DeLong '18 and Stanley Barber '19, of Belleville, Ont., were visitors at the College during December. Both have been farming since leaving O. A. C.

We have received a letter from J. C. Harris, of New Denver, B. C., in which he wishes the Review the best of luck for 1919. Mr. Harris was one of the editorial writers on the Review Staff in the early days. An article from his pen will appear on these pages shortly.

"Doc" Fraser '20, until recently chemist with the British Explosives, Ltd., Renfrew, has joined Chem. Staff.

A. V. Michener '18 is lecturing in Entomology at the M. A. C., Winnipeg. Norman James '18 is teaching Dairy work at the same Institution. The College opened late this year owing to the "flu" epidemic.

"Harry" Smallfield '20 is taking the Dairy Short Course this winter.

"Dave" Elliott '17, District Representative at St. Catharines, was a visitor here during Winter Fair week.

W. J. Nixon '14, District Representative at Monteith, was a Winter Fair visitor at Guelph.

Arthur Musgrave '19 has been appointed Dean of Residence. He recently received his discharge from the R. A. F.

R. C. Elder '18 paid us a visit recently. He has received his discharge from the army and has returned to the farm an Canfield, Ont.

J. R. Almey '19 is Assistant District Representative at Welland, Ont.

J. R. Silbick '19 was a recent visitor in Guelph—and incidentally at the College.

Clayton Frey '20 is farming at Acadia Valley, Alberta. He intends to return next year to complete his course.

A. P. Clark '19, of Lyvan, Sask., was a Christmas visitor at the College. He intends to follow up dairy work for the coming season, and will enter with '20 next fall to take the Dairy Option.

E. J. Atkins '19 is lecturing on Horticulture to the invalid soldiers at the Guelph Sanatorium.

J. W. Wadsworth '19, of the R. A. F., has returned to Sault Ste. Marie, to resume his duties as Representative of the Department of Agriculture.

We are indebted to the Rev. G. F. Seovil for the following item: Rev. David M. Rose, who graduated at O. A. C. with '08, is now with the Canadian Mission, Palampur, Punjab, India. Mr. Rose was Editor-in-Chief of the Review in 1907.

We are in receipt of a letter from J. R. Sweeney '19. He is still with the Russell Creamery Co., Russell, Man.

E. P. Bradt, formerly District Representative at Morrisburg, has been appointed Deputy Minister of Agriculture for New Brunswick.

Percy G. Leslie '18, of Cheltenham, was a visitor here during Winter Fair week.

#### DEATHS

DEATH OF PROF. GALBRAITH  
Prof. A. J. Galbraith, Professor of Chemistry at the Manitoba Agriculture College, died at his home in Winnipeg on November 11th, 1918. His death was due to pneumonia following influenza. The late Prof. Galbraith was well known here, and his demise will be deeply deplored. He

entered the O.A.C. as a student in 1908, and graduated in 1911. After graduating he spent some months in the Chemical Department of the University of Toronto, returning to the O.A.C. as a member of the Chemical Department Staff in 1912. He was associated with Prof. Harcourt's department until the fall of 1915, when he was appointed Professor of Chemistry in Manitoba College.



Lieut. Roy Lindley Vining '14, died at the Guelph General Hospital on Thursday, December 19th, after an illness of one week. He was taken ill with Spanish Influenza, and pneumonia later developed. Vining was a native of Oxford County, and a son of Joseph A. Vining, who formerly resided near Thorndale, but who is now living in Ingersoll. He was graduated with the B.S.A. degree in 1914, and after spending some time at Morrisburg was appointed District Representative of the Ontario Department of Agriculture,

with headquarters in Hamilton. When the 129th Wentworth Battalion for overseas service was formed, Vining enlisted, and later qualified for lieutenantcy. He proceeded overseas with his unit in August, 1916, later transferring to the Canadian Machine Gun unit, with which he went to France. In fighting at Passchendaele he was severely wounded, and in consequence was invalided home, a bullet which lodged in his chest never having been removed. Appointed Lecturer in Animal Husbandry and Specialist in dairy cattle in the Ontario Agricultural College, he entered upon his new duties three months ago. All his many friends join us in our expression of sympathy for his bereaved father, brothers and sisters.

We are deeply grieved to hear of the death of Alex. McCreedy, son of Prof. and Mrs. S. B. McCreedy. Alex. was well known to many of the recent graduates and undergraduates of the O.A.C., and much of his spare time was spent around the college. He was 16 years old and had been ill for only a few days with influenza when his death came. The Review extends its sincere sympathy to the bereaved family.

We reprint the following from a Chatham paper. A report of Donald Maynard's death appeared in the December issue of the Review:

A. S. Maynard, of Harwich, has received the following letter, telling of the death of his son, Donald Stewart Maynard:

Somewhere in France,

October 30th, 1918.

Dear Mr. Maynard,—Long before this letter reaches you you will have received the official word of the death of your son. I was his section officer,

and am writing to give you some of the details of his most unfortunate death, in the hope that it will be of some small comfort to you to know that he died bravely, as every soldier hopes to do, and he was reverently buried in a beautiful little cemetery in one of the fairest parts of France by his old comrades.

I had been instructed to detail twelve of my best men under Sgt. Wyman to proceed to the —th Infantry battalion to carry on with certain



very important work that falls to the lot of Engineers. The job, above everything, required careful, quick-witted, resourceful men, and your son was one of the first I picked. Wyman is an absolutely reliable N. C. O., and no better man could have been placed in charge of the party. They did their work excellently and not a man was hurt while doing it, though it was of a very dangerous nature. Unfortunately, however, your son was struck in the back by an H. E. shell which hit

the brick pillar of a gateway in which he was standing, in front of his billet. It was his turn to stay in and cook the rations for the remainder of the party, and the sergeant was with him two minutes before the fatal shell struck. He returned at once and found the poor boy quite dead.

All his personal effects have been carefully collected. I am enclosing a list of the various articles which you will receive in due course. The funeral was conducted by the Rev. Sparks, and all the boys of his section were present, including myself. He is buried in a civilian cemetery of a little French town, the name of which I cannot give on account of censorship, but you can get it from the Canadian Records Office, Old Bailey, London. The spot is marked by a cross, erected by our battalion. The cemetery is a wonderfully beautiful one and is most excellently taken care of. It is surrounded by a high stone wall and a row of tall waving poplar trees.

I wish to convey to yourself and all his relatives and friends my heartfelt sympathy in your bereavement. Although your son had been with us a comparatively short time he was a general favourite, loved by all for his cheerfulness, eagerness and every soldierly quality. His death removes one of my most promising men, quite the most promising of the younger chaps.

If there is anything more I can tell you or anything I can do at any time please let me know, and I will be delighted to do anything in my power. My address is 7th Battalion Canadian Engineers, B. E. F., France, or in civilian life, 172 Pim St., Sault Ste. Marie, Ont., or in care of Toronto Harbor Commission, Toronto.

Very Sincerely Yours,

F. J. BLAIR, Lieut. C. E.



1919

Many opportunities have been provided for frail humanity to turn over a new leaf and make a fresh start. Night, blotting out the mistakes of the previous day, and ruling it off definitely from the next, so that:

“Every day is a fresh beginning,  
“Every morn is the world made new.”

Birthdays, the personal milestones on the road of life, which make people pause and consider whether they are fulfilling their youthful dreams and living up to the ideals formed in that marvellous impressionable period when all things are possible.

New moons, hailed of old with much superstitious ceremony, and still accompanied by wishing and turning of money. The first day of the week, or of the month, quarter day, Thanksgiving and other anniversaries, all of these are useful in pulling us up and making us reflect a little. But probably the most popular time for taking a retrospect and making good resolutions is when we have to change a figure in the group which identifies the particular Year of Our Lord in which we are living. Purely artificial and imaginary as is the barrier between 1918 and 1919, it is felt to be a transition point, a definite spot in that curious spiral which we call time—going round and round and yet never actually traversing the old ground.

And so we always hope for something better in the New Year. We wish something better to all our friends, but do we remember that the hopes and wishes go for very little, unless we ourselves steadfastly purpose to be something better and to do something better. If all the world could be stirred to make that resolve, then indeed there would be a Happy New Year!

#### POSTPONED EXAMINATIONS

A fresh outbreak of influenza at the College, for which the Winter Fair is blamed, gave a good reason for dismissing the Macdonald students to their homes on December 11th, just on the eve of examinations. No one would seriously question the wisdom of this step, and the extra week of vacation was hailed with joy.

But there was a shadow over the vacation! Examinations were not over, and that relentless band, Fanny Farmer, Clara Kimber, George Strayer, Robert Hutchison, Bailey, Coleman, Sherman and the rest of them, instead of being decently buried in oblivion, would take hands and dance a weird reproachful dance around many a pillow, obtruding their undesirable presence upon dreams of Christmas presents, dances, skating parties, afternoon teas, and friends and brothers home from the war.

Verily, what was gained on one side was lost on the other.



## MISS NIXON

Miss Nixon has been recalled to her home in St. George on account of the ill-health of her mother, and will not return to continue her work at Macdonald. Miss Nixon's departure is much regretted, the more as she has been for so long a time connected with the institution. She is a Macdonald graduate (Normal) and taught in the Consolidated School. Later she became Demonstrator in Laundry work at Macdonald Institute and upon the marriage of Mrs. Fulmer, then Miss McLennan, she succeeded her as Demonstrator in Cooking.

The students who have passed under her tuition have always been warm in their praises of Miss Nixon, and her methods, and she was especially noted for her up-to-date recipes.

Sincere good wishes will follow her for a prosperous and happy career wherever it may run its course.

## TOUGH CUTS OF MEAT

How many of those who read this article have happened to listen when the mistress of a home was phoning to the butcher?

What did she order? Wasn't it something like **this**?

"Will you send me a nice porterhouse steak, please, not too thin, about the size I usually have? You haven't any porterhouse? Oh! Well then, please send me round steak; yes, just about the usual size, and will you send it this morning, please? And I should like a nice roast for Sunday,—the one I had last week was just right; yes—thank you."

The betting is that an order to the butcher at the end of the week takes this form more often than any other.

Of the meat on a beef carcass, about

two-thirds, broadly speaking, is fit for roasting, frying or broiling, that is in other words cooking by dry heat. The remainder consists of what are known as "tough cuts." Evidently they are not popular. What becomes of them? How can they be utilized?

It is easy in a city to insist upon having tender cuts, if one is willing to pay top-notch prices, but in small towns and villages the purchaser will often find that the supply has been exhausted, and that only the undesirable portions are left. In country districts where farmers kill their own meat, the whole of the animal must be consumed; any one who buys a quarter of beef from a farmer in cold weather, will find that it will not always be a hindquarter. People must take turns and share fairly. The tough cuts must be eaten. If they are cooked according to the methods followed in preparing sirloin, ribs, rumps or round, disappointment will be the inevitable consequence, and yet it is possible to treat these despised tough cuts in such a way that they will furnish palatable attractive and nutritious dishes.

The question of cost must be considered. While the tender meat now sells at from 30 to 42 cents per pound, the less choice portions can be bought at from 25 cents to 30 cents. Some careful experimenting must be done to find out whether the difference in price is as great as it appears. On one occasion, after the bone, gristle, fat and skin had been removed from a piece of forequarter meat, the edible part was weighed and found to be dearer than round steak. Some people claim that the amount of fuel consumed in cooking cheap meat, counterbalances the saving in first cost. This claim may be questioned, as, although the process is much longer, a lower

temperature is needed, and possibly the small gas flame and slow fire do not represent a greater outlay than do the roaring fire and the double row of burners in full blast for a shorter time. When the fireless cooker is used there is no foundation for any such claim.

What then is the secret which will enable the housekeeper to make the tough cuts acceptable? Simply this:

**Prolonged cooking by moist heat at a temperature below boiling point.** Any cook book will furnish recipes for pot-roasting, braising and stewing, but few cook books allow enough time. Half as long again, or in some cases twice as long would be better. A little forethought and planning are necessary of course, but does anyone expect good results without these? Any of these dishes can be reheated without suffering any deterioration, and it is frequently convenient to prepare a meal the day before it is to be eaten.

There is another way of dealing with tough meat. If it is passed through the meat grinder the fibres are cut horizontally into such short lengths that they cease to be objectionable, and much of the connective tissue which holds them together is removed entirely, remaining in the machine. This ground meat can be used for Hamburg steak, beef loaf, Scotch minced collops and other recipes, and will be found quite acceptable. Meat is also rendered less tough by hanging for some time before cooking, and by pounding with a rolling pin. The tough parts, which are those most exercised by the living animal, are frequently more juicy than the tender parts, and are therefore suitable for making beef tea, soups and rich gravies.

The traditional Briton demands roasts and broils, and scorns French

"Kickshaws," but it is no mean accomplishment to produce dainty dishes, as the Frenchwoman does, from meat that is not fit for either roasting or broiling. The true economist seeks to get good results from unpromising materials and to turn all available supplies into digestible and nourishing food, so that nothing may be wasted.

M. B. S.

### THE DANCE

Great was the excitement at the Hall when it was learned that there would be a dance in the gym in honor of the successful Fourth Year Stock Judging Team, who had just returned from Chicago. Although the dance was impromptu, the gym was prettily decorated with ferns, Jap lanterns and Year '19 pennants. The music was good, and all agreed with the Junior, who, after it was over, was heard to declare enthusiastically that everyone had had "the scrummiest time ever!" The inevitable "lights out" came as usual at 10.30, and the party reluctantly broke up at the "well!"

Prof. Harecourt—"Can you name a liquid that will not freeze?"

Jo—"Hot water, sir."

(Two Macites hurrying back from English across the icy campus.)

Crash!

"Oh, are you hurt?"

Silence.

"Tell me, dear, is it your shoulder?"

A long moan.

"Tell me at once where are you hurt?"

(Tragically) — "Oh-h—! My hair net's torn to bits!"

# Demonstration Plan

MISS MACDONALD

January 10th, 1919—Subject: *Methods of Breaking Eggs.*

## REQUISITION—

- 4 new laid eggs.
- 2 waterglass eggs.
- 7 cold storage eggs.
- 1 stale egg.
- Parsley.
- 1 tablespoonful of oleo.

## UTENSILS—

- 1 small platter.
- 7 fruit dishes.
- 2 wineglasses.
- Small omet pan.
- Bradawl.
- Bowl of brine.

## ILLUSTRATION

Chart Showing Composition of Egg.

AIM—To show clearly the different methods by which the interior of an egg can be dissociated from its shell.

INTRODUCTION—However simple a culinary operation may appear, it will be found that there is always a wrong way and a right way; indeed, some people hold that there are many wrong ways and only one right way. The proverb: "There's reason in roasting eggs," gives evidence of a right and wrong way of conducting this simple process, and the same is true of breaking eggs.

### SUBJECT MATTER:

The breaking of an egg may be:

- A Accidental.
- B Intentional.

### MANIPULATION.

Distribute copies of this poem:

- "A marble wall as 'white as milk,
- "A curtain drawn as soft as silk;
- "A thief broke down the marble wall,
- "And found within a golden ball."

- A I One of the earliest recorded examples is Humpty Dumpty.
- II Another is the girl on her way to market with a basket of eggs on her head, who destroyed all her dreams of fine clothes and social distinction by a toss of her head.

- III An egg may easily roll off a table — like this! Sea-birds eggs taper very suddenly, so they roll in a circle and are preserved from this fate.  
Good example of survival of the fittest.
- IV The game of blowing an egg from one glass to another sometimes ends fatally.
- Place two wineglasses close together with an egg in the nearest. Blow sharply down the side of glass, causing the egg to jump.  
If you can't blow hard enough, ask the assistant to try.
- B Intentional.
- I Preserving shell whole.
- (a) Vacuum method,  
Benefitting the individual.  
A perforation is made in the apex of the egg and another in the base. The lips are applied to one of the apertures and, a vacuum being created, the contents of the egg are drawn into the mouth.
- Make a hole with bradawl at each end of egg and suck.  
N. B.—Be careful to use a new-laid egg.  
Set the shell on a fruit dish on the serving table. For obvious reasons the contents cannot be exhibited.
- (b) Plenum method,  
Benefitting the community.  
Similar to the above, but the breath is forcibly introduced into the egg, expelling the contents. Shells may be decorated and filled with small candies for Easter eggs, or used as moulds for jelly eggs.
- Make a hole at each end and blow.  
A cold storage egg will do for this example. If it smells bad ask the assistant to remove it; otherwise set it on the serving table in a fruit dish, and the shell in another fruit dish.
- II Preserving egg whole.
- (a) Bringing side of egg in forcible contact with flat surface.  
Be careful not to break yolk.
- Tap new-laid egg smartly on table, and then holding it over fruit dish, break shell open, passing yolk from one half to the other, allowing the white to fall into fruit dish.  
Put yolk in another fruit dish.

- (b) Rupturing shell by a blow upon the edge of some vessel, as a cup, saucer or bowl. Authorities are not agreed as to the relative merits of these two methods. Break egg by tapping on edge of fruit dish and proceed as before. Ask assistant to set the fruit dishes on serving table.
- III A small boy with a hammer and an inquiring mind can break a basketful of eggs in a very short time. This method will not be demonstrated as fresh eggs are now quoted at \$1 per dozen.
- C Desirability of ascertaining condition of eggs before conducting the above experiments:
- 1 Ask the person from whom you buy the eggs. This is quite futile.
- II Use a candler.
- III Put the eggs into brine. The fresh ones will sink and the stale ones will float. If you can get an egg-candler, show how it is used. If you can't never mind. Put a new laid egg and a stale egg into the brine and let the assistant carry the bowl round the class. Rehearse this carefully.
- IV Place the tip of the tongue upon the broad end of the egg. If a sensation of warmth is immediately experienced, the air bubble is small and the egg is fresh. The egg that remains cool should be rejected. Let the attendant carry round dish containing the remaining six eggs for class to test.
- D Chemical composition of egg. Illustration "as full of sense as an egg is full of meat." Exhibit chart of egg showing proportions of protein and fat.
- E Necessity for breaking eggs. Galloned eggs of course are excepted. Illustration: "You can't make an omelet without breaking eggs." Demonstrate the truth of this. Heat omelet pan over gas and put 1 tablespoonful of oleo in pan. When it sizzles, lay 3 unbroken eggs carefully in the pan. Heat for 8 minutes. Demonstrate that the result is not an omelet. Place the result on a small hot platter and set in the warming oven.

F An egg is occasionally laid without any shell. This saves a lot of trouble both to the hen and the cook.

Conclusion:

I have, I think, clearly shown the fundamental principles of egg breaking. In any case, the demonstration will now close, as I have dropped the 3 eggs that remained and they also are broken "as sure as eggs is eggs."

One point I have failed to elucidate in spite of all my research. Perhaps the class can enlighten me. The problem is, "Which was first, the hen or the egg?"

If a shell-less egg can be procured, let the assistant carry it round the class. If not, which is probable, never mind.

Ask the assistant to clean them up. Take "the result" from warming oven and place on serving table, garnished with parsley, and arrange fruit dishes symmetrically around it. Invite the class to inspect serving table.



### EXAMS

'Twas ten o'clock on Thursday night,  
 And everything was still,  
 For all the gay and giddy girls  
 Were meek as Kaiser Bill;  
 And up and down the corridors  
 They paced with fev'rish tread,  
 With worried brow and weary eye  
 And towel around the head.  
 And here some Juniors murmur o'er,  
 "There's protein in the bean,"  
 "For stains upon the kitchen sink,  
 Apply some kerosene."  
 Or, over there, a groan comes forth,  
 "Starch granules must be burst!"  
 Or, "Bev'rages are what you drink,  
 To satisfy your thirst."  
 "My sewing notes are finished now,"  
 One chuckles in her glee;

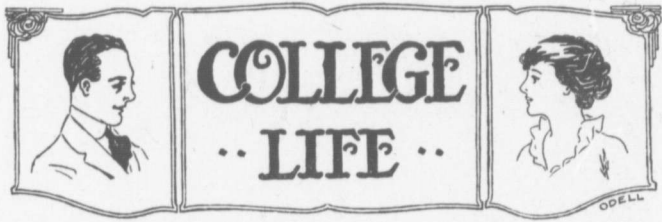
"But when it comes to Foods"—she wept,

"Alas—ah, woe is me!"

And why, you ask, are all so sad,  
 And why all look forlorn,  
 The answer is a simple one—  
 Exams to-morrow morn.

### CORRECTION

In the report of the Basketball match between the Seniors and Juniors, which was given in the December Review, it was erroneously stated that the Juniors were successful, victory belonging to the Seniors.



Another year has rolled by and many and great are the changes which have befallen the O.A.C., the nation and the world.

It is with saddened hearts that many greet the new year because of someone who has passed to the Great Beyond from sickness or war. Many greet 1919 with joyful hearts because of the return of loved ones from the field of action, or the relief from the suspense of waiting, not knowing what moment would bring the dreaded message. The world rejoices that 1919 shall not know the trying times which have existed for the past four long years. The nation, with glad and thoughtful hearts, know that victory is ours, that right has triumphed, and that the Xmas message of "Peace on Earth; Good will toward men" shall be fulfilled.

The O.A.C. will, this year, welcome back and renew acquaintance with many who have served their country courageously, and will have the pleasure of again receiving a large number of these splendid men as students.

The O.A.C. and Macdonald Hall closed with a "bang" on Wednesday, the eleventh of December. The announcement of the closing of "Mac" Hall, which came about ten a.m., was received with mingled feelings by the

boys at the college, and there was an air of unrest among all, particularly in evidence among the freshmen. But few realized that the O.A.C. would be closed before the examinations had been written. The announcement of the closing of the college, which was made by the President at dinner that day, therefore, came as a distinct surprise. The rapid development of new cases of influenza and colds beginning to look very serious, Dr. Creelman, with his usual wisdom and foresight, ordered the quick despatch of all students who could conveniently get to their homes. Naturally a loud applause followed this announcement, and examinations were forgotten. However, the President impressed upon those years the fact that all should be prepared for test examinations upon return to College after the opening of the new year.

The second outbreak of the "Flu" epidemic at the O.A.C. was not so serious as the first, in as much as the individuals, except in a few instances, were not as ill; but sickness would no doubt have been more general had the college not been closed early. Macdonald Hall, however, was fortunate in not having any new outbreak of sickness.

With the opening of the Winter term we hope that all traces of the in-

fluenza gem will have disappeared, never to return, and that all those who were unfortunate enough to fall victims to the disease will have completely recovered.

Every one is anxiously looking forward to some extra good times during the winter term. Skating, snowshoeing, tobogganning, hockey and other winter sports and pastimes will soon be in full swing. With the opening of the new year, should we not all be happy and gay? The war is over, victory is assured, our boys are returning, and the beauties of our Canadian Winter beckon us to forget our sorrows and really live, glad that we have been permitted to enjoy this old world in these glorious days.

The college is to be congratulated upon its work this year in the judging of live stock. Our stock judging team won a famous victory at Chicago International, and results of the judging competitions at the Guelph Winter Fair are very creditable. Very few outsiders got "within the money" and the instructors who so ably prepared the students deserve praise for their effective teaching. Every year had a good showing of money winners. The Seniors carried off the inter-year trophy with the Sophomores a close second.

A short time previous to the close of lectures in December a snow-ball fight was staged in front of the Chemistry building. Although the freshmen put up a good "scrap," yet if the winners were decided by the amount of ground gained, the upper years are without doubt right in accepting the honors. However, the fight, which was carried on in the best of terms, was

thoroughly enjoyed by all, and no hard feeling was exhibited by either side. Very few casualties were listed. The only real damage done was the breaking of a couple of panes of glass, the loss of a fountain pen, a few notes and a cuff link—and a lecture or two delayed.

The chapel choir, with their leader, Mr. Iveson, spent considerable time on their Christmas Contata, but the new outbreak of influenza and the subsequent closing of the college prevented the presentation of it. We hope they will see fit to render it when the college reopens in January.

Fragments of conversations picked up at random in the college corridors towards the close of the fall term might be interesting to our readers. The information contained therein is, of course, unofficial:—

"O.A.C. are going to have a team in the Intermediate O.H.A. this year."

"I hear they are going to have an informal fortnight dance at the Hall next term."

"Someone was telling me there will be a new bunch of "Mac" girls in after Xmas. That really looks interesting."

"The rink will be in fine shape just about the time college reopens. All the girls from "Mac" and many from down town, will be there. Oh! Boy!

"The freshmen are not a bad sort after all."

"I believe there is a possibility of a new residence being built to be ready by the fall of 1919, to accommodate the two upper years."

"Second and Fourth Year hockey teams who fought it out for first place in the inter-year championship last year are almost intact and eager for



the fray. Lood out for Third and First Years, probably they have some dark horses."

"The new Dean is a husky looking chap. I guess we had better be good when he is within hearing distance."

The Winter Fair, as usual, brought a number of familiar faces back to the O.A.C. for a short visit.

It looks like old times to see Art. Musgrave back at college. We believe he will fulfil the duties of Dean of Residence with wisdom and satisfaction.

#### APICULTURE CLUB

The weekly meeting of the Apiculture Club was held in the Entomology Class Room on November 19th. Mr. Armstrong, of Ridgeway, President of the Ontario Bee Keepers' Association, and a very practical man in bee-keeping, gave a most interesting talk on swarm control. He dealt with the subject from the beginning of the work in spring to the harvesting of the honey in early fall.

Numerous questions during the address elicited valuable information on many important points, and a profitable discussion followed. The increasing interest taken indicated by the number of new members obtained, goes to show that Apiculture is rapidly gaining in popularity and will soon occupy the prominent place in an Agricultural curriculum it has always deserved.

The Poultry Club was reorganized on Thursday evening, the 21st of November. Considerable interest has been aroused and a prosperous year is no doubt assured. The following men were elected:

President—P. Shorey.

Vice-President—Mal. Howarth.

Secretary-Treasurer—G. Snyder.

Year Representatives—G. Hunter, A. Hall, C. M. Ferguson and Pierson.

Judging classes as well as interesting talks will be the special features of this club. Excellent prizes will be offered to those who take part in the weekly judging competitions.

Results of Judging Competitions at Winter Fair:—

#### Horses

1. J. D. Dyer . . . . .
2. F. J. Webster . . . . . '21
3. V. Stuart . . . . . '22
4. A. W. Mead . . . . . '20
5. L. E. Dymont . . . . .

#### Sheep

1. D. F. Aylesworth . . . . . '19
2. C. Tice . . . . . '19
3. M. F. Cook . . . . . '19
4. J. M. Shales . . . . . '19
5. W. C. Hopper . . . . . '20

#### Dairy Cattle

1. E. Stilwell . . . . . '19
2. W. A. Fleming . . . . . '20
3. L. A. Dymont . . . . .
4. J. B. Hanmer . . . . .
5. W. B. Blakely . . . . . '22

#### Beef Cattle

1. F. M. Snyder . . . . .
2. V. Stuart . . . . . '22
3. I. S. Chapman . . . . .
4. J. R. Higgins . . . . . '19
5. G. S. Grant . . . . . '19

#### Swine

1. W. R. Gunn . . . . . '19
2. J. R. Higgins . . . . . '19
3. C. Flatt . . . . . '21
4. S. King . . . . . '20
5. P. L. Sanford . . . . . '19

#### Poultry

1. G. S. Snyder . . . . . '21
2. C. F. Luekham . . . . . '19
3. J. A. Hall . . . . . '20
4. R. Frith . . . . . '21
5. C. C. Eidt . . . . . '21



# ATHLETICS

## HOCKEY PROSPECTS FOR 1918.

The prospects of the success of hockey around O.A.C. for this coming winter are exceedingly bright. The majority of the old team is back and everybody is looking to the Freshmen year to produce some "stars." A little review of the success of the College team last year will create the necessary enthusiasm to make the coming season a better success than ever.

Our College rink is by now familiar to the Freshmen class. Its large ice space is always well kept and affords advantage to speedy players.

Six exhibition games were played last year against teams of no mean calibre. The season opened with a local game with McMaster University team, with which a return game was played at Toronto, then followed games in succession with Page-Hersey Munition Team from Guelph; Toronto Dental College Team, winners of the Jennings' Cup in the Intercollegiate Series; the Medical College Team, Toronto, runners-up for the above cup. The Page-Hersey team were the only team to defeat the College, and that by a small margin, the score being 5 to 4. As a sum total of all the games the College ran 33 for and 15 against, which showed the ability of the College team. The sportsmanlike character of the players was shown by the fact that only four penalties were imposed on the team. This produced a type of hockey which was both pleas-

ant to watch and play from start to finish.

Of the inter-year hockey little need be said as the interest in it is always keen and incidentally money loose.

An attempt last year was made to have the team in the Toronto University Series for the Jennings' Cup, but owing to the constitution of the University Athletic Association and the lateness of the season we were not allowed to enter. This year it is the intention of the officers of the O. A. C. Association to try to enter the team for the Jennings' Cup, and if that fails there is still left the chance of showing the Intermediate O. H. A. that the O. A. C. can produce a dangerous team.

To one and all a final word—Show a true Alma Mater spirit and make hockey, our Canadian sport, a success around O. A. C.

## INDOOR BASEBALL

The indoor baseball season is off to a flying start. Although late in starting, two games have already been played. The finals will be played in the near future, and the winners of this teams series will meet the winners of the schedule of next term for the championship of the college.

The interest shown in baseball has been very great, and much credit must be given to the third and fourth years, who, under existing conditions of lacking in numbers to choose from, have mustered very creditable teams.



### YOU'RE THE MAN

A certain member of a certain year forgot to shave the hollow between his nose and upper lip one evening on which he was fussing. A few days later when he went to shave perchance his fingers happened on the self-same spot, and the impression his finger tips obtained so tickled his fancy that he decided to allow the scattered, sprouting bristles to remain unharmed.

Day after day their length increased, until, about six weeks later, they might have been discerned by an observant person.

One morning his room-mate grabbed him by the shoulders, pulled him around towards the light, and, after much peering through his glasses, exclaimed: "Say, did you not forget to shave that spot on your upper lip?"

"Why, you blind bat, that's a moustache. You had better go down this afternoon and have your lenses changed. It's dandy, too. Why, I've had it six weeks—Don't you think it improved my appearance?" he inquired earnestly, surveying himself in the mirror.

"Well, it isn't noticeable enough to sway the balance either way," answered his ingenuous "wife."

A week later someone else perceived the pubescent growth.

"I say, did you not forget to shave this morning?"

Always that, "Did you not forget to shave." No one possessed enough

originality to say, "Why, you're growing a moustache. How nice. You look quite natty in it."

And because no cruel person was malicious enough to raise a mob of barbers, the hairs prospered and soon could be distinguished at a distance of five feet on a bright day. But the odd thing about them was that they did not match, the hair on this gentleman's head, which was a light brown; the facial hairs were red, nice bright red—No one in the residence possesses such a moustache. It is distinguished looking.

So, curious readers, if you wish to discover the owner of these fine bristles, just saunter around the halls and when you meet a good looking chap with light brown hair and an especially nice Tamworth-red tuft on his upper lip, tap him on the shoulder and say admiringly: "You're the man."

---

College spirit demands that you back the advertisers who back you. Look them up.

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### To a Hand

O Hand, thou wert a lovely Hand!  
 How beautiful, how sweet!  
 To think I held thee but last night  
 So dainty, fair and neat!  
 Thou pretty Hand, to my sad breast,  
 Didst highest gladness bring,  
 When gazing long I saw in thee  
 Four aces and a king!

## EGGS IN JANUARY

Continued from page 230

past few years this difficulty has not been overcome, but now a lighting system is being used with great success. A powerful light (preferably electric) is hung in the hen-house. Two hours before daylight this light is turned on and left burning until the day is bright enough for the hens to work. Then, the evening is extended a couple of hours in like manner. This gives about the same length of day as in spring. Under such conditions the hens are quite active and egg production is greatly increased. In fact, some claim that the increased yield will run as high as forty per cent.

The observance of such details as these will bring good results. The flock readily responds to such treatment. Success is indicated when the hen jumps off the nest almost every morning and voices her most hearty spring cackle throughout the neighborhood.

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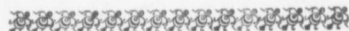
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Mr. Unwin—Mr. Strong, what other language than English do you consider it advisable for a student to learn while attending here?

Strong—Profane.

Once a Freshman was cast on an African shore,

Where a cannibal monarch held sway,

And they served up that Freshman in slices on toast.

On the eve of the very same day.

But the vengeance of heaven followed swift on the act,

And before the next morn was seen, By cholera morbus that tribe was attacked.

For the Freshman was terribly green.

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## A LAPSE OF MEMORY

Continued from page 212

soon spinning merrily along the road towards home. My friend proved a vivacious talker and was glad to be going home. Luckily he did not ask any embarrassing questions about the health of the people at home, but monopolized the conversation himself, probably realizing that I did not feel much like talking.

As we drew near to a comfortable looking homestead he slowed down, and said that he could easily walk the rest of the way. This admission gave me the very information I needed — that this must be my home. Mentally thanking him, I told him to drive on to his place since I was in no hurry. He thanked me, and we proceeded down the road to the next house, a distance of about half a mile. Here my friend left me, and I was soon back at the spot he had indicated as my home. Driving into the yard I saw a small garage with the doors open and drove my car in. As I proceeded towards the house, I seemed to feel a sort of haunting familiarity about the place. I could not actually recall having been there before, but it seemed to me to be a scene that I had visited in a dream some time ago.

By this time it was quite dusk and the lamps were alight in the house as I entered. An elderly lady was in the room, who I immediately concluded was my mother. I did not actually recognize her, but some instinct beyond all question seemed to cry out to me that it was she, and I called her "Mother" without any hesitation. She told me that my supper was waiting for me on the table, and that I

Continued on page xxxiv.

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### A LAPSE OF MEMORY

Continued from page xxxiii.

was later than she had expected. While I ate my supper I recounted to her the details of my accident, still withholding any information regarding my mental condition. Mother said that she thought I looked pale when I came in, and proceeded to examine my head, which was now hurting me more and more. She bathed and bandaged the wound, and said that I should have seen a doctor while in town. I replied that I would go to bed right away, and see how it was in the morning—meaning more than my mother realized. Mother said that she had better put another pillow on my bed, to be sure that my head had a good, soft place to rest. I followed her upstairs to a bedroom where she fixed up the bed, re-arranged the bandage

on my head, and left me. I was glad to get into bed and rest my head since I was beginning to feel sick and dizzy. I soon sank into a sort of stupor from which I did not awake until a few days ago.

Although very weak, I am now in perfect possession of my faculties and memory. How this was brought about I have just learned from my mother and from the nurse who is taking care of me, and who, I am glad to say, is leaving me to-morrow.

It seems that during the night I became delirious and then gradually sank into a state of unconsciousness. My alarmed parents summoned the local physician who said that my condition was dangerous, since the wound in my head was of a more serious nature than we had realized. He said he

Continued on page xxxvi.

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