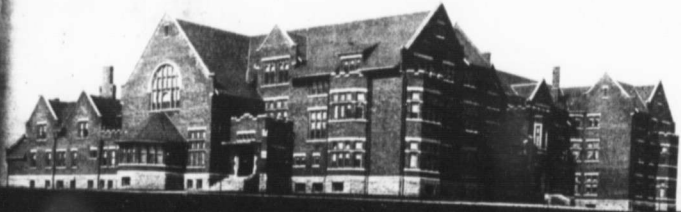


# THE O.A.C. REVIEW

JANUARY, 1911



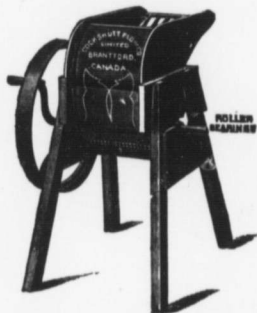
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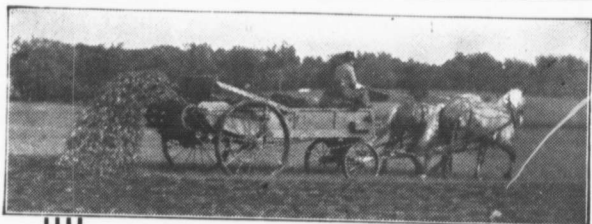
Joseph Stratford, General Manager.  
We want farmer agents in every locality. Hurry up.

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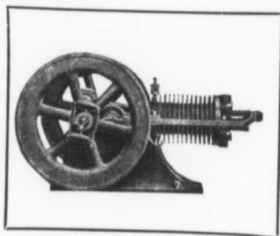
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# THE O. A. C. REVIEW

THE DIGNITY OF A CALLING IS ITS UTILITY

VOL. XXIII.

JANUARY, 1911.

NO. 4.

## The School and The Farm

J. DEARNESS, M.A., LONDON.

A man is what he is, as the result of two factors—heredity and education. Every one may therefore be said to be educated—ill, well or indifferently.

Instruction or information is very commonly confused with education. In a sense the words are opposites. The former means building in or filling up—the latter drawing out or development. The schools will not reach their possibilities until parents and teachers regard them as agencies, not for filling up the mind of youth, but for drawing out and developing all their powers, moral and physical as well as intellectual.

Education, like the tree, is properly judged by its fruits. Reading Latin and writing elegant English, said Ruskin, do not mean education, but that man is well-educated, to quote his words, "who is happy, busy, beneficent and effective." Education must be judged by what a man is and does, and not alone by what he knows. Its fruits are knowledge, power, efficiency, happiness and character; and to the extent that a man falls short of his possibilities to bear these fruits his education is imperfect. In its briefest expression education is a process of qualifying one to reach his maximum of usefulness and happiness. The

school has not done and cannot do, all this work of education. It is assisted by the family, society (companionship in home, school, world), and vocation.

The home takes care of that part of the education which springs directly from the instincts and fundamental impulses. One writer has tried to prove, and he has made a strong case, that quite half of the average person's education is obtained before the seventh year.

The school has been charged with the impartation of knowledge, supposed to be useful, and training in the arts of expression. Its share in the work of education has been almost solely intellectual.

To more or less haphazard association with companions has fallen most of that important part of education which determines the degree of social fitness.

Volitional and motor education have come through performance of home duties, play-time activities and apprenticeship experience. "A whole some human employment," wrote Ruskin, "was the first and is the best method of education." The need to work is the postulate of human progress.

These four agencies—the home, the school, society, and work—as in the

past, are likely to continue contributing their share to the process of education. The only one of them, however, that is specifically organized for the purpose is the school; it has consequently received an inequitable share of the praise or blame for the general result. Outstanding examples of successful men among the makers of this country, and of the neighboring republic have had their success attributed to the cross-roads country school. Who can say how many of them are more greatly indebted to the discipline of "chores" than to the influence of the "little red school house?" Doing things that to the child seem worth while for him self and others, especially when there is an element of his own planning in the doing, is richer educational experience than sitting at a desk absorbing knowledge from books. My observation is unique unless it is generally true that the youth who does not learn to work between the ages of fourteen and eighteen stands little chance to become a successful worker at any time. An uninterrupted course of book-learning up to the eighteenth or later year usually limits its victims to the soft-handed vocations.

The school being the only one of the four agencies named under direct control, it is clear that changes in the customs and conditions of family, social and vocational life should be accompanied by correlative changes in the school. Apprenticeship is disappearing; organization and specialization are reducing the variety and complexity of the activities of the shop and home; consequently, in urban communities, the school is preparing to take a share in the technical and industrial education of the youth.

But the farmer's child has lost more educationally through these changes

than the child in the city. Few children, possibly none, in the schools of Ontario to-day, are wearing garments whose raw materials they had seen on the sheep's back, and every step in the manufacture of which they had witnessed or participated in. In many other similar respects the child's life on the farm, notwithstanding some compensations, has become contracted compared with that of the pioneer's child. There is correspondingly less that the child on the farm can do, or is called upon to do to-day. The attendance of big boys and girls at the winter school who had been kept at home to work in the summer is a thing of the past. Formerly, by the time a boy had reached, say his eighteenth year, he had received his schooling and had learned the farming trade. Now he remains in school with no substitute for the former home education, yet all the while the adult life on the farm has been making increasing demands upon a non-bookish education.

To-day the successful farmer is a practical biologist. His more delicately-bred herds would bankrupt him on the treatment that served the hardy stock which survived the winters on wheat-straw and browse. The annually increasing number of insect and fungus pests, formerly unheard of, require him to be entomologist and chemist. The maintenance of the fertility of his soil, the construction and sanitation of his buildings, and the use and care of expensive and complex machinery would tax the skill of experts in physics and mechanics. The general merchant has hardly more need to observe intelligently the fluctuations of the world's markets. Equally with the dweller in town, he should be prepared for public service when called upon by his community. Space for

bids a detailed statement of the education needed by a farmer to-day. A school that is adequate to his requirements would seem to be sufficient for anyone.

How do the schools we have meet these needs? A writer in the *Toronto Star* (Aug. 16th), speaking of himself, a teacher, and his brother, a book keeper, who can add like lightning and spell like a dictionary, as typical products of the Ontario school system, stereotyped for subordinate service by the completeness of their school career, contended that if every boy and girl in the Province were predestined for the professions, the school system would not require any material modification. His contention affords a useful topic for the debating society. One of his remarks caught attention, namely that the slogan of the public school is not *On to the Farm!* but *On to the High School* and there further on along the same line. He might have added the further on the fainter the appeal of the farm becomes.

When the ideal rural school in an agricultural country becomes a reality, taking it for granted that the makers of school laws and regulations have right views of educational values and fairly intimate knowledge of rural conditions and aspirations, then each of the following causes will have contributed its part:

Inspectors will be practical experts in elementary education, will have considerable knowledge of agricultural science, and be qualified through their knowledge and sympathies to inspire youth with ambition to excel on the farm.

Teachers will be trained so that they can make farm-life the centre of educational activity.

Text-books will be redolent of the atmosphere of Nature and the farm.

Courses of study will require education of the heart and hand as well as of the head, and will attach as much importance to the right study of things and processes as to book-learning.

Let us examine some of these propositions in more detail. I know whereof I speak, when I affirm that but few people realize how much good can be done for the schools of a county by an inspector having a reasonably free hand, and the ability and determination to use his influence to promote the welfare of his schools. Equally with the teacher's, his qualifications, and performance will depend on his training, aims and sympathies. These are naturally affected by the legal requirements for his certificate. What answer is given an applicant for an inspector's certificate who claims to have the highest grade of public school teacher's certificate, several years' successful experience in all departments of public school work and ability to address acceptably on educational topics an assembly of children or a gathering of their parents?

Refusal.

"Will it help that I have also had successful experience in managing a farm?"

Not in the least.

"If I attend the Agricultural College two or three years and complete a course of studies there, will the certificate be granted?"

No; agriculture is not the kind of culture that counts for the purpose in question.

"If I go to a city university to specialize on Latin and Greek for two or more years and obtain an honor degree in classics, will this experience count?"

Most certainly.

Is this the kind of training that best fits a man for the exceedingly important work of rural school inspection?

Few will deny that Dr. Ryerson's view—requiring candidates for public school inspector's certificates to specialize on efficiency in public school teaching and on public school courses of study—had much to commend it. The man who can render valuable service at a public school teachers' institute and also at a farmers' institute ought to make an efficient rural school inspector.

Proper teacher-training.—This is at once the most important and the most difficult requirement. One who can competently manage and teach a large rural school is qualified to teach any public school. On the academic side he must be trained in the ordinary expressive arts, literature, history, civics, mathematics and in a somewhat practical way in all the sciences that underlie agriculture. In a city normal school, attended by a couple of hundred students, it would be extremely difficult in an annual term, even with a conservatory for plant studies in the winter and a suitable farm accessible by street railway, to give a professional training moderately adequate for efficient rural school teaching. Without conservatory, without a farm, with but a small proportion of the time of the session for agricultural science it is simply impossible to prepare high school students entering the normal school with very limited knowledge of farm science to be efficient rural school teachers. The difficulty is increased by the fact that book-methods of teaching are nearly valueless in teaching science. Teachers who, during their training, have no experience in taking a class of children to the barnyard or

grainfield and making the visit educationally valuable are not likely to experiment along these lines in their own schools.

Courses of Study.—There is heard much complaint and much ill-considered criticism of the overcrowding of the public school curriculum. Critics have counted the thirteen subjects prescribed for the youngest grade and quoted the number as though its mention proved that the course must be overcrowded. But they have not named the subject which children of that grade are not capable of learning in some degree, and of which they should not or need not know anything. An active child living on a farm is spontaneously learning facts and acquiring experiences that might be grouped and classified under a score of subject titles. The ground for criticism lies with the method of teaching and quantity of matter taught, rather than with the number of subjects.

The high school entrance has unfortunately become the popular standard of a completed public school course. Now all the essentials of that standard can be learned, have been learned, between the ages of eight and twelve years. The child that attends from five to fourteen to pass the entrance has spent half these years in "marking time." Could they not be applied to better purpose?

Then again, successful and happy life on the farm requires that between fourteen and eighteen the youth must learn "the trade." Where else than on the farm can he do that? But at fourteen he (or she) is too young to have properly learned all that the school should teach. He cannot become accustomed to work, and at the same time attend school in a distant town. Does a dilemma arise here? No; the

plain way out, is to provide for that division of his time which will permit of his learning his trade on the home farm, while he completes his schooling at the home school. Farmers who wish their children to follow soft-hand vocations may be satisfied with present conditions, but the others will appreciate the kind of education I am pleading for. I heard of an instance where a teacher failed to agree with her trustees in respect to the following year's salary. When it was known that she proposed to leave the school at the end of the term five of the farmers in the section offered to add \$5 apiece to their school rates to retain her services on the ground that she "was the first teacher they had ever had who made lessons at school of the things the children do at home."

Lastly, equipment, though of much importance, is less indispensable than the preceding requirements. It is not easy for example to exaggerate the potentialities of the school garden, but it is easy to overrate its mere existence. The educational value of school gardens, nature collections and scientific apparatus is entirely dependent on the way that they are used. Awarding money grants for merely having them without regard to their use may be worse than waste.

Sanguine hopes are built upon the investigations of the Technical and Industrial Education Commission. If their report shows how the ideal rural school can be realized its publication will be the most noteworthy educational event of the times.

#### THE SOUL.

What bears me up? 'Tis not this earthy frame,  
 These vigorous limbs, this sordid teeming earth,  
 That bore me patient ever since my birth;  
 But something inward, some fierce mystic flame,  
 For which our language hath no subtler name  
 Than spirit: some dread hidden lamp of life,  
 Behind the ego dense, the passions rife,  
 That looks far out and dreams from whence it came.

Those others weaken, Fever, sin, disease,  
 The shock of mountains and great toppling seas  
 Shatter their being: this that dwells within  
 Knows other base of power more secret, dread,  
 Drawn forth, eternal, from some fountain-head  
 Of power and life, where sense hath never been.

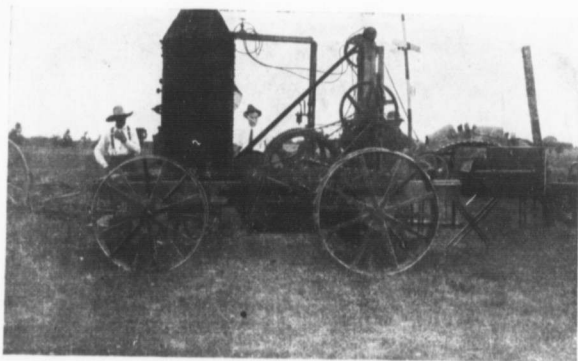
—*Wilfred Campbell.*

## The Record of an Old Steam Ditcher

R. S. HAMER, B.S.A., PERTH.

IT is only within the last two years that the Buckeye steam ditcher has attracted general attention in Ontario. It will consequently be a surprise to many to find, that one of the older models of this machine has just completed its ninth season's work in Eastern Ontario. According to the

of Weirstead, Que. While its head quarters have always been on the other side of the Ottawa, it has, however, been operated almost entirely on this side of the River. In that long, level strip of heavy clay land which extends for nearly one hundred miles along the Canada Atlantic, through the



BUCKEYE TRACTION DITCHER, 1902 MODEL, ONE OF THE OLDEST IN CANADA.

company's records, this is one of the first, if not the first, of these machines sold in Canada, and in view of the fact that at the present time the improved steam ditcher promises to become in Ontario one of the most potent influences yet introduced in promoting interest in underdrainage throughout the Province, a short sketch of the record of this old timer may not be without interest.

Imported in April, 1902, by Mr. J. C. Jamieson, of Bristol, Que., this ditcher did not change hands until the spring of 1908, when it was purchased by its present owner, Mr. W. J. Tuck,

northern part of Carleton County and through the heart of Renfrew County, underdrainage was early realized to be a necessity. Roughly speaking, one would be safe in saying that more tile has been laid in Renfrew County than in the other counties east of Peterboro, combined. As hand labor became scarce, the demand here became incessant for some satisfactory method of digging drains to grade by machinery. As in other parts of the Province, various devices were tried but not until Mr. Jamieson hazarded the heavy outlay necessary to the importation of a Buckeye Ditcher, was the demand met.



As soon as the machine was started by the company's expert, it was seen that it was capable of doing the work and in a short time more orders were booked than could possibly have been attended to even by an improved model run by an experienced man. But this old wooden-frame machine though staunchly built and thoroughly efficient when properly handled, was not the machine of to-day and those who operated it were buying their experience at its expense. In less than a

week, at the end of which time other business took him away and the machine was handed over to a third employee whose mechanical ingenuity, however, was exhausted inside of three days. The wreck lay idle until the middle of September when it was reset and used in a demonstration at Renfrew Fair. From that time until the middle of November, Mr. Tuck handled it again with practically no loss of time for breakages and succeeded in



COMING UP A STEEP GRADE.

week it was put out of commission by the first man who undertook to run it. The owner himself then took hold of it and ran it for a month with varying success. At the end of that time he got the present owner, Mr. Tuck to try his hand at it. As Mr. Jamieson well knew he secured in this instance the most likely man in the district to make a success of the machine for Mr. Tuck's genius for practical mechanics requires no endorsement in that part of the country. Mr. Tuck took the ditcher out, after giving it an overhauling, and

exhausting the local supply of tile before freeze-up.

In 1903, the machine started out on May 15th, in charge of two engineers, and at the end of three weeks it was again hopelessly out of repair. On June 16th, Mr. Tuck once more took charge and with the exception of a few weeks' in midsummer, ran the machine until November 23rd. This was probably the biggest as well as the most profitable season's work the machine has ever done. Repair bills after the middle of June amounted to only about

forty dollars, and at the end of the season Mr. Tuck carried home to the owner more than nine hundred dollars over and above his wages. This record will be better appreciated in connection with the following prices which have ruled with this ditcher every year up to the present: Three feet deep and under, 15 cents per rod; three and one-half feet deep, 18 cents; four feet deep, 20 cents; four and one-half feet, 22 cents. No doubt the fact that it was a dry year and that most of the digging was shallow had a good deal to do with the profits of this year. At all events the owner figured that in the two season's work, the machine had very nearly paid for itself.

The ditcher's record for one day's work was established during the season of 1903. Between 3 p.m. of the afternoon of one day and 3 p.m. of the afternoon of the following day, including loss of time for making five set ups, the machine dug 223 rods by actual measurement. The digging in this instance, however, averaged only two and one-half feet deep.

To follow the history of this machine, in detail, during succeeding years, would make this article unduly long and would serve no special purpose. It was operated chiefly by the owner himself, with profit, but with many ups and downs, and many long waits for repairs. During this time it came into competition with two newer and heavier models of the Buckeye machine imported in '05 and '06. Wet seasons interfered with the effectiveness of the latter machines, however, and as in many instances they could not be prevented from digging themselves into the ground, most of the work went to the old ditcher. By the end of '06 it began to show the effect of its campaigns and during the season of 1907

it lay idle until after harvest. Mr. Tuck was given the contract of putting it in shape again and after working on it with an assistant for seven days making repairs he handled it for the remainder of the fall. He took it home with him for the winter and the next year it started out on the road with him as his own property. During '08 and '09, as other interests permitted, Mr. Tuck undertook several large drainage jobs, and by means of improvements which he himself made in the ditcher he made of it a very profitable investment.

In July, 1910, Mr. Tuck brought his ditcher down into the north part of Lanark County to work on a large system previously staked out by us. This was the first time I had seen this ditcher in operation and certainly under Mr. Tuck's management it did work equal to that of a new machine. The grade was tested different times with a dumpy level and found to be exactly according to specifications. On one drain averaging nearly three feet deep we timed the machine for various intervals and running on the second gear, it made as high as nine feet per minute.

About the middle of August we induced Mr. Tuck to bring the machine down to the Perth district and from then until the end of September we had it directly under our supervision, working only on systems laid out by us. It was brought down by its own power, travelling most of the forty odd miles over hard macadam roads and fording the Mississippi River on a ledge of flat rock with the water with in an inch or so of the fire box. Notwithstanding the shaking up it received on the way down, it was ready for work on the morning after its arrival. Any person familiar with physi-

cal features of this section of Ontario will understand that nature was not concerned about the optimum condition for traction ditching when she moulded it. Stray boulders and gravelly knolls may be encountered at almost any part of the Province but the solid rock is a different matter, and where the formation is the old original granite, it dips and again crops up above or near the surface, most unexpectedly. While most of our digging this summer was in clay of good depth, we nevertheless struck the granite

age of from 75 to 150 rods per day was made.

The foregoing personal observations have been recorded chiefly with the idea of showing that the lifetime of one of these machines is not confined to a few seasons. When this old time model with nine seasons of all kinds of treatment behind it could do as fine work and as rapid work as it did for us this fall, and when it stood so well the hard pounding on our rocks and the jarring over our hard macadamized roads to which it was subjected



TAKING THE TIME.

more often than was either pleasant or profitable, and between solid rock and large stones the old ditcher was pounded unmercifully. Certainly the owner did not spare his machine and as long as there was any hope of raising an obstruction without pulling up the wheel, he kept ripping away at it. Frequently in soft ground, I have seen it force to the surface, stones weighing over thirty pounds. Of course there were breakages, but mostly minor ones, such as cutting off bolts on cups and slicers. On one job, three hundred of these were cut off in two days. Other repairs were found necessary from time to time, and of course time was lost, but most of the time an aver

no person need look on the newer models with any doubt as to their durability.

At the present time there are some seven hundred Buckeye ditchers at work in America. In the past two years they have materially increased their foothold in Ontario and during the next few years the demand promises to be very active. Each year it becomes more difficult to obtain labor competent to open tile drains by hand, and if Ontario is to be drained according to schedule in the next hundred years, ditching machinery is a prime necessity. At the present time the Buckeye steam ditcher appears to be the only machine able to do the work.

## Agricultural Demonstration

E. A. HOWES, '11.

INCREASING interest is being shown in practical demonstration of scientific agriculture and as a recognition of the demand for such, demonstration farms are to be established in different provinces. The recognized handicaps in working out this idea are the narrow margin of failure allowable and the caution, almost distrust, shown by the average farmer when considering results reported or shown by Government employees. The purpose of this article is not to criticize the wisdom of the movement, but to relate an experience which shall be the justification for the suggestion of work supplementary to that carried on by the demonstration farm.

In the autumn of 1903, at Bowesville, near Ottawa, I had the privilege of beginning formal school-garden work in Ontario. My plan comprised not only individual and class plots for the pupils but also a number of experimental and demonstration plots. But one of the experiments shall be referred to here, that of potato spraying for blight.

The section in which the school-garden was placed produced more potatoes than did the remainder of the county, several of the farmers having over forty acres in potatoes annually. No doubt all these farmers had read of spraying with Bordeaux, and I know that two had tried it in a half-hearted way, but I had every reason to believe that bulletins and other literature on the matter had been of great use as shaving paper. Naturally I felt greatest interest in the results obtained from my potato plots.

During 1904 I grew two plots of potatoes, each 10 feet by 20 feet, spraying one four times and leaving the other unsprayed. In the fall I found a difference of equivalent to 64 bushels per acre in favor of the sprayed plot. I published the result with all the assurance imaginable, but somehow the information was not received with enthusiasm proportionate to that with which it was given. I compared my results with those obtained from similar work in other provinces and found that my claims were comparatively modest. I found that one demonstration had realized a percentage of gain alone greater than the best crop produced in his locality. My estimate of the farmer's carelessness of his own interests was colossal.

The long Ottawa Valley winter gave me time to shift the blame to where it belonged and the following spring, with a somewhat chastened spirit, I began a new demonstration. On the other side of the school-garden fence Mr. R— was planting a 26-acre field of potatoes, and I made arrangements to work in conjunction with him; in deed he kindly performed part of the demonstration work for me. The garden had been surveyed from the field mentioned; thus there could be no appreciable difference in soil. My potato land received a dressing of manure drawn from the same heap that furnished the fertilizer for the field over the fence. I planted my potatoes when Mr. R— planted his and in the same way and later I cultivated them when his were cultivated. I followed his lead in applying Paris Green. In fact, as we worked together, it became com

mon knowledge that the only difference in treatment of the two crops was that mine received three ordinary applications of Bordeaux, two of which were in conjunction with the Paris Green spraying.

In the fall the crops from an equal length of sprayed and unsprayed rows were dug at the same time and results compared. They showed a balance in favor of the sprayed potatoes equivalent to 52 bushels per acre, and also showed a much larger percentage of salable potatoes. Next the rival crops were displayed at the local four corners. I had no reason to complain of lack of interest this time. In one of the implement warehouses of Ottawa were two of Aspinwall's sprayers constructed with a view to facilitate spraying with Bordeaux. These were purchased at once and more were ordered. Not long ago a report issued by the Department at Ottawa, spoke of the advance in potato culture in that district due to spraying for blight.

The failure of 1904 I ascribe to the following:

1. The plots did not appeal to the farmers because they were plots and not definite rows such as they had been brought up with.

2. The plots received better treatment than would fall to the lot of an ordinary crop, in fact they were called "pet plots." Also they were sprayed oftener than the farmer would ordinarily find practicable.

3. Being small the plots were plain

ly liable to magnify error in either direction.

4. The farmers looked askance at a demonstration carried on solely by a paid demonstrator under unusual conditions.

The first three reasons are simply mentioned in passing, the kernel of the matter lies in the last and leads me to the suggestion that shall conclude this article. At least seventy-five per cent. of the success of 1905 was due to the fact that I was co-operating with a resident potato-grower. It would have been better had the whole demonstration been conducted in his field and by himself alone, but other considerations prevented. However, my experience has led me to believe that a system of demonstrations carried on by local farmers, with proper scientific advice, but under normal local conditions, is bound to carry with it the conviction necessary to general imitation. This scheme does not minimize the importance of demonstration farms as such. Indeed its tendency should be to strengthen the hands of the demonstrator as a result of the educative influence of the local demonstrations. If some means could be found to establish these as supplementary to the demonstration farms the percentage of indefinitely curious, not to mention prejudiced, visitors to the latter would be materially lessened. Lastly, the work has passed the experimental stage in many of the states south of us, where it is pronounced a beneficent factor in spreading the knowledge gained at experimental farms and stations.

## The Tariff

[Editor's Note.—The Review is always willing to publish the opinions of any ex-student on any subject, but assumes no responsibility for such views.]

R. J. DEACHMAN.

PROTECTION as embodied in our Canadian tariff is an unmitigated curse. It is a combination of callow selfishness, flagrant thievery, and downright black injustice. I write these things with my pen on edge, and if I could put some shriller, double-tongued venom into my writing fluid, just take my word for it, you would see it there. Take note, though, I make no promise of being judicial in the presentation of my case. I simply want to hold the brief of the prosecuting attorney, and if there be those who think that argument can be framed to justify the graft called protection, let them busy themselves with the framing thereof, and for comfort's sake let me add that on that side are the crackers and sardines, and those who fight for the cause may, if the gods are kind, fare sumptuously on the crumbs that fall from their master's tables.

I said this thing miscalled protection was founded on callow selfishness. I repeat it—so it is. You never yet did see a protectionist who did not want to purchase his raw materials wherever he could buy the cheapest. We have here in Vancouver a manufacturer of sugar. Protectionists claim that we are blessed by the honor of his presence by virtue of the tariff. It may be, but for the life of me I cannot see that the blessing is one for which we should be specially grateful. He, 'tis true, doth on special occasions take full page advertisements in which he rants much on supporting home industry, on loyalty, and kindred subjects relative

to bank accounts, yet he buys his fire insurance in New York, and just so recently as last winter asserted most vociferously that he would purchase anything he wanted wherever he pleased without preferential regard for flag or country. That bordereth some on callow selfishness when you remember that he wants protection for himself, and would, if he could, compel us to buy our sugar from him.

Then there is another case. This is more widely known, for as Shakespeare has it, "I gave it bold advertisement." The Lumbermen—please send them all marked copies of this paper as I know they would like to hear of this again—passed last winter a resolution in which in language most grandiloquent they asserted, "The inalienable right of the Anglo-Saxon to purchase what he wanted wherever he pleased." I do not know for certain, but I feel that I am safe in saying that when they had passed unanimously this resolution, they broke forth into that ragtime song, "I want what I want when I want it." At least this much is certain they immediately afterward passed a resolution calling for higher protection or lumber, and this summer they told the Premier that the people on the plains were rich and they wanted their money. That sure is going some towards selfishness, isn't it?

Protection is flagrant thievery. According to one good man who is competent to judge as any man I know, protection costs each farmer about \$300 a year. My own idea is that this figure is away under the mark when

you apply it to the West. That much is taken from one class and given to another class. That is thievery or piracy or looting or whatever you like to call it—further it is slavery. My definition of the latter word may be wrong—trim it with your Webster and see. My own idea is that you are in slavery if a master takes a hundred per cent. of your labor and then gives you back enough to keep alive on and serve him still. That is complete slavery. If the master takes 50 per cent. you are one-half slave; if one-tenth per cent. you are one-tenth slave. So if you take the cost of protection into consideration, and know your income, you can figure the amount of your carcass which belongs to the favored of the government. I feel that it is flagrant thievery for these fellows to take me and not even pay for me.

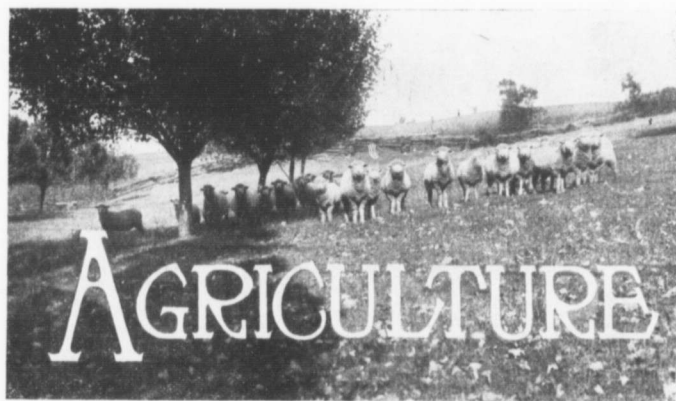
Did I hint that there was black in justice about this game called protection? Well here is one of the blackest spots. Mull over these stray musings and form your own conclusions. The railway is a public service corporation. It transports goods from one section of the country to the other, and it charges a uniform price for the service. The largest shipper can get no drawback or rebate or handout or anything of that kind. This is part of the law of the land for it would be an injustice of the worst kind for favored shippers to get an unfair advantage.

The Dominion Government which passed this law takes a different view when the tariff is under consideration. Do you know that the farmer pays duty on imported iron and steel. So does the manufacturers, but all or nearly all of the duty collected from the

manufacturers is handed back to them under a "drawback" clause in the tariff. Do you like it? When is a criminal rebate arrangement not a criminal rebate arrangement? If you let me answer my own question I will say "Never"—not even when it is done by the will of the Government of Canada.

If you believe in the protective theory you may say that I fight by example, that I do not in laying down these charges follow any broad principle—that I only exhibit for your gaze a few malignant ulcers on the protective system, but do not expose the disease. "A tree is known by its fruit," and if the protective system countenances, as it does, injustice and unfairness, it cannot fail to be an evil force in Canadian national life. I listened to the twaddle of the chappies who want protection when they assembled at their annual gabfest in this city a few months ago. The substance of one fellow's cold remarks was "We should not try to tell the farmers that this thing will benefit them—we must go at it by telling them that the country needs the revenue."

So the interests associated in advocating protection are also a unit in advocating extravagance. It is the policy of the protectionists—known and admitted in every land where the cult holds sway—to urge extravagance, to encourage militarism, to develop navies a mile long in order to get a tariff a mile high—to foster privilege and to hamper democracy. These things hold no place in my conception of the future Canadian nation, so I damn with alacrity at every possible opportunity the development of the protective principle in our Canadian customs tariff.



## The Ontario Provincial Winter Fair

**G**UELPH has had many grand winter shows, but all those who were privileged to be present at the 1910 show were unanimous in saying that it was bigger and better than ever. Not only were there a greater number of animals of all classes shown, but the quality of these animals was also far superior to any previous exhibits. All the available space in the large fair buildings was filled and many horses had to be taken to outside stables while the sheep were badly crowded together and the whole building had an appearance of being just a little small to accommodate all the stock.

As far as attendance goes this year's fair was a record breaker, it being estimated that upwards of thirty-five thousand people visited the show. Large crowds were present each day, but it was on Wednesday that the building was taxed to its utmost capacity and it was with difficulty that one could make

his way through the dense mass of humanity struggling to get a glimpse at a prize winning bird or animal. The seating accommodation around the judging arena was inadequate to cope with the crowd and as one of the most educative features of the show is seeing the animals being placed by expert judges, those in charge of the fair should provide space for everyone to see the awards being made.

The horses were the great centre of attraction and so they deserved to be, for they were a grand aggregation. Of course the ever popular Clydesdale predominated, but there were also some massive high quality Shires present. Light horses were also present in large numbers; Hackneys, Thoroughbreds and Standard-breds, each being represented by high-class specimens, and each having their admirers. The champion Clydesdale stallion of the show was Sailor King, owned by Graham Renfrew Co., of Toronto. He is a dark



brown, with splendid feet, pasterns and bone, and strong, straight and true action, and is, in fact, one of the best horses in Canada. The reserve was Craigisla, owned by the same firm, and a right good horse. The premier mare was found in Baroness Insch, exhibited by Smith & Richardson, Columbus, Ont. She has plenty of size and is brimful of quality, and deserved to win. The reserve in the class was Zulerka, shown by John A. Boag & Son, of Queensville. The champion for Canadian bred Clydesdales was awarded to Smith & Richardson, on their yearling stallion, and to Alex Graham, of Oro, on his filly.

In Hackneys, the competition was very keen and the large crowds present became so interested that the judging arena was filled time and again with ringing cheers as some particular favorite showed his action before the judges. Two hackney pony stallions faced the judges in one class, and they are without a doubt the best pair in Canada. After considerable deliberation the prize went to Graham Renfrew Co's Plymouth Horace, the undefeated champion of Canada, and the highest, truest going pany ever seen at Guelph show. The Hackney Stallions had as premier horse Derwent Per former, exhibited by G. H. Pickering, of Brampton, the reserve going to King Chocolate, owned by A. Yeager, of Simcoe. Both these horses are good movers and have excellent conformation, and it was with great difficulty that the winner was picked. In Hackney mares Model Queen, exhibited by J. F. Husband, of Eden Mills, was an easy winner.

Space will not permit of a detailed account of the other breeds more than to say that Gardhouse, of Weston, had the champion shires, and that the

standard breeds and thoroughbreds were represented by the best specimens our country can produce.

The cattle were also a great attraction and never before have so many good individuals come together at the winter fair. Shorthorns and Short horn grades were perhaps in the majority, but the Hereford, Galloway and Angus were also there, and always to be reckoned with in the awards. The grand championship was awarded to the Shorthorn steer "Roan James," bred and exhibited by James Leask, of Greenbank, Ont. This steer was reserve champion at the Chicago International. He is a low set, deep, thick steer, very thickly fleshed and exceedingly smooth, and were it not that he handled a little softer than the American judges like, he would doubtless have been grand champion at Chicago.

Hogs, always out in large numbers, were more numerous than ever, York shires, Berkshires, Chester Whites, Tamworths and Hampshires making a strong showing. The length of the individuals, the spring of rib, smoothness of shoulder, lightness of jowl and neatness of ham all go to show that the bacon hog is the hog for Ontario farmers. In the dressed carcasses, Brethour won the sweepstakes and also the pure bred prize on two York shires, while Jas. Wilson & Son, of Fergus, won on the grades and crosses.

Sheep made a good showing, but would have been seen to far greater advantage had they been allowed more space. Cotswolds, Lincolns and Leicesters upheld the honor of the long woolled breeds, while the short or medium woolled breeds were represented by Shropshires, Southdowns, Ox fords and Dorsets, excellent individuals of all these breeds were present, as

seen both in the pen and in the room where the carcasses were hung up and much interest was shown in this important class of live stock.

Poultry, as usual, was present in increasing numbers and was just as noisy as ever, but received its share of attention from those present, some of whom stated that it was the greatest poultry show in America.

As a part of the fair the lectures given in the lecture-room are deserving of mention. From the time they began on Tuesday afternoon until the close of the fair, the lecture-room was filled with a large and enthusiastic audience, who listened attentively to the lectures given by experts in their different branches and who were there

to spread broadcast what they had learned of their particular subjects. Judging by the questions asked those present received a great deal of valuable knowledge at these meetings.

The student-judging competition, like the rest of the show, was a great success, and the winners were fairly well divided throughout the four college years. With some it is still a question whether or not these competitions are very educative, but if they are not, in a sense, educative, they serve to give those who enter them experience, and whether they get in the money or not they certainly get value for their entrance fee many times over in the experience gained.

W. T.

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## The Chicago International Fat Stock Show

**A**NOTHER International Exposition has passed into history.

It is a commonly expressed opinion on all sides, that it excelled all previous years; not only in the number of entries, but also in the quality of the stock, the keen competition for honors among the breeders of the various classes of live stock, and in the interest that the show aroused throughout all America. This fact goes to prove, that this exhibition is becoming more and more recognized by breeders and fanciers of live stock, as the most important event of the year in the live stock world. It not only is a means of the breeders advertising their stock, but also a stimulus for them to breed the best possible, in order to keep in the company in which they find themselves placed, when exhibiting at this great show. Along

with all this, it undoubtedly stands pre-eminent as a means of educating farmers and stock raisers of the United States and Canada, by raising the standard of their ideals, and by fixing in their minds the type of animals bred by our best stockmen.

The horse department has reached a high state of perfection, and showed an improvement over previous years. The horse fancier, whatever his favorite breed might be, from the massive Percheron down to the little Welsh ponies, could not be otherwise than well satisfied with the showing of the splendid individuals representing the various breeds. The development of the Belgian horse in the past few years, from a rough, heavy-boned animal to the present high class draft horse, as seen on exhibition this past year, has been little short of phenom

enal. Similar improvements have been made by the breeders of the Percherons, and the fine classes of animals of this breed at the show this past year seem to now possess about all the desirable characteristics that go to make up first-class draft horses. The Clydesdales, the old favorite draft horses, show that the breeders of these have not been asleep while others were progressing. The improvement in general appearance, in style and action, accompanied by a marked improvement in quality of bone, reflect credit on those who have been working with this breed, and have brought it to its present rank among the draft horses.

A prime feature of the show was the success of Graham Bros., of Claremont, Ont., who won practically every thing in the Clydesdale classes, winning two championships, sixteen firsts, and two seconds, including seven specials for animals bred in Canada or the United States. Their success is indeed praiseworthy, for they were competing against the best importers and breeders on the continent.

It is impossible to go into details of the cattle exhibit, in the small space allotted to this article. The grand champion fat steer was again a grade angus. The honor of producing this animal going to Iowa Agricultural College at Ames. Mr. James Leask, of Greenbank, Ont., was a close second, and won the reserve grand champion ship with his short horn steer "Roan James." Those who were privileged to see and handle this fine animal will appreciate the high position Mr. Leask holds as a breeder and fitter of this favorite breed of cattle. He deserves great credit for the honor he has brought Ontario as a live stock province, by producing an animal of such a high standard of

perfection, as he has this year, and in previous years as well.

Canada upheld its reputation in the sheep department, easily carrying off the honors by winning the grand championship, as well as many blue ribbons in the other classes. The grand championship prize went to the Huntley Wood Farm, Beaconsfield, Quebec. It seems rather strange that sheep raising should have dropped off in Canada as it has, when we possess a climate and country so suitable to the production of high-class animals. There is little doubt but what in time this industry will be given the attention that its importance merits, and the winning of championship prizes year after year at Chicago should help to hasten that time, by bringing to the attention of our farmers the possibilities of sheep raising in Canada, and the remunerative returns that many are receiving from fitting lambs for market.

In swine, the American type of fat hog was, of course, predominant; but it was also noticeable that the breeders are getting more and more away from the excessive fat type, and breeding more to quality. The lighter hog is fast gaining favor in the American market, hence the tendency to get away from the extreme heavy fat type. The trim bacon hog that is the feature of Canadian exhibitions, was conspicuous by its absence at Chicago. A few pens of Yorkshires were on exhibition; but their type and quality seemed to at once suggest, that they were outcasts, as far as having any attention paid to their development as a type of market hog was concerned.

Our Live Stock Judging Team again journeyed to Chicago to compete in the International Judging Contest; and although their rank among other

colleges was not as high as last year, yet in number of points they stood higher than any previous Ontario team. This seems to prove that the standard of excellence is being rapidly raised from year to year; which, no doubt, has resulted, partly from the fact that most of the other colleges are keeping typical animals of the various breeds, that they are obliged to judge, right at home on the college farm; and partly because of the experience that their men have gained from entering judging contests at the different state fairs before judging at Chicago. It seems that the only reasonable method to adopt in order to overcome these disadvantages with which

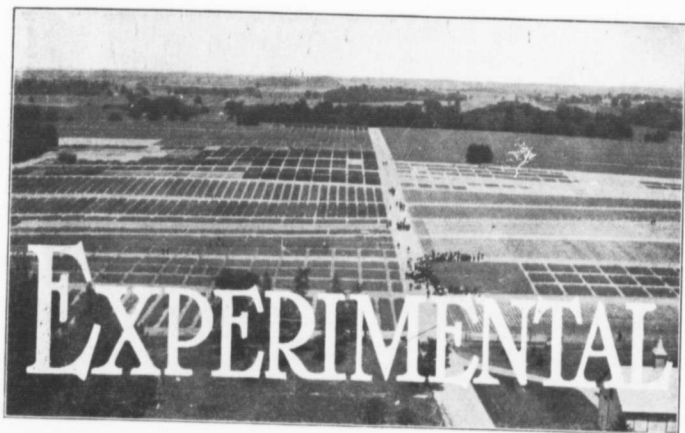
our students undoubtedly have to contend, is to keep these classes of stock at the College here, so that the team may become familiar with them, and not find it necessary to judge animals that they are everything but familiar with. This being done we would be placed more on an equal basis with the other colleges which cannot be said of us at present. Our team is supervised and coached by instructors second to none in America, and Ontario students are stronger in Animal Husbandry than those of any of the other colleges. All we lack is the stock with which to work, which should be a comparatively easy matter to remedy.

E. BRADT, '12.

#### ON THE COMPANIONSHIP WITH NATURE.

Let us be much with nature; not as they  
 That labour without seeing, that employ  
 Her unloved forces, blindly with joy;  
 Nor those whose hands and crude delights obey  
 The old brute passion to hunt down and slay;  
 But rather as children of one common birth,  
 Discerning in each natural fruit of earth  
 Kinship and bond with this diviner clay.  
 Let us be with her wholly at all hours,  
 With the fond lovers zest, who is content  
 If his ear hears, and if his eye but sees;  
 So shall we grow like her in mould and bent,  
 Our bodies stately as her blessed trees  
 Our thoughts as sweet and sumptuous as her flowers.

—Archibald Lampman.



## Ontario's Co-operative Experiments in Agriculture for a Quarter of a Century

C. A. ZAVITZ.

Professor of Field Husbandry Agricultural College, Guelph.

**T**HE Ontario Agricultural and Experimental Union was organized in 1879 by the officers, ex-students, and students of the Ontario Agricultural College. The original objects of the Association were "To form a bond of union among the officers and students, past and present of the Ontario Agricultural College and Experimental Farm; to promote their intercourse with the view to mutual information; to discuss subjects bearing on the wide field of agriculture with its allied sciences and arts; to hear papers and addresses delivered by competent parties; and to meet at least once annually at the Ontario Agricultural College."

It will be seen that no reference is here made to co-operative experimental work. This feature was added

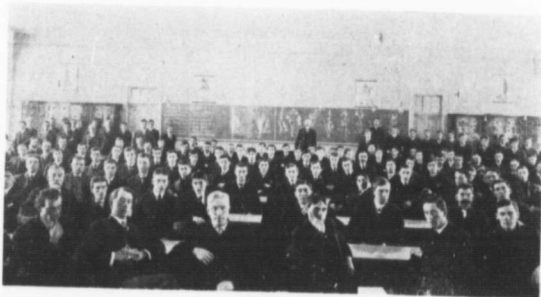
a few years later, when it was seen that some work of this character might be added to advantage. In 1886, experiments had been carried on at the College for a period of ten years. The information thus obtained formed an excellent foundation for the establishment of a system of co-operative experiments amongst the farmers of Ontario. A study of the farming methods of the Province showed the need of some direct assistance to the farmers in the development of a better agriculture. It was thought that an excellent way to bring this about would be to introduce the co-operative experimental feature in connection with the Experimental Union, which was comprised of energetic young men who had had the advantage of a training at an agricultural college, and had be

come fairly familiar with accurate methods of conducting experimental work. At that time a committee was appointed to assist in getting a plan of co-operation established. Through correspondence with the members of the Association, arrangements were made by which twelve of them undertook to conduct experiments with fertilizers and field crops on their own farms in the year 1886. From that time forward, the work has had a steady and substantial development.

#### Nature and Plan of the Work.

The great object of the co-operative experimental work in Ontario is to

Ontario Agricultural and Experimental Union. The great bulk of the co-operative experiments have been conducted by the farmers themselves upon their own farms. It is pleasing to be able to state, however, that the Union has secured the co-operation of other interested people. Officers and members of the Farmers' Institutes have, in some instances, united in carrying out a large number of co-operative tests in connection with their local organizations. The directors of some of the Agricultural Societies have arranged for the growing of experimental crops on the exhibition grounds and these



SHORT COURSE CLASS IN SEED JUDGING, 1910.

help the farmer to help himself. Its aim is to encourage the farmers of all classes to do better work for themselves and for others, than they have been doing in the past. It endeavors to give men a deeper interest in farming, a higher opinion of their occupation, a greater appreciation of their responsibilities, an opportunity for making more money, and the means by which they can take a more prominent part in the progress and the development of their country. The co-operative experimental work is operated jointly by the Ontario Agricultural College Experiment Station and the

have been used as object lessons at the time of the autumn fairs. Some of the Public School Inspectors have encouraged this work in their various school sections, either in the school grounds or at the homes of the pupils living in close proximity to the school buildings. Besides these, various seedsmen, editors, agricultural representatives in the High Schools, and others have taken up the work with a good deal of enthusiasm, have obtained object lessons and definite information which have proven very serviceable. The Experimental Union opens up a channel through which

some of the best material of the experiment station can be brought to the homes of the farmers. It makes direct application of the information gained at the station, by having experiments conducted on hundreds and even thousands of farms, and it systematizes the co-operative work in such a way that the results of these experiments which have been conducted with care and accuracy can be summarized and made into valuable reports for the guidance of farmers generally. It introduces improved methods of farming along various lines. It combines in an admirable way the training of the hands and the training of the intellect. It is probably not too much to say that it is one of the greatest educational features which has ever been introduced throughout the rural districts of Ontario.

In the system which is being carried out in Ontario, the results of experiments and investigations carried on at the experiment station form the basis for the selection of the materials used for the co-operative experiments. These materials consist of seeds, tubers, plants, fertilizers, and in a few instances chemicals, thermometers, rain-gauges, etc., which are forwarded to the experimenters by mail, by express, or by freight. Close attention has been given to the methods of conducting the experiments, and printed instructions for conducting the tests along with blank forms on which to report the results are forwarded to every person undertaking the work. From the beginning, the co-operative experimental work of the Union has been directed and controlled by circulars and letters, printed and written, which have been transmitted through the mails. Personal letters are also used frequently to give encouragement and friendly

advice to those especially who are entering upon the work for the first time. When personal visits have been made to the experimenters, the object has been to enable the director to study the difficulties of those actually engaged in the work, and thus to be in a better position to know the best methods to adopt in the printed instructions rather than to take any part in the immediate control of the practical operations of the experiments. We believe that this is a wise move, as it places the men upon their honor and tends to bring out the best that is in them. Every man is made responsible for his own experiment and is urged to do the very best he can for himself, for his neighbors, for the Experimental Union, and for the country. A pleasing feature in connection with this work is the fact that many persons, who at first took but little interest in the experiments, have afterwards proven themselves to be most valuable experimenters and have shown great care and accuracy in the details of their work. The names of those who conduct the experiments with the proper amount of care and accuracy, are placed in our record book of successful experimenters, and these individuals are carefully looked after in the future. Great care is exercised in planning the various co-operative experiments in such a way that they can be successfully undertaken by the people who are to be benefited thereby. Some experiments are comparatively simple and some are more complicated, but in every case the work is made as clear of comprehension, as definite of purpose, and as simple in method of operation as is consistent with the objects desired. It has been the constant aim to make all experiments as interesting, as valuable, and as instructive as it is

possible to make them. It is probably due to the care taken in the selection and in the planning of the experiments and to the kindly interest manifested toward the experimenters themselves that the co-operative work has become so extensive in its operations, so popular among the people, and so far reaching in its results. The reports of the co-operative tests are very carefully examined, and those which are complete and show carefulness and reliability throughout are summarized. The average results and the special features of the various experiments are presented and discussed at the Annual Meeting of the Experimental Union. The results thus presented along with the discussion thereon are printed in the Annual Report of the Union, of which about 30,000 copies are issued and distributed amongst the experimenters and amongst the farmers generally.

#### Development and Extent of the Co-operative Work.

Although the co-operative work had a small beginning and was at first confined to the testing of a few crops and fertilizers, it has increased until it now includes thousands of experimenters. From time to time new lines of activity have been added until many branches of agriculture have been included in the system. The following gives the year in which the co-operative work in the various departments was started:

1. Field Husbandry.....	1886
2. Horticulture .....	1888
3. Dairy Husbandry .....	1889
4. Agriculture .....	1889
5. Live Stock .....	1890
6. Economic Entomology .....	1892
7. Economic Botany .....	1893
8. Soil Physics .....	1897
9. Poultry Raising .....	1899
10. Forestry .....	1901

11. Agricultural Chemistry.....	1904
12. Rural School Gardens.....	1908

Under six of these headings, work has been conducted continuously since it was first started. In the other branches it has been somewhat irregular, owing to various reasons. It will be seen that the co-operative experiments in Field Husbandry or Agronomy have now been conducted throughout Ontario for a period of twenty-five years.

#### The Experimenters.

The co-operative experimental work in Ontario has been purely a volunteer movement from the start to the finish. No financial help whatever has been offered any person to undertake and carry through the co-operative work. The materials for the experiments, the instructions for making the tests, and the blank forms for reporting the results are furnished free of charge to those who ask to join in the work.

Experimenters in crop production use the soil on their own farms, conduct the experiments themselves, and report the results to the director of that particular branch of co-operative work in which they have enlisted. In those experiments in which crops are produced, the produce is retained by the experimenters as their personal property, except in some instances in which small quantities are returned to the College for comparison. Particularly in the departments of Field Husbandry and Horticulture, the volunteer experimenters consist of farmers of various attainments, including both men and women, highly educated and self-educated, old and young, married and single, rich and poor, who are doing the work according to their own peculiar circumstances. Some of the volunteer experimenters have carried out their work with great skill and ac



curacy and have reported the results of their valuable work in each of ten, twelve, or even fifteen years. About three thousand of them have now become trained in the work from their experience in conducting experiments in previous years.

### How the Co-operation of the Farmers is Secured.

Early each year, circulars outlining the co-operative work are distributed by the various committees appointed by the Experimental Union. Those invited to take part in the scheme of co-operation may be classified as follows:

1. The officers and students past and present of the Ontario Agricultural College, who pay an annual fee of fifty cents, and who have control of the executive work of the Experimental Union.
2. The experimenters of former years who have done satisfactory work.
3. Leading farmers, fruit growers, gardeners and others, whose names have been furnished by inspectors of the Public Schools, the secretaries of the Farmers' Institutes and Agricultural Societies, the agricultural teachers in the High Schools, and others.
4. Farmers who have seen the experiments of their neighbors and who wish to join in the work.
5. Various persons throughout the Province who have seen or heard reports of the work and who wish to assist in the movement by conducting experiments on their own farms.

As a general rule, the circulars are distributed in the order here given, starting first with those who have been connected with the College and following with those who have become

trained in the work by past experience, and the experimental material is sent out in the order in which the applications are received.

### The Number of Experimenters.

In 1910, the co-operative work was conducted on farms throughout Ontario in agronomy, horticulture, poultry raising, forestry, agricultural chemistry, apiculture, and in connection with the Public Schools in Elementary Agriculture, Horticulture, and Forestry. The co-operative work in Agronomy has been conducted for a longer time than that of any other department. In Agronomy alone there have been 58,812 distinct tests made throughout the Province since the work was started twenty-five years ago. Each of these tests consisted of from two to ten plots. The increase in the number of experimenters in Agronomy can be seen from the following figures which show the average yearly number actually engaged in the work in each of the five five-year periods during the last quarter of a century.

Five Year Periods.	Average Annual Number of Experiments.
1886 to 1890.....	71
1891 to 1895.....	1,060
1896 to 1900.....	2,992
1901 to 1905.....	3,379
1906 to 1910.....	4,278

It will therefore be seen that during the last five years the co-operative experiments in Agronomy have been conducted annually on an average of 4,278 farms, the greatest number in any one year being 4,856.

### The Finances of the Experimental Union.

The cost of the co-operative experiments is paid conjointly by the Experiment Station and the Experimental

Union. The Station pays for the most of the labor and for some of the material, and the Union for the bags, labels, printing, postage, stationery, expressage, freight, etc., and also for part of the material required for the co-operative work. The Union receives a special annual grant from the Government which is increased from time to time as more money is required. The first Government grant to the Union was made in 1888 and amounted to \$75.00, and the grant for 1910 amounted to \$2,750. All the executive work of the Experimental Union is confined to the officers, ex-students and others of the Ontario Agricultural College who pay an annual fee of fifty cents. These fees assist in the work of the Association. Besides paying for the co-operative work, the grants are also used for advertising and reporting the Annual Meeting and for other expenses in connection with the Organization. The Annual Report is printed and distributed by the Provincial Department of Agriculture.

#### **Co-operative Experiments in Field Husbandry in 1910.**

There were in all, thirty-nine separate and distinct lines of co-operative experiments conducted throughout Ontario during the present year. These included spring and fall grains; root crops; forage, fodder, silage and hay crops; culinary crops; the growing of grains, grasses and clovers in different combinations; the application of commercial fertilizers and farmyard manures, etc. Most of the plots were one rod wide by two rods long, being exactly one-eightieth of an acre in size. Formerly some of the plots were considerably larger, a few being as large as one-half of an acre each, but these gave less satisfaction than the smaller

plots. It is very difficult indeed for the experimenters to give the accurate weights of the crops produced on large sized plots. With the smaller plots, experiments can be kept more completely under control, and more definite results can be obtained.

The system of co-operative experiments here described is very different from a system of seed distribution where no definite instructions nor systematized plans are given for conducting accurate work and for reporting the actual results. An observant person would probably notice that the former has many commendable features not found in the latter, and that the latter has some objectionable features which are not included in the former.

#### **Value of the Co-Operative Experiments in Ontario**

It is impossible to determine the value of the co-operative experimental work in the Province of Ontario. It is very difficult indeed to even make an approximate estimate of the influence of this feature of extension work. It might be in place, however, to draw attention to a few agricultural features which have undoubtedly been influenced more or less by the work of the Experimental Union.

According to the statistical report of the Bureau of Industries of Ontario, the average annual increase in yield of grain per acre for the whole of Ontario during the last twelve years, as compared with the twelve years previous, has been 11.3 per cent. in winter wheat, 15.1 per cent. in oats, and 22.7 per cent. in barley. The increase for the oats alone amounts on the average to \$11,029,258 annually. In the last twelve years the market value of the barley of Ontario has increased from \$3,245,880

to \$10,943,788. The introduction of the Mandscheuri barley through the Experimental Union has had much to do, not only in the actual increase in the yield of grain per acre, but also in the increase in acreage of barley grown throughout the Province.

The Experimental Union has led the farmers to feel that the Experiment Station is working for their good, and has thereby caused a deeper interest in the work of both the station and the college. The interest in the institution is shown by the fact that the Experiment Station is now visited annually by about 40,000 of the farmers of the Province. The work has helped to overflow the college in both the long and the short courses until the number of students who took up agriculture or domestic science in 1909 numbered upwards of 1,200, and the prospects are that there will be about 1,500 registered in the present year.

It has been my privilege to be directly and intimately associated with the co-operative work of the Experimental Union since its start in 1886. From what I have been able to observe from my experience as a practical farmer, from my study of agricultural condi-

tions, from my connection with the Ontario Agricultural College for over a quarter of a century, and from my visits to over one hundred agricultural colleges and experiment stations, in different parts of Europe, the United States and Canada, I am convinced and thoroughly convinced that valuable results can be obtained from co-operative experimental work, which cannot possibly be secured in any other way. I commend this system of co-operation as one of the most important lines of extension work which can be carried on in any agricultural country where a thriving experiment station is in existence. I had strong faith in the value of co-operative experiments before our work was started in Ontario and that faith has been gradually increasing from that time to the present. The system in operation in Ontario is exerting an influence which is wholesome in its character, extensive in its operation, and far-reaching in its results. It deals with the farmers themselves as well as with the materials used in farming; with living, thinking, active men as well as with animals, plants, seeds, fertilizers and soils. Its tendencies are to improve men and to help men to improve agriculture.





## The Improvement of the Strawberry

E. W. HEURTLEY, '11.

**T**HE modern varieties of strawberries are derived from four sources, viz.: 1. *Fragaria vesca*, the alpine or brood strawberry, a native of Europe and America. It has prominent seeds, conical fruit, great hardiness, few runners, and long fruiting season.

2. *Fragaria elatior*, Hantbois strawberry, a native of Central Europe, with the following characteristics: Greater size than *F. vesca*, round or oblate fruit with a musky flavor, prominent seeds, rather shy bearer.

3. *Fragaria Virginiana*, a native of the New England States, its seeds are deeply embedded, and its fruit is roundish to conical and highly perfumed. It is quite hardy.

4. *Fragaria Chilensis* or *grandiflora*, a native of Western America, from Oregon to Chile, its seeds are set in shallow depressions, its flowers are larger than those of the other varieties, and are not self-fertile. It is not very hardy.

Most of these characteristics may be recognized in the cultivated varieties of to-day. From *F. vesca* and *F. Virginiana* we get hardiness. *F. Chilensis*, size; from *F. vesca*, the

"ever-bearing" so-called, habit. The musky "foxy" flavor obvious in many seedlings would seem to come from *Fragaria elatior*.

Of the Virginian strawberry it was said that God could have made a better berry, but he didn't. Man, therefore, set about the task, and has not been unsuccessful. Early in the 17th century the best of the New England varieties were taken to Europe, and there, owing to their large size and better quality, found great favor. From them the best varieties of modern times have come. It was found that seeds from these gave new and improved kinds, and after the introduction of the Chilean varieties many seedlings and hybrids were produced, which displaced all previous sorts. The first varieties to be cultivated commercially were "Keen's seedling," "Wilmot Superb" and "British Queen," the latter still being a favorite in England. On this continent the first large berry introduced was "Horey's seedling," and later the "Charles Downing," "Green Prolific," "Kentucky," "Crescent," and "Wilson's Albany." The last two are still well known.

The best recent production in Eng

land is the "Laxton," a very early berry possessing size, quality, firmness, hardness and vigor. It traces its descent through "Royal Sovereign" and "Sir Joseph Paxton" to "Noble" and "King of the Earlies," getting flavor, color and shape from "Paxton" and earliness from the other three.

In Canada a great deal of work has been done by Professor Macoun, Dominion Horticulturist. He has produced numerous seedlings, among which are some very promising varieties.

As the market for straw berries has grown so has the area under cultivation, and with the area under cultivation the number of varieties in the attempt to find berries suited to all conditions of soil and climate and for all purposes. While it is true that the straw berry will do moderately well through a wide range of soil and climate, there is always one kind which seems especially suited to every set of conditions. Hence, there is a demand for very many varieties, and moreover since the fruit has come into such universal favor, there has come a call for varieties especially suited for different purposes, early, midsummer, late, forcing, shipping and canning. Now it is in the attempt to find the varieties best suited to all conditions and for all purposes and at the same time possessing all the qualities of the ideal berry that the plant hybridist patiently pursues his task.

Like every other breeder he must constantly have his ideal in view. An ideal plant should possess the following qualities: 1. *Fruit Flavor*, which for

a dessert berry should be rather sweet, while for canning a considerable amount of acidity is not undesirable. 2. *Firmness*, that will enable the fruit to ship well and to remain whole when canned or preserved. 3. *Color*, a rich uniform red which will not disappear when cooked, as white berries do not look so attractive in syrup. 4. *Size*, large and well-maintained throughout the season. 5. *Form*, roundish, conical, regular and uniform. 6. *Seeds*, small,



HYBRIDIZING AT JORDAN HARBOR.

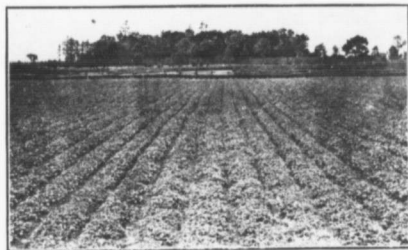
few, not prominent. 7. *Core*, small, tender. 8. *Season*, very early to very late. *Flower*, on stout stalks, bisexual, with abundant pollen. In addition the plant should be hardy, vigorous, productive, drought and disease resistant.

The process of hybridization in straw berries is similar to that in other plants. Both the male and female flowers chosen for parents are bagged just as they are opening, the female parent flower being emasculated just previously.

As soon as the pistils are receptive the pollen bearing flower is dusted over them, and each flower is rebagged until the pistils begin to swell and fertilization is complete.

Immediately the fruit ripens the

seeds are sown in light soil in flats, and kept continually moist. They germinate in from 4 to 6 weeks. When the plants begin to crowd they are pricked out and to get the quickest results are potted and kept growing late in the season in cold frames. They will then fruit the following season. The usual way, however, is to plant in rows the first season, giving each plant a number and carefully recording its parent age.



PART OF A SIX-ACRE FIELD.

No runners are allowed to grow and careful continuous cultivation is given. The second year the runners are still kept off, and the plants are allowed to fruit. As every seed sown produces a different plant, a large number of varieties is obtained from a few berries. It is desirable to observe the fruit for at least three years, as very often its character changes considerably after the first year. In raising new varieties so many worthless fruits, or at all events so many showing no improvement over existing kinds, are produced that a very large percentage have to be discarded. Many new varieties are yearly put on the market, few of which survive the tests of the experiment stations.

During the last three summers considerable work has been done at the

Provincial Government Horticultural Experiment Station at Jordan Harbor, both in testing the suitability of old varieties to that district and in raising and testing new ones. It was the writer's privilege during the past summer to care for and make notes on 1,500 seedlings fruiting for the first time.

The majority of these were the results of crosses made with definite objects two years previously, as well as of selections of promising berries, the male parents of which were unknown. Very detailed notes were taken, and a mass of data obtained, which at the present time has not been systematised, so that only the most general results are yet available. The notes included the dates of first full, and last blossom, sex and average size, average number of petals, and amount of pollen, and the average number of blossoms per plant, the date of first, full and

last fruit, its quality, size, color and form, attachment of calyx, size and length of neck, size and character of core, as well as texture and flavor of fruit, and the position and size of clusters; the color and position of seeds; the surface, margin, texture, color, shape and size of leaf, the length and thickness of the petiole, the number of runners produced and the freedom of the plant from disease. These records were made comprehensive, so that, in addition to giving information regarding the new varieties, Mendelian characters, correlated variations and examples of atavism and degeneration, might be observed.

For observation work, the past season was not a good one, owing to lack

of rain, the berries all came in very much about the same time. All the work, therefore, had to be pushed and ordinary distinctions of ripening season were not marked. In making these notes, in order that they may be of comparative value the fruits and plants must be as nearly as possible at the same degree of growth, because a very slight degree of ripeness in the fruit often makes a very great difference in flavor, coloring, prominence of seeds, tightness of calyx, firmness of berry, etc., and there is a vast difference in the texture and color of leaves of different ages.

In the course of this work many purely staminate plants were noted. Though naturally, with the exception of some of the Hantbois and Chilian varieties, the strawberry flower is bisexual. Under the influence of cultivation it has become subject to structural alterations, and many unisexual varieties have been propagated, all of which of course are pistillate. The purely staminate varieties, however, are not uncommon, and to the unobservant appear in their early stages of growth very attractive, being generally very vigorous, healthy plants, and very productive of runners. Though they might be of some use for pollinating purposes for producing fruit they are of course worthless.

Four of the eight different crosses under observation were as follows:

1. *Michel's Early F x Senator Dunlap M*

—It was desired to obtain an extra early berry, with a darker color, a firmer texture, and greater vigor than is usually found in Michel.

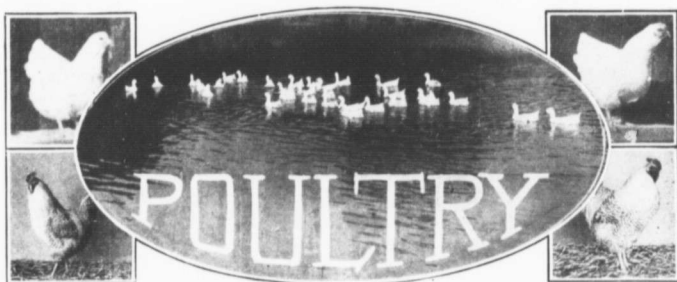
This cross and its reciprocal No. 3 were among the very earliest to fruit. The dark color of Senator Dunlap was conspicuous in all those having the best flavor, though no berry of any size was obtained, and only one combined flavor with earliness and quantity.

2. *Michel's Early F x Brandywine M*  
—This cross was made in an effort to combine the earliness of Michel with the color and flavor of Brandywine. These fruited somewhat later than the last cross, and though there were more of moderately good flavor, there were fewer grading first-class.

3. *Senator Dunlap F x Michel's Early M*  
—This cross is reciprocal with No. 1 and the results were somewhat similar, though there were more berries ripe early, there were also more ripening quite late, and not so many midseason. The color of Senator Dunlap was still conspicuous.

4. *Senator Dunlap F x Brandywine M*  
—Here it was desired to combine the earliness of Senator Dunlap with the color and flavor of Brandywine; though a few vary early ones were obtained, including one which began to fruit on the 10th June, the earliest of any, the majority were midseason. For flavor this cross was disappointing as many fruits grading No. 3 in flavor resulted, with a small proportion of No. 2, and very few No. 1. The color, however, was uniformly a rich dark red.

The results though not yet tabulated or worked out, serve to show that by persistent judicious selection and crossing, a great deal may be done towards producing a strawberry containing all the best qualities of those now known.



## Chickens on a Fruit Farm

S. H. CULP.

**T**O have the greatest success with chickens we must keep them in as near natural conditions as possible. For these conditions the fruit farm is ideal. The trees furnish shade, and the newly stirred soil furnish an abundance of insects.

The most up-to-date and best way to keep them is in portable colony houses, and on free range. These

a universal hover. Set enough hens at one time to have about sixty chicks to put out at once, which nicely fills a hover. In this way you have strong, healthy chicks from the start. Hopper feed grain during the summer and let them hunt insects for their meat supply. During the winter more attention is given to the feeding. We feed horse meat, which can be got at little



A GOOD PLACE FOR THE CHICKS.

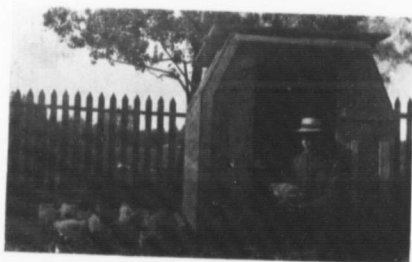
houses can be moved when desired, to keep them on fresh ground or away from ripe fruit. We prefer to hatch all our chicks with hens and raise them in a colony house equipped with

expense. Feed this meat sparingly as too much of it causes liver trouble, and in many cases diarrhoea, etc. Clean the houses at least once a week and be particular about cleanliness.



The labor required to care for chickens kept in this way is very small and the bulk of it comes at a time when the fruit grower is not rushed with other work. Practically the only labor during the summer, is to gather the eggs, and shut the houses at night and open them in the morning. All houses must be closed at night to prevent loss from coons, skunks, weasels and so on.

From our eighty hens we sold six hundred and seventy-three and one half dozen eggs for one hundred and eighty-three dollars and seventy-six cents, in the year, starting Oct. 1st, 1909, and ending Oct. 1st, 1910. That is after we had the eggs required for the table and for hatching, which wasn't a few, because we raised about two hundred and fifty chickens that summer. Besides these direct returns



In return for the free range, natural food, and conditions, and clean houses, you need not worry about disease as you have strong chicks and hens. We lose very few from disease. Our cockerels are nearly all marketed at the broiler age. Some of our first hatch were marketed when they were eight and one-half weeks old and averaged two pounds and one ounce each.

there are others, in the form of more and better fruit, as the chickens eat many insects that would destroy and damage the crop. The returns from the flock are good as was shown, and these returns are not only good, but they come largely at a time when other returns, on a fruit farm, are small and fit in nicely to pay living expenses.



## The O. A. C. Poultry Club

**O**f the various clubs organized in connection with the College, none has shown so great progress as the O. A. College Poultry Club. In the fall of 1908 a few enthusiastic poultry students, believing that the time devoted to the subject of poultry at the regular lectures was inadequate for their needs, began to discuss the advisability of forming a club.

The matter was discussed with the assistant at the Poultry Department and at last was submitted to Prof Graham who expressed himself as being in hearty sympathy with the movement. He promised all the assistance possible and offered the use of the poultry lecture room for the meetings which were to be held every two weeks.

The club was duly organized and the meetings held during the fall term consisted of addresses on various phases of the work. These addresses were given by Professor Graham, his assistants or some of the members of the club. After each address the subject was thrown open for discussion. The members usually entered heartily into these discussions and much valuable information was often gained.

In the spring term another feature was introduced which consisted in practical work in judging poultry. This was done on alternate Saturday afternoons. The work proved very interesting and brought the members in closer touch with the various breeds. When it was possible Professor Graham was present and discussed the placings with the class.

Still another feature was the fixing up of a reading room, down stairs beneath the lecture room. The reading

room was supplied with bulletins and Poultry Journals, to which the members had access at any time. Pictures and drawings adorned the walls and preserved specimens of diseased organs in the various stages of the diseases were placed on exhibition for the inspection of the members.

In the spring term of 1910 Mrs. Dawson, of London, Ont., generously contributed a cup and medal to be awarded to the victors in a White Wyandotte judging competition. This was supplemented by several books contributed by Professor Graham. A large number entered the contest and the judging was keen and creditable.

During the present fall term prizes were offered by the club for the three best pair of birds, killed and dressed by the competitor. This was open only to the senior students who were members of the club. Professor Graham commented very favorably upon the excellent work done in this contest.

This year the club has been made a life member of the American Poultry Association and will be able to keep in close touch with the doings of that great organization.

The membership of the club is gradually increasing. At its inception there were about fifty members. During the second year of its existence, the membership increased to about seventy-five while this last year it has increased to more than one hundred.

The addresses are not always confined to the members and the staff of the poultry department. Occasionally a visitor who has had experience in poultry work, is impressed into service, and this gives variety and interest to the meetings.

From the foregoing, one can readily see that the members of the club are active and are on the alert for all the information that may be had on the subject of poultry. And no wonder, since poultry raising has become an occupation by itself and the demand for good poultry and good eggs cannot be supplied and the prices are such, that a plant properly managed means dollars to the owner.

There are members of the poultry club who think that there should be a course instituted at the College for

the fourth year that would lead to a specialist in poultry. There are a number who would like to take their degree in that course and it does look somewhat reasonable when we consider the large amount of work that may be done in the subject of poultry.

However, the poultry club is doing good work and giving much information to its members in the way of management and organization of poultry work and its influence will soon be felt outside the College walls.

## The Ontario Poultry Show

**P**ROBABLY the best poultry show ever held on the American continent was the "Ontario" Poultry Show, held in connection with the Provincial Winter Fair, during the first week of December. Never before in the history of the show was there quality of such a high standard, and never before were there such a large number of entries. While these were not so large in some classes as in former years, still the total number of entries far exceeded that of any previous year. Competition was very keen in all classes and even where number seemed to be lacking, quality was of such a high order that many of the judges found difficulty in placing the awards, this was especially the case in all the American varieties where competition was centered mostly around the birds shown by breeders, who have had life long experience in breeding and conditioning birds for the show-room. The display of birds in the Mediterranean class was considerably larger this year than ever before. The breed

er of these varieties had probably stronger competition both in quality and numbers than any of the other exhibitors. In fact quality in the Leg horns was so good that one White Leghorn cockerel of excellent type and color, with good comb, yen and legs, was considered the best bird in the show, and would easily outscore any of the other birds shown.

The ornamental breeds, pigeons and pet stock, were about as well represented as usual. The exhibit of turkeys, ducks and geese was a little larger than usual this year, and competition was quite keen in all classes. The exhibit of dressed poultry was smaller this year than other years. The quality of dressed chickens was, however, very good, but the turkeys, ducks and geese were few in number and what were there were only of ordinary quality.

We might add by way of criticism that the time seems to have come when exhibitors must cease to trim combs, paint wings, and color legs if they

want to win out in any competition. Many a bird was this year disqualified on this account. When the sharp eye of the judge detects any attempt at faking, he is compelled to throw the bird out of the competition. This is a common practice among poultry fanciers and when detected should be

promptly acted upon by all judges. Another lesson learned by some of the exhibitors was to condition their birds properly before putting them into the show room. Quite a few birds were placed down or left unplaced altogether owing to not being in proper show condition.

M. C. H.

#### PAST AND FUTURE.

The Past!—In even our oldest songs,  
 Regret for older past appears,—  
 The Past with all its bitter wrongs,  
 And bitter, buried years;  
 With all its woes and crimes and shames,—  
 Its rule of sword, and king, and cow!—  
 Its scourages, tortures, axes, flames,  
 And myriad murders foul!

The Future! To our latest lays  
 A common strain of longing clings  
 For future nights, and future days,  
 And future thoughts and things.  
 The Future! Who of us will see  
 This Future,—in its brightness bask?  
 Ye ask the Future?—Let it be!  
 Ye know not what ye ask.

The Present! Ah, the mightiest mind  
 Holds only that. We may not see  
 The dim days, or the undefined  
 And unformed ages yet it be:  
 Enough for us that if we do  
 The present deed that should be done,  
 The three shall open to our view—  
 Past, Present, Future—One!

—George Frederick Cameron.

# THE O. A. C. REVIEW

## REVIEW STAFF.

W. DAWSON, Editor.

W. TOOLE, Agriculture.

I. B. HENDERSON, Experimental.

F. M. CLEMENT, Horticulture.

M. C. HERNER, Poultry.

R. GREEN, College Life.

G. McROSTIE, Alumni.

F. C. McRAE, Athletics.

MISS R. MacADAMS, Macdonald.

MISS MacTAVISH, Asst. Macdonald.

S. H. HOPKINS, Locals.

W. H. WRIGHT, Artist

A. HUTCHINSON, Business Manager.

E. A. WEIR, Assistant Business Manager.

## Editorial

"A Happy and Prosperous New Year" to all our readers is the greetings which go forth with this the January issue. To those successful in the so much dreaded Christmas examinations, congratulations, to those who plod on under the burden of a "star" and to those who were victims to the terrifying epidemic, "mumps," we offer condolences.

A review of the past year reveals the fact that success has perched gaily upon our banners, the Review has in every way held fast its position as a College publication, and an Agricultural magazine. The prospects now before us are highly encouraging, due in a large measure to the faithful work of those who had her interests at heart and to the loyal support of our Old Boys and our students.

With a continuation of this support

no fears are entertained for the future of The Review. Then, at this the beginning of a "New Year" let us have a pledge of your support in making our College paper an even greater success.

The Editorial Staff of The Review wish to take this opportunity of thanking Mr. Gandier, for his excellent services in the capacity of Editor for the past year.

### The Retiring Editor

Mr. Gandier has been unusually successful in his choice of material, and has shown excellent judgment in improving the tone of our College Paper. We therefore feel that mere thanks are inadequate means of expressing our gratitude, for his unselfish devotion of time and brains. In his retirement, Mr. Gandier has left an example which our present staff will do well to copy.

In the issue of last May a lengthy editorial appeared on the subject of

**Student  
Contributions**

again, however, we would call your attention to the fact that a very small percentage of students contribute to their College paper. The Review is yours, therefore, why not use it as a training ground, in which to prepare yourselves for future work in the world of journalism. From the ranks of every year, men will go forth to seek their fortunes in a journalistic career, who have very little practice in the art of writing or opportunity to test their ability before they leave our halls. Then accept every opportunity given, we can not publish articles from all students, yet we can publish articles from a much larger number than have as yet contributed.

In this issue we call your attention to an article entitled "Agricultural Demonstration," by one of our seniors. In the succeeding months we hope to publish at least one leading article, in every issue, written by a student. Such a move, we believe is for the benefit of the student body, and so we look for your sympathy and help in this work and for an increased interest in the articles appearing in our columns.

Careful investigation has revealed the fact that, although at the age of forty-five, fully eighty per cent. of men are established in whatever pursuit they follow and are in receipt of incomes considerably

in excess of their expenditure, yet at the age of sixty it has been found that ninety-five per cent. are dependent upon their daily earnings, or upon their children for support. Many, no doubt, read the despatch from Detroit which recently appeared in the Canadian papers, and which described the condition of a man who but a little more than forty years ago was a financial power in that city, who had a "palatial home" on one of the most fashionable thoroughfares, entertained lavishly, and to whom everybody was prepared to pay homage. But the fates were against him. He suffered serious financial losses, and when he began to go down hill he found the road properly greased for the occasion. His friends deserted him. Now at eighty years of age, after his day's labor, he wends his way to the city with the other bent, broken-down old men who have influence enough to have their name on the city's pay roll.

The moral is that out of one's abundance during the prime of life something should be laid aside for declining years and invested where thieves cannot reach it and where one cannot possibly be deprived of it. The Canadian Government has made this possible by passing an Act known as the Canadian Government Annuities Act. This Act received the unanimous support of both sides of the House, and was adopted solely in order that the masses of Canadian men might be benefitted thereby. Definite information with regard to this measure may be obtained by application to the Superintendent of Annuities, Ottawa.



## In Memoriam

A GENTLEWOMAN PASSED THAT WAY.

**T**O meet Mistress Margaret Harcourt was to know her, and to know her was to love her. She was sweet and wholesome, cheerful and good, and she has gone from us never to return.

The whole community was stunned on Sunday morning, Dec. 4th, when it became known that Mrs. Harcourt had suddenly passed away. "Surely it cannot be," said one, "I saw her yesterday at the market." "She was rocking the baby when I called in the afternoon," said another, "and seemed so well and happy." "She expected to take Communion in Chalmers' Church on Sunday morning," exclaimed a third; but when the large congregation sat down to the Lord's earthly table at eleven o'clock, Margaret Harcourt was even then in close communion with her Heavenly Father.

It is always hard to give up friends, it is doubly hard to do so when all is bright and happy, and the future seems to hold so much in store.

For many years Mrs. Harcourt was very delicate, and had suffered more than anyone will ever know. Then came the severe operation in October, the birth of the baby boy, a miraculous and rapid recovery, and the beginning of what looked like a joyous motherhood. But it was not to be, and we are left to mourn.

To Prof. Harcourt we tender our heart-felt sympathy, and to the sorrowing mother and sister we can only say, we share your loss. She was our friend. Beyond her strength she strove to help in our College affairs, and in College life she will be long remembered.

She has gone, but her memory lives, and while we return to daily duties and daily toil, our load is lightened and our path seems clearer, and our voices ring truer because "she passed this way."

### The Promenade Bazaar.

All those present at the Promenade Bazaar on December 2nd, certainly left the hall with a new lease on life. The different societies at the hall had cushions, pennants, pictures and candy for sale, and the rush was so great that only the earliest arrivals were so lucky as to get a sample of the beautiful work done by the girls. Everything for sale was a work of art from the cushions and pennants to the arrangement of the peanuts in the brittle. This latter

busy supplying the wants of hungry buyers.

The refreshments were served in the parlor beneath cherry blossoms and by the most charming of Japanese beauties. And amid such surroundings it can hardly be wondered at that all thoughts of material things were left behind at the door and we soared into that blissful atmosphere which surrounds the world and makes life worth while. The girls who had charge of this part of the work are to be congra



PHILHARMONIC CONCERT—SCENE FROM THE WAYSIDE INN.

being a special triumph of mathematical accuracy and skill.

The west end of the lower hall was partitioned off and formed a very pretty picture gallery. Here were hung the passepartouted pictures which had been made by the members of the Literary Society of Macdonald Hall.

The pennants and cushions were for sale in the reception room which had quite a gala appearance.

The Y. W. C. A. had their stall under the main stair case, and as their wares were eatable the girls were kept

tulated on the delightful taste shown in the decorations and to be thanked for those delightful moments we spent under their care.

The musical programme in the Gym consisted of a violin solo by Miss Farmer, songs by Miss Harrington and Mr. Gibson, and an instrumental by Mr. J. B. Lund.

### The Philharmonic Concert.

"Culture is like wealth, it makes us more ourselves, it enables us to express ourselves."—Hamerton.



Such is the aim of the Philharmonic Society; and to the large audience which saw for the first time on the evening of November 25th the Choral Club arranged in order on the newly remodelled stage which was tastefully decorated to represent an old-fashioned country home of the seventeenth century, by Mr. J. B. Lund, the extent to which the society has already accomplished this aim, must have been apparent.

From the time the College Orchestra, under the very capable leadership of Mr. Close, opened the programme with a selection from Fletcher-Meaker until the final number was concluded, there was never a break.

The Choral Club gave a number of selections in a style that reflected the utmost credit upon the members of the club and their capable leader Mr. Ryrie.

Miss Steele gave a piano solo which was rendered in faultless style and was presented with a handsome bouquet; and Mr. Close, leader of the Orchestra, gave a violin solo, "Il Trovatore," which held the audience spell bound.

The second part of the programme was quite different from the customary introduction of outside talent as on former occasions, and in its stead there was presented by the members of the Society a farce entitled, "Much Ado About Nothing," and a musical tableau, "Storm Bound."

The caste of characters for the former were as follows:

Mr. Simpleton.....W. H. Wright  
Tom (servant of Mr. Simpleton)..  
.....T. O. Clark  
Mrs. Simpleton.....Miss G. Heustis  
Jelly (a maid).....Miss B. Seaborn

Both Miss Heustis and Mr. Wright were exceedingly good in their rather

difficult parts; and as for "Tom" and "Jelly" they brought the house down, especially when Tom accidentally lost his green wig.

The Tableau represented a coaching party spending a half-hour at the Inn on account of a breakdown. The Inn was delightful and "Mine Host's" punch excellent. The party amused themselves with songs and a dance. Lady Harrington and Lady Crews sang most charmingly and were backed up by Lord Jack (Mr. Harding) and the sailor (Mr. Gibson). The songs were followed by a dance, "Sir Roger," which was interrupted by the hostler announcing that the coach was again ready to proceed. A toast to "King George," ended most appropriately both the stay at the Inn and also the evening's programme.

#### The Union Lit.

A pleasant evening's entertainment was afforded on November 18th, when the Union Literary Society held its second meeting for the College year, at which the following programme was rendered:

1. Piano solo—J. D. Lawson.
  2. Piano solo—Miss Irene Smith.
  3. Debate—  
Resolved, "That the world is growing better." Affirmative—Messrs. J. E. Rettie and R. L. Vining. Negative—G. S. Taylor and J. A. Robertson.
  4. Vocal solo—Miss Lena Harrington
  5. Presentation of Cross Country Medal—Professor W. R. Graham.
  6. Cornet solo—H. Philp.
  7. Judges' decision.
  8. Critic's remarks.
- God Save the King.

The applause which followed each and every one of the musical selections was indeed well merited. As for the piano solos little criticism can be made.

and the charming personality of Miss Harrington as well as her songs made this number one of the most popular of the evening.

The principle feature of the programme, however, was the debate between the two sub-societies, the Delphic and the Maple Leaf, Messrs. Rettie and Vining representing the former, and Messrs. Taylor and Robertson the latter. Mr. Rettie proved himself a fluent and forcible debater, and in his reply showed considerable skill in detecting the weak points in his opponent's arguments. Mr. Vining, the supporter of the affirmative, also delivered a well-prepared speech, but was rather weak in his refutations.

Mr. Taylor, leader of the negative, and his supporter, Mr. Robertson, appeared somewhat nervous on the platform, consequently their speeches were not so effective as they might otherwise have been.

The Cross Country Cup was then presented to Chas. W. Petch, who on November 12th broke the College record for five miles. Ribbons were also presented to the five men who came next in order, viz., Messrs. Harding, Sorley, Tisdale, Rogers and Patrick.

The critic's remarks by Mr. Caesar were very instructive. His criticisms were short, consistent and directly to the point, and were assuredly well received. The meeting closed by singing God Save the King.

#### Literary Societies Organize.

The officers of the various Literary Societies for the ensuing year, are:

Union Literary Society.

President—P. C. Dempsey.

Secretary—E. G. Hood.

Treasurer—E. Bradt.

Auditors—Messrs. Reek and Jackson

#### Delphic Society.

President—W. M. Aikenhead.

Vice-President—A. W. Boyd.

Secretary—H. King.

Committee—M. M. Baldwin, J. Johnston, J. Miller.

#### Alpha Society.

President—R. W. Schuyler.

Vice-President—T. O. Clark.

Secretary—G. L. Woltz.

Committee—C. W. Buchanan, A. C. McCulloch, E. Hampson.

#### Y. M. C. A.

The officers of Y. M. C. A. elected for the coming year are:

President—P. O. Vansickle.

Vice-President—R. L. Vining.

Secretary—C. F. Neelands.

Treasurer—G. G. Bramhill.

Chairman of Missionary Study Committee—W. M. Aikenhead.

Chairman of Bible Study Committee—G. J. Jenkins.

Chairman of Music Committee—J. E. McRostie.

Librarian—R. G. Brown.

#### The Student Conference in Guelph.

Friday, Saturday and Sunday the 2nd, 3rd and 4th of Dec. were days of unlimited inspiration in Guelph; when over three hundred delegates from Ontario Colleges held their first Inter Collegiate Missionary Conference. Norfolk Street Methodist Church was crowded each evening to hear such speakers as Miss M. Kawai, secretary of Y. W. C. A.'s in Japan; Mr. J. C. Robbins, Missionary to the Philippines; Rev. T. E. E. Shore, General Missionary Secretary for the Methodist Church of Canada, and Mr. J. Lovell Murray, President of the Conference.

# Alumni

The following O. A. College Old Boys registered at the Guelph Winter Fair, held from December 5th to 9th, 1910:

A. A. Derrick, an associate of '05, is a fruit grower of Summerland, B. C. He is also the organizer and manager of the Lakeside Stock and Dairy Co., Limited, of Summerland.

T. G. Raynor, graduate of '89, is in Seed Branch of the Department of Agriculture at Ottawa, Ont.

M. D. Jackson, a graduate of '09, is situated at Carp, Ont., as District Representative of the Department of Agriculture for Carleton County.

S. E. Todd, a graduate of '10, is situated at Petrolia, Ont., as Agricultural Representative for Lambton County.

S. H. Culp, an associate of '11, is farming at Vineland, Ont. "Sammy" reports that he is still enjoying single blessedness.

G. N. Robertson, a graduate of '05, is a fruit grower of St. Catharines, Ont.

W. J. Dolsen, an associate of '90, is following mixed farming near Chatham, Ont.

John I. Brown, associate of '00, is in the poultry business at Pembroke, Ont.

W. E. Williams, of class '97, is farming near Clandeboye, Ont.

Leslie Tennant, associate of '06, is farming near Falkland, Ont.

E. B. Palmer, associate of '12, is farming near Norwich, Ont.

M. S. Sproat, of '09, is farming at Naneswood, Ont.

P. E. Angle, graduate of '09, is at Simcoe, Ont.

L. McEwen, associate of '12, is farming at Wroxeter, Ont.

Chas. H. Barnett, associate of '12, is farming at Rannock, Ont.

T. R. Terry (Jerry), poultry graduate of '05, is Mile Stone Inspector at Guelph, Ont. "Jerry" reports an oncoming baldness.

D. S. Salkeld, associate of '08, is farming at Goderich, Ont.

H. S. Austin, an associate of '08, is farming at Lynn Valley, Ont.

Wm. D. Dyer, graduate of '93, is farming at Columbus, Ont.

J. Laughland, graduate of '10, is Assistant District Representative at Collingwood, Ont.

George Westlake, of '82, is farming at Yarmouth Centre, Ont.

Lester M. Harley, associate of '11, is farming at Harley, Ont.

M. A. Campbell, an associate of '09, is farming at Zimmerman, Ont.

C. A. Lawrence, graduate of '09, is a fruit grower near Port Dalhousie, Ont.

A. J. Emitt, of '08, is a fruit grower, Louthead, Ont.

W. R. Bishop, of '96, is at London, Ont.

H. C. Duff, graduate of '09, is at Peterboro. Some one has volunteered the information that he is married.

C. H. Shuh, an associate of '03, is farming at Waterloo, Ont.

John Harcourt, an associate, is farming at St. Anns, Ont.

A. G. McKillican, associate of '11, is farming at St. Elmo. This winter he is acting as Assistant Representative at Peterboro.

T. H. Binnie, graduate of '07, is in journalistic work in Toronto, Ont.

J. H. Hare, graduate of '08, is District Representative at Whitby, Ont.

R. S. Duncan, graduate of '06, is District Representative at Port Hope, Ont.

C. M. Cassel, of class '12, is farming at New Dundee, Ont.

D. E. MacRae, graduate of '10, is teaching in High School at Port Hope, Ont.

W. J. Fraser, associate of '12, is at Revelstoke, B. C.

Erle Kitchen, associate of '10, is farming at St. George, Ont.

A. D. McIntosh, graduate of '09, is District Representative at Stirling, Ont.



T. L. HALL, '04.

R. R. Sloan, associate of '06, is a fruit grower at Blythe, Ont.

R. H. Reynolds, associate of '04, is farming near Scarborough Jct.

George C. Warner, of '06, address Toronto, is at present travelling.

J. S. Howell, associate of '11, is at Jerseyville, Ont.

Milton Weber, associate of '12, is farming at Winterbourne, Ont.

Floyd D. Shaver, associate of '12, is Assistant District Representative at Petrolia, Ont.

J. S. Knapp, associate of '12, is Assistant District Representative at Galt, Ont.

O. Robb, associate of '12, is farming at Sheffield, Ont.

T. L. Hall, of year '04, more commonly known as "Tommy," is farming on his one hundred and twenty-five acre farm near his old home at Ariss, Ont. "Tommy" was married last year to a Miss B. Burns, of Maple Lodge, Rockwood. Miss Burns was a "Mac" girl, having attended the Macdonald Hall in year '06. Both of them are successfully putting into practice what they learned on the College Heights. "Tommy's" brother, J. S. Hall, who attended the O. A. College in '00 and '01, is running the home farm.

F. C. Hart, B.S.A., a former graduate of the O. A. College, is now situated at Galt, as District Representative for Waterloo County. The accompanying cut shows him among his demonstration plots. These plots are made a source of valuable instruction to the farmers of Waterloo County. Mr. Hart, also gives special lectures on Agricultural subjects to the students of the Galt Collegiate Institute.

#### Notice to 'Subscribers.

We sometimes get a subscription without a name, address, or mark of any kind to indicate who sent it. When this occurs we take note of the subscription and the date upon which we received it, but this is as far as we can go.

When a person subscribes to The Review, we consider him a subscriber until he notifies us to discontinue.

Complaints of non receipt of numbers usually occur when subscribers change their address without notifying the Review. The blame is attached to The Review Office, but we nearly always plead "Not Guilt."

We do everything we can to make it easy for the subscribers to get in their annual subscriptions early. Please help us as much as possible, and don't write us angry letters if we must bill you the second time.

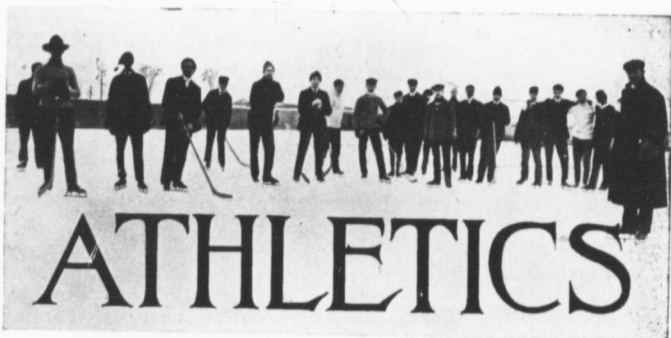


F. C. HART, AMONG HIS DEMONSTRATION PLOTS.

The price of subscription to ex-students in Canada is fifty cents. To all other people on the face of the earth the price is one dollar per College year.

We are obliged to pay from ten to twenty-five cents exchange on bank cheques. There is no charge on postal notes or express orders, so kindly send us these for amounts over fifty cents.





### Cross-Country Run.

The annual cross-country run was held this year on Saturday, November 19th, at half-past one. The day was bright, the air fine and bracing, yet not too cool, but the inclement weather of the previous day made conditions rather unfavorable for record breaking as the track was very heavy.

Ten starters faced the line. Petch and Miller were looked upon by most of the students as favorites, while some of the other competitors were also considered to be dangerous. A hot pace was set from the start by Petch with Miller in close pursuit. They continued in this position until Miller dropped out before the first half was completed. Petch then forged ahead, and passed the College running freely with a light, strong stride, while Harding and Sorley were both running rather heavily.

In the second half Petch had an easy time of it for at no time was he forced to exert himself, and won in easy fashion, being about a minute ahead of the second man. He won in the fast time of 33 minutes 10 and 4-5 seconds, which was very good considering the poor condition of the track.

The others finished in the following order—Harding, Sorley, Tisdale, Rogers, and Patrick.

### Inter-Year Football.

The advantage of inter-year sports are principally these, they bring out and develop the men—it is from these men that the first teams of the College are chosen. They create a spirit of class loyalty and pride. They develop interest in games in particular and athletics in general by offering an incentive to fullest endeavor in each line of sports.

This year the games can certainly claim a full share of these virtues for probably in no previous year was keener interest and competition aroused. It was early seen that the champions would come from either the senior or junior year. These two teams were so evenly matched and played with such determination that to the end of the last game in the series it was uncertain where final victory would rest.

The first game of the series was played between the freshmen and seniors and won by the seniors, score 21-6. The juniors won the next game from

the second year, score 16-2. The third game of the series was played between the juniors and freshmen and won by the juniors, score 31-1. The second year then dropped out defaulting to the freshmen and seniors.

The most exciting game of the series now came off between the seniors and juniors. Great excitement prevailed in both camps. These same teams were pitted against each other a year ago in the final game and although 1912 won the championship then, she was now slightly weakened having lost two of her star players.

The game was very fast and clean and an all round good exhibition of football. Both teams worked like demons and were so evenly matched that it seemed as if a little fluke on either side would win the game for the other. Such, however, did not take place, as the final score will show, for when the whistle sounded for full time the seniors were ahead by one point and the game ended, Seniors 10, Juniors 9.

#### **Freshmen Indoor Meet.**

The fifth annual freshmen indoor

meet was held this year on Saturday afternoon, December 3rd, under the auspices of the Athletic Association and under the personal control of Instructor Ringland.

The entry lists were much larger than last year, the contests very keen and the skill of the contestants of a very high order. Some very fine talent was unearthed and Mr. Ringland deserves a word of praise for the commendable manner in which he has taken charge of the work; he has in a short space of time transformed some very raw material into quite prominent indoor men.

Only one record was broken, and that was in the hitch-and-kick, Robertson raising the old record by two inches. The rest of the events about the same as last year, with a little more practice the first year men should make a good showing at the annual indoor meet next spring.

The grand championship was won by W. R. Mollisin, with twenty points, J. E. McRostie was second with sixteen points, and G. W. Spaltebolz third with eleven points.





## Pompilia

PROFESSOR J. B. REYNOLDS.

PROBABLY many who will glance at this title and pass on uninterested have never read Brown ing's "The Ring and the Book." Among the twelve divisions of this poem, "Pompilia" stands seventh in the series, and is an account of the tragedy from the lips of Pompilia, the murdered wife of Count Guido, spoken in gasping breaths as she lay dying. Pietro and Violante were a well-to-do couple of low rank living in Rome towards the close of the seventeenth century, being without children, Violante had found an unfortunate mother whose child was a burden and a shame to her, and had adopted the child. This was Pompilia, and the child grew up the acknowledged offspring of the couple. When Pompilia had reached the age of thirteen, the scheming foster-mother, all unknown to Pietro, married her to an impoverished aristocrat, Count Guido by name. For three weeks the marriage was kept secret, and the girl-bride continued to live with her foster-parents. Then the husband came to claim his own, and with it the wealth which he supposed his

wife would inherit. Arrangements were made whereby Pietro and Violante should go to live with the newly wedded pair at Arizzo, where the Count's ancestral palace was situated. Trouble arose over the dowry of Pompilia and finally Guido stripped the couple of their wealth and drove them from him. His hatred extended to his girl-wife, and with the low cunning of a nature given to base suspicion and evil plots, he attempted to entrap her into committing indiscretions. He charged her with light conduct, loaded her with abuse, kept her constantly in physical fear and mental torment. Thus four years passed, and when she could bear no more she fled to Rome under the care of a young priest, Guiseppe Capousacchi. The husband pursued, overtook them, had the priest arrested, and placed his wife under the charge of a house of nuns. This place she left for a lonely villa, outside the city, where Pietro and Violante were living. Here, eight months after she had left Arizzo, her babe was born. When the child was two weeks old, Count Guido, with some confederates, came to the



villa one night and murdered his wife and her foster-parents. Pompilia lived just long enough to tell her story.

It is not so much the story, however, that we are expected to be interested in, as the character of Pompilia herself. An exceptional character has been developed in the midst of exceptional circumstances. She is of unrecognized birth. Brought up by illiterate parents, she can neither read nor write. She is mated at thirteen years of age with a man nearly four times as old, who for four years treats her with unexampled cruelty. She has known the joys of motherhood for only two weeks when she is foully murdered. It is her dying confession that we read. Yet neither shame, nor illiteracy, nor starved affections, nor cruelty, has been able to curb her lavish spirit of native goodness, or shake her simple faith.

Of her husband she can say but little good.

And nothing like so tall as I myself,  
Hook-nosed and yellow in a bush of  
beard,  
Much like a thing I saw on a boy's  
wrist.

He called an owl and used for catching  
birds—

Such was her husband. Him she  
dismisses from her dying thought with  
the utmost charity possible.  
I could not love him, but his mother  
did.

For the priest who befriended her  
she felt all the reverence of a simple  
trustful nature toward a strong and  
saintly character. She saw him first,  
and he saw her at a public play.

An earnest face

Solemn almost, saw me, as I saw him.  
Whether they became lovers or not de-

pends upon what you mean by the  
term. To her he was

a lustrous and pellucid soul  
So that, when I am gone and sorrow  
stays,  
And people need assurance in their  
doubt

If God have yet a servant, man a  
friend,

The weak a saviour and the vile a foe—  
Let him be present, by the name in-  
voked,

Giuseppe—Maria Capousacchi!

When they are overtaken in their  
flight, and the guards seize the priest,  
Pompilia snatches a sword from her  
husband's side, and flashes it before  
their eyes in defence of her friend.  
During his examination at the murder  
trial, Capousacchi is informed of the  
death of Pompilia. He bursts out in  
credulously:

No, sirs, I cannot have the lady dead!  
That erect form, flashing brow, fulger-  
ant eye,

That voice immortal (oh, that voice  
of hers!)

That vision in the blood-red daybreak  
—that

Leap to life of the pale electric sword  
Angels go armed with,—that was not  
the last

O' the lady!

If these feelings are love, they were  
lovers. But he was a priest and she  
was a wife, and Pompilia declared:

The glory of his nature, I had thought,  
Shot itself out in white light, blazed  
the truth

Through every atom of his act with  
me.

Her motherhood is her crowning  
glory. Naively she boasts

All women are not mothers of a boy.

During her four years with Guido,  
her affection had been famished by his  
ugly deformities and his "cold, cruel

snicker," and her simple faith in the eternal goodness sorely tried by his suspicion and cruelty. But the two weeks of mother's joy that had been granted her wiped out from her memory the records of the cruel past. Her own love for her boy, and the strength and goodness of the priest her friend were to her sufficient assurance of the divine power and goodness. The health and the purity of her nature are

shown in the fact that the complexion of her soul has taken no coloring from the evil atmosphere that has encased her. She takes her cue only from the good she meets. The priest's broad brow reverberates to her the truth of God:

Through such souls alone,  
God stooping shows sufficient of His  
light  
For us i' the dark to rise by. And I  
rise.

## Among Ourselves

### The Philharmonic Concert.

The Philharmonic concert of the O. A. College was held in the College Gym. on November 25th. Every year sees a widening of the scope of this society and this one was no exception to the general rule—in fact it far exceeded the efforts of the other years and was unanimously pronounced a splendid success.

The College Gym. had just been renovated and was well equipped for the performance. The new stage was a very pleasing sight and certainly made the hearts of all present swell with pride to think it belonged to the O. A. College. It was fitted up to represent a typical wayside Inn of the seven teenth century. A cheery fire blazed in the old grate, trophies of the hunt, and a coat of arms adorned the walls, while from the ceiling hung a huge candelabra, lending its glory of light to the beauty of the scene.

The evening's entertainment consisted of a musical programme to which

the Choral Club and Orchestra largely contributed, a farce and a tableau. The selections rendered by the Orchestra were well received and added considerably to the enjoyment of the evening. The members of the Choral Club gave four selections which called forth storms of applause. The sixty voices blended together in almost perfect harmony and the volume and beauty of tone were remarkable for such an amateur club. Mr. H. Ryrie is to be highly commended for his splendid work in training and directing the chorus.

Miss Mabel Steele, of Dundas, one of our talented Macdonald girls of last spring, rendered a piano solo in such a manner as delighted the entire audience. She was encored and presented with a huge bouquet of yellow mums. Mr. Close, A.T.C.M., is to be congratulated on his skill as a violinist. His solo from "Il Trovatore" expressed the soul of the artist in every note and he was pronounced a genius.

The farce was "Much Ado About Nothing," only in this case Sheake speare has nothing to do with it. The characters were well chosen for their parts and were taken as follows: Mr. Simpleton, Mr. W. H. Wright; Tom, servant to Mr. Simpleton, T. O. Clark; Mrs. Simpleton, Miss G. Huestis; Jelly, a maid, Miss Beatrice P. Seaborn. The humor of the play centered about the aim of each individual of the cast trying to be beautiful. The parts were well taken. Mr. Wright and Miss Huestis were splendid as a newly-married couple; Miss Seaborn as Jelly, an inquisitive maid, and Mr. T. O. Clark as a servant, provoked screams of laughter in their efforts to become beautiful. They were heartily applauded and more than one regret was expressed at the brevity of the performance. The tableau, "Storm Bound," following the farce, was pronounced one of the prettiest and most effective productions ever seen in the city of Guelph. The scene presented was that of a typical inn of the 17th century. Everything was in accordance with the times. The ladies were beautifully and elaborately gowned in creations such as their vainer sisters of that century might have donned. The inn-keeper, gentlemen and hostler were also most fittingly arrayed. The whole tableau, with its songs and character actors, was a splendid piece of work. Miss Crews, as leading lady, sang "Drink to me only with thine eyes" very sweetly, while Miss Harrington was very winsome in her song entitled "Come, Lassies and Lads." The scene closed with a toast to His Majesty King George.

After the crowd had dispersed the members of the Choral Club and all who had helped to make the evening a success were given a banquet in the

spacious dining room of Macdonald Hall. Speeches and toasts were in order, and everyone declared they had spent a most delightful evening.

Taking everything into consideration, we are safe in saying that the 1910 O. A. C. Philharmonic Society has made remarkably rapid strides and promises to be very famous in the years to come. Everyone heartily unites in congratulations on the progress of the society of 1910. H. A. S.

#### The Mumps.

If it had only been some formidable or high sounding disease, if we could have said smallpox or spinal meningitis, we might have explained our previousness at home with a better countenance. But mumps! Of course no one could be expected to take mumps seriously. We did try once to call it inflammation of the parotid glands, this, uttered with an air of deep concern, we thought should be impressive. But alas! That ubiquitous person the trained nurse, was present. She sniffed and said—mumps.

Poor mumps, why is it always the clown among diseases? Poor victims of mumps, why are they not entitled to their fair share of sympathy? The bitter irony of it is hard to bear, to suffer unspeakable misery and wretchedness, to have one's natural beauty of countenance unbalanced and marred, and then to be considered a joke—just because it was mumps.

When mumps comes along and upsets the equilibrium of a whole college and scatters the collegians to the four corners of the earth, you begin to sit up and take notice. You wonder why it doesn't change its name. The idea of calmly accomplishing a thing like that and continuing to do business under the foolishly childish name of mumps.

There is one thing certain, it is a name that will not be mentioned by the diplomatic in the presence of some thirty odd men who reside at O. A. C. Be warned, ye new short course, when you wish to open a conversation tactfully do not inquire, "Where did you spend your Christmas? If you are wise, do not ask, "Have you ever had the mumps?"

R. M.

#### December Prom.

That business may be combined with pleasure and that co-operation gives a lustre life to trade was convincingly proved by the success of the enjoyable evening at Macdonald Hall on Friday, December 2nd. The motive of the affair was not pleasure purely, it had also the sordid purpose of gain, wherefore there were dubious apprehensions and misgivings as to the spirit of hospitality. There were, however, plenty of enthusi-

asts to put the hall in gala attire and cleverly disguise the hard face of business.

The library lights were clothed in red shades, which lent a holiday glow, and the whole room was wreathed with pennants and padded with cushions and ribboned with arm-bands, all in the familiar blue and red, which warms the heart of the O. A. C. man, and bearing inscriptions in various adaptations of Mac. and O. A. C. The

Athletic Society were responsible for this particular scheme and their wares proved so very popular that their duties for the evening were over before 8:30, as all their stock was sold and their only difficulty was to elude the troublesome customers who persistently clamored for more. When receipts and expenses were reckoned they found themselves \$23 to the good and the Athletic Society established on a monetary basis of glorious independence.



SNOW-SHOEING, A FAVORITE WINTER PASTIME AT MACDONALD.

As the Y. W. C. A. was almost as fortunate and their efforts made quite as successful a bid for popularity. They had converted the handsome and dignified drawing room into the most fascinatingly frivolous Japanese tea room, all fluttering with pink cherry blossoms and sweet with the perfume of flowers. Here coffee and ices were daintily dispensed by little kimona-clad Japs who never failed to correctly count the change. Under the stair arch there was another seductive attraction in the form of a candy booth. Everyone seemed to feel that the goods were worth their price, and the Y. W.'s gross receipts amounted to \$18 which will doubtless accomplish much in good works.

Down at the south end of the hall the Literary Society had arranged and

The Y. W. C. A. was almost as fortunate and their efforts made quite as successful a bid for popularity. They had converted the handsome and dignified drawing room into the most fascinatingly frivolous Japanese tea room, all fluttering with pink cherry blossoms and sweet with the perfume of flowers. Here coffee and ices were daintily dispensed by little kimona-clad Japs who never failed to correctly count the change. Under the stair arch there was another seductive attraction in the form of a candy booth. Everyone seemed to feel that the goods were worth their price, and the Y. W.'s gross receipts amounted to \$18 which will doubtless accomplish much in good works.

furnished a most artistic studio where pictures were offered for sale. They all sold without the necessity for artful practices on the part of the sales ladies. It is not often that a small picture store clears \$12 in half an hour.

Because of these various attractions the prom. was one of unusual interest and the Y. W. finally found it necessary to threaten with eviction a few of their patrons whose appetites were still unsatisfied, even after the lights had blinked out.

R. M.

#### Macdonald Literary Society.

This year the Macdonald Literary Society has wandered from its beaten path in undertaking a series of interclass debates. On Saturday evening, November the 26th, the first debate took place, and the innovation proved a great success. The subject was "Resolved that money has more influ-

ence on the world than love." Miss Davis and Miss Jones upheld the affirmative for the Junior Normals, Miss Mabel Crews and Miss Amy Wright, the negative for the Short Course.

The two classes have every reason to feel proud of their representatives. The duties of Miss E. Wright, the critic, were very light, as she had only one or two unfavorable criticisms to offer. The judges' work was not so easy. It took them many minutes to reach a decision. In the interval Mrs. Fuller and Miss Annie Bell favored us with piano solos. After prolonged discussion the judges awarded the victory to the Short Course.

It might be well to note here that at the close of the series of debates the winners will debate with representatives of the O. A. C. at a meeting of the Union Literary Society. N.B.

## Much Ado About Nothing

Mac. Girl—Waxing poetic—Notice the building against the clear cut sky?  
Query—What was the matter with the sky?

#### After the Phil. Concert.

Mac. Girl—Say, do you suppose that boy's hair will ever come the right color? I should think he'd feel so bad he'd leave the College! We offer our congratulations to the manufacturers of such a realistic green wig.

B.—Let me have some perfume like you have on, will you?

M.—Sure—then we'll smell like twins, won't we?

Plans for the Xmas holidays in case we are all detained: We'll have a mump prom. No one admitted who has not got them fully developed on both sides, and they'll have to present their cheeks (checks) at the door.

Superior O. A. C. Grad. (reading the notice, "This farm for sail")—Now I will have some fun with this simple country gentleman. "Say, farmer, when is this farm going to sail?"

S. C. G.—Young man, this farmer is going to sail just as soon as the fellar comes along who can raise the wind.

## Schools' and Teachers' Department

Devoted to those interests of the Ontario Agricultural College which pertain particularly to the training of teachers for giving instruction in the schools of the Province along vocational lines—in Home Economics, Industrial Arts, Elementary Agriculture and Horticulture.

### ELEMENTARY AGRICULTURE.



GARDEN AND SCHOOL IN S. S. NO. 6, CHATHAM TOWNSHIP (SOUTH).  
MISS JEAN SCHLEIHAUF, TEACHER.

### A Kent County School Garden.

A successful school garden has been conducted this year at School Section No. 6, Chatham Township (South), under the direction of Miss Jean Schleihauf, who took the course in Elementary Agriculture and Horticulture in the 1909 Teachers' Normal Class. Besides the experimental and demonstration plots, there were thirty-eight pupils' individual plots in the garden; of these it was estimated that thirty were a success.

The work was encouraged by the trustees and neighborhood in general. A friend of the school furnished a supply of manure. The pupils spaded half of the ground required and the janitor the other half. The hoes, rakes and spades were borrowed for the work; the pupils brought their own stakes and twine for marking off their plots. Each child kept a garden journal. The work did not interfere in any way with the regular school work and on the other hand Miss Schleihauf reports that the garden work added interest and vividness to the other studies.

No difficulty was experienced in caring for the garden during the holidays. On the opening of school in August, the flowers and other plants were found to have been well looked after by the pupils.

There are good prospects of a wider adoption of gardening in the schools of Kent County. There are now four teachers in West Kent qualified to take up the work. With the active support of the Ontario Corn Growers' Associa

tion, the Inspector and a body of trustees who see the value of education that deals with the concerns of the home and the farm, the future promises well for the boys and girls in the rural schools of the County.

#### School Corn Fairs in Kent County.

The cause of Agricultural Education in its rural schools has received a decided impetus in the County of Kent this year. Last year there were two School Corn Fairs held in Kent, one at S. S. No. 5, Raleigh, and the other at S. S. No. 2, Chatham. They proved such successful experiments that this year the work has extended generally throughout the county, as well as in the County of Essex. Through the recently organized Ontario Corn Growers' Association and with the co-operation of Inspector Smith and his teachers, the schools have taken an active interest in the selection and improvement of corn by the pupils. During the past season, the boys and girls have been thoroughly interested in this practical phase of Nature Study, carrying out their work and observations in their fathers' fields. As corn is the leading field crop of the county it is needless to say that this branch of school work has enlisted the sympathy and co-operation of trustees and parents in general.

Marking the close of the children's work and studies in this regard School Corn Fairs were held in the four townships of Chatham, Raleigh, Dover and Romney. At each fair the schools of the township came together at a central school and besides competing in the corn judging contests, united for a programme of addresses, sports and literary numbers.

The fair in Romney Township was a particularly good one. It was held on November 4th, at School Section No. 3, a purely rural school district. Two weeks before the fair, the Inspector wrote to each teacher asking for two numbers for an afternoon's programme, and also that two boys be selected to represent the school in a judging contest. Exhibits of corn selected by the pupils from the crop grown at their homes were also asked for. The eight schools of the township responded and 115 entries of five selected ears were made for the corn exhibit. On account of an outbreak of scarletina in one of the schools, only 90 exhibits were sent in, however. The trustees of the schools were enthusiastic as well as the teachers, and willingly spent the whole day in helping to carry out the arrangements. A large two-horse wagon load came from each school. Many ratepayers and trustees were present, and the school house proved to be too small to hold all who came.

The scoring of the corn by the boys was excellent. Score cards had been sent to all the teachers previously so that they had an opportunity of training the boys for the contest. While the judges were awarding the places for the selected corn exhibits, the boys entered in the judging contest arranged their 1st, 2nd and 3rd choices and scored the ears given them on the cards.

Mr. Robinson, Reeve of the township, presided over the meeting that was held in connection with the exhibit, and in addition to the splendid programme provided by the pupils, short addresses were made by Messrs. Schlichter and Lounsbury, Inspector Smith and Mr. A. McKenney, the Agricultural Representative under whom the work was commenced two years ago.

The Chatham Township School Corn Fair was also very successful. This was held at Eberts, on October 29th. The pupils' exhibits of selected corn were exceptionally good, surprising the judges, Mr. Duke, president of the Corn Growers' Association and Mr. McKenney, the Agricultural Representative, by its remarkably good quality.

In the afternoon, while the corn was being judged, a programme of sports was carried out outdoors. The two mile relay race between school teams of four boys excited a good deal of enthusiasm and resulted in a win for the team from S. S. No. 2. In a tug of war contest between four of the schools,

the team from S. S. No. 6 succeeded in winning; the teams were made up of ten scholars and the teacher in each case. In the evening a meeting to discuss the question of corn growing and improvement was held and largely attended by those who had become interested in the children's exhibit.



SCHOOL GARDEN CERTIFICATE, VICTORIA, AUSTRALIA.  
**AGRICULTURAL AND SCHOOL GARDENING IN VICTORIAN  
 STATE SCHOOLS, AUSTRALIA**

The following statement has been recently received from Mr. J. P. McLennan, Supervisor of Agriculture in the Schools of Victoria. It will be read with great interest, showing as it does the splendid progress being made by our Australian cousins in this new phase of School work.

The work falls naturally into two divisions, viz.:—(1) The beautification of school grounds by mean of flower gardens, shrubberies, lawns, and plantations of trees; (2) the teaching of Elementary Agriculture, which implies the formation of experimental plots for the growth of crops and vegetables.

**School Gardens and Plantations.**—There is a flower garden and plantation of trees at almost every school in the state; there are 2,300 schools, and at least 2,000 of them have gardens. Teachers make their own arrangements for obtaining flower seeds and seedlings. They have been assisted by seedsmen and florists who have supplied collections either free of cost or at a cheap rate. Curators of public gardens have also donated plants occasionally.

The State Forestry Department supplies the trees required for planting on Arbor Day, but some teachers raise trees from seed at their schools.

**Agriculture.**—Agriculture is taught as the subject of experimental science at about 400 schools. At these schools there are experimental plots and vegetable gardens in addition to the flower beds. There are other schools, where agriculture is not taught as a specific subject in the programme, but which have small experimental plots. The matter of taking agriculture as the subject of experimental science is left to each teacher to decide. It is quite optional with him whether he takes it or not.

The seeds for the experimental plots are supplied by the Government



which also supplements money raised locally for the purchase and the erection of fences, tool sheds, etc.

Text-books on Agriculture are supplied free to teachers who are teaching the subjects. A supervising officer of agriculture personally visits schools to give advice regarding the laying out of the plots and the proper carrying out of experiments. He also contributes articles regularly to the "Education Gazette and Teachers' Aid" on Agriculture, gardening, and tree-planting, and lectures to teachers at provincial centres.

**Factors of Success.**—The widespread interest that is taken in the work by teachers is probably owing to the following factors:—

1. **Encouragement by Department.**—The prime cause is the encouragement given to this work by the Education Department, especially since the introduction of the New Programme of Studies in 1904.
2. **Credit Given for the Work.**—The Inspectors of schools have backed up the Department, and given every encouragement to teachers by making favourable reference to the work they are doing in their reports on schools.
3. **Certificates and Prizes.**—Each year the Department awards either first or second class certificates to a certain number of schools in each inspectorial district that have the best improved grounds. A handsome prize is awarded annually by the Australian Natives' Association to the school with the best kept and best improved grounds in each inspectorial district. The school with the best school rose garden in the Metropolitan district is awarded a prize by the National Rose Society of Victoria.
4. **The Education Gazette and Teachers' Aid.**—A copy of this publication is sent to every school every month, and for several years the editor has given prominence to articles dealing with gardening and tree planting. These articles have referred to the work being done in other countries as well as at the best schools in our own state, and have often been illustrated by photographs. Informative articles have been contributed regularly by the Supervisor of Agriculture and other qualified teachers.
5. **Circulars of Information.**—Circulars of information have been published at various times.
6. **Supervisor of Agriculture.**—This officer has disseminated information by means of lectures, articles, and personal visits to school.
7. **Exhibitions of Work.**—The Royal Agricultural Society of Victoria holds a competition at its Annual Agricultural Show in Melbourne. The prizes are competed for by the inspectorial districts of the state, which exhibit collections of work done by the schools in connection with agriculture. Some of the rural agricultural societies provide for displays of agricultural produce by the local schools.
8. **Newspaper Support.**—The newspapers of the metropolitan and the country press recognize the value and importance of the movement, and publish articles appreciative of the work.
9. **Nature Study.**—The introduction of nature study into school work has resulted in a general and real interest in animal and plant life. Teachers have been trained to look around them, and so have found at first hand materials in soil and plants for the observational and experimental work that agricultural teaching requires.
10. **Arbor Day.**—Special Arbor Day celebrations are carried out in every school in the state on a stated day every year. This movement has resulted in the growth of a healthy sentiment regarding the planting and care of trees.
11. A State School Horticultural Society is just now being formed, and it is expected that teachers from all parts of the state will join it. The objects of the society are to facilitate the distribution and exchange of seeds and plants, and to assist in improving school-gardening generally.



Farmer (entering office at Winter Fair)—I want to make a decoration.

Clerk—A what.

Farmer—They sent me in here for to make a decoration.

Clerk—Oh, I see. You wish to make a declaration that you are entitled to compete as a bona fide amateur exhibitor. Is that it?

Farmer (doubtfully)—I guess so, you ought to know, but it sounds to me like definition of character.

~ ~

Clerical Visitor (to freshman smoking while at student labor)—My boy, do you not know that the wages of sin is death?

Student (promptly)—Yessir, and the wages on this job are a good deal worse than that.

~ ~

Gerow—Look here, you promised to pay me back that dollar last week. Pay up now like a man.

Darling—I'd like to do it, Gerow, but I've got to teach you a lesson. Never lend money, I never do.

Up to the time of going to press the editor has escaped the mumps, and is quite willing to detail the measures he adopted to stave off the dread disease. First of all he decided that it was good policy to feed up well in case his throat swelled up and he couldn't swallow. The result was he had to change his boarding place as his landlady thought he had eating diabetes. A pint of warm salt-water was recommended to him as a sure preventive, taken directly after breakfast. He took one dose and after all was over he said that he firmly believed he had thrown up his immortal soul. He discountenances the use of salt and water altogether.

~ ~

St. Peter—And who are you?

Student—I am a College man from the O. A. College.

St. P.—And did you read the College paper?

S.—Yes.

St. P.—Did you pay for it?

S.—No.

St. P.—Down.



## How "Eastlake" Steel Shingles will save you money



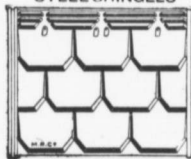
Talk No. 1

### Quality

By

The Philosopher of  
Metal Town

"EASTLAKE"  
STEEL SHINGLES



Bank your dollars on **quality**.  
Inferior quality, whether in building material or farm implements, is the source of constant worry and needless expense.

It's poor economy to save on first cost, and then—

Pay out two or three times the original cost in repairs, wasted time, inconvenience, etc.

In barn roofing **much** depends on quality—the safety of your crops, your implements and live stock.

"Eastlake" Steel Shingles are an absolute assurance of safety.

They are made of the finest and toughest sheet steel, perfectly galvanized.

The "Eastlake" workmanship is the best—careful inspection at each turn in the big "Metallic" shops guarantees perfection.

And perfection means satisfaction—a roof that lasts a lifetime.

"Eastlake" Steel Shingles are highest quality, yet cost you no more than inferior roofing that requires replacing or repairing in a few years.

And an "Eastlake" roof means clean rain water for household use.

Let us send you our illustrated looklet, "Eastlake Metallic Shingles." Write to-day—just your name and address on a postcard.

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## His Mistress' Voice.

Vision of loveliness, art thou forever  
gone from me?  
Shall I no more list to thy voice, or  
hold thee on my knee?  
Cruel fate, wilt thou that pearly ear  
prevent,  
From listening to my sad, adoring  
song?  
Gods of the skies, my heart in twain  
is rent,  
If thou so do, thou doest a sad  
wrong.

"Oh, poor Fido, why hast thou me for  
saken?  
Why didst thou try to stop the night  
express?  
Why art thou now so full of informa-  
tion?  
And dead, and deaf to all my sweet  
caress?"

White wast thy teeth, and bright thine  
eyes,  
And sweet the curl of that sweet  
tail;  
Thy nose was't turned by nature wise,  
And sleek thy coat of yellow-pale.  
Return, return and bark once more,  
Let me thy charming accents hear;  
Oh, puppy, dear, I thee implore!  
Come back, come back, relieve my  
fear.

Fido came back but not in life,  
For death had claimed him for her  
meat;  
He interviewed the surgeon's knife,  
And now is labelled "good to eat."

Fate's irony! He on his mistress' table  
came!  
Well browned in gravy, round and  
hot,  
She hungry, saw a dozen of the same,  
And being also famished, ate the lot.

Thus came he back at her request,  
And to her lips, his form once more  
she raised.

But sad, is it indeed to tell the rest,  
The flavor of those sausages she  
praised;

Thus dear in life, was't also dear in  
death,

For sausage meat had reached an aw-  
ful price,

And as he hit the train, his latest  
breath

Was't "take me butcher, I'll make  
sausage nice!" —P.E.L.

Why cannot our Canadian journal-  
ists take a lesson from their Yankee  
brothers and give their imagination a  
little license. It would liven up our  
farm papers wonderfully. Here is a  
clipping from an American farm  
paper. "John Chester, a New York  
farmer, picked up a horse-shoe in the  
road, and the next moment he was  
struck by an automobile which tossed  
him to one side. While Chester was  
shaking his fist at the chauffeur another  
car came along and threw him 10 feet  
in the air. He alighted in a soft ditch  
and was unhurt. When within 300  
feet of his home he was struck for the  
third time by another automobile and  
thrown into a field, where he lay un-  
conscious for an hour. No bones were  
broken. Not once did he let go the  
horse-shoe and he attributes to it the  
great luck which this talisman brought  
him, and has nailed it over the parlor  
door."

After this we suppose everybody  
will carry a horse-shoe slung round  
their neck for protection. Hitherto the  
pedestrians have been divided into two  
classes, the quick and the dead, a per-  
son having to be either one or the  
other.

# Artistic Tailoring

## at Moderate Prices

There's a Style and Elegance about our Tailoring that has won us an envied reputation.

Men, who know and who wear good Clothes, are free to say that there is no better combination of quality, price and workmanship, than a Suit, Overcoat, or pair of Trousers made to order in this establishment. It is to your decided advantage, Sir, if you appreciate good Tailoring, to

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There's always that "something" about our Tailoring that gives it an individuality, both in cut and fabric. We're not fancy priced Tailors—

### NO ONE SAYS THAT

Come in for a consultation before you decide the Clothes proposition.

R. W. WATERHOUSE,

Tailors to men who know,

Ingersoll, Ontario.

Drop a card stating what you want and I will call and see you.

Lady (passing along Charles St.)—  
Who lives in that house, my dear?

Little Girl—Nobody lives there at  
all, only seven students from the Col  
lege.

The difference between the style of  
speeches in our Public-Speaking and  
Oratorical contests is about like this:  
In the former a speaker would say  
merely, "Two and two make four," in  
the latter he would embellish that sim  
ple statement thus: "Ladies and gen  
tlemen, when, in the course of human  
events, it becomes necessary to take an  
integer of the second denomination and  
add it to an integer of the same denom  
ination, the result, and I have the sci  
ence of mathematics to back me in my  
judgment—the result sir—and I say it  
without fear of successful contradic  
tion—the result is four.

THE CANADA FLOUR MILLS CO.  
**Purity**  
THE PUREST AND BEST  
35

**PURITY  
FLOUR**

"More bread  
and better  
bread"

**Pleases people  
hard to satisfy**

Herridge—I nearly sold these boots yesterday.

Murray—How was that?

Herridge—I had them half-soled.—  
(Exit.)

That O. A. College professor who encourages so much the growth of barley in Ontario will cause the temperance men to make a "rye" face—  
Guelph Herald.

## 31,795 ASPINWALL

Potato Planters made and sold up to August 1st, 1910, by

ASPINWALL MANUFACTURING CO.,  
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Please mention the O. A. C. REVIEW when answering advertisements.



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THREE FEEDS FOR ONE CENT.

Will save you money over the ordinary way of feeding.  
 Will keep your stock in better condition.  
 Is equally good for horses, colts, cows, calves, hogs, pigs, sheep, lambs; etc.  
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 Is sold on a cash guarantee by over 125,000 dealers.

COLORED SPEED PICTURE OF

DAN PATCH, 1:55. CRESCUS, 2:02 $\frac{1}{4}$ .

MAILED ABSOLUTELY FREE.

We have just published a large colored lithograph showing Dan Patch and Cresceus in a fast finish down the stretch. It was made from life, and shows both of these magnificent animals in their natural colors. If gotten out in a small edition it would sell for \$2.00. We will be glad to mail it to you free, postage prepaid by us, if you will write us at once, answering the following question:

1st—Name this paper. 2nd—How many head of live stock do you own?

Picture will not be mailed unless you answer these questions.

International Stock Food Co., TORONTO  
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1. The only through line; coaches, tourist and standard sleepers daily to Winnipeg and Vancouver.
2. The shortest and fastest route; unexcelled equipment.
3. The avoidance of customs and transfer troubles.

ASK ANY AGENT  
 FOR PARTICULARS



ASK ANY AGENT  
 FOR PARTICULARS

Professor Dean—A youth at College is like a cheese at a certain stage of manufacturing; he is very green and full of empty spaces.

Aikenhead—Good morning, Boyd, how do you feel this morning?

Boyd—I don't quite know yet. I have only just got up.

It is inconceivable that there should be a right way of growing corn and not a right way of growing character—Bernard Snell.

When the Niagara electric power failed in Guelph the other evening all the Scotch merchants in town stood guard over their tills until the light was switched on again. Those Scotchmen never could trust one another in the dark.



**UNDERWOOD**—the world's best typewriter—more generally used in Canada than all other makes combined.

75% of operators are trained on the Underwood.

**United Typewriter Co. Ltd.**

Toronto, Montreal, Winnipeg  
Hamilton, London, Halifax, St. John, Edmonton

## Official Calendar of the Department of Education for the year 1911

### January:

1. New Year's Day (Sunday).
2. By-laws for establishing and withdrawal of union of municipalities for High School purposes to take effect. (1st January).
3. High, Public and Separate Schools open. (3rd day of January).
4. Provincial Normal Schools open (Second term). (Subject to appointment).  
First meeting of Rural School Trustees. (Wednesday following the annual meeting).  
Polling day for trustees in Public and Separate Schools (1st Wednesday in January).
5. Trustee Officers' Reports to Department, due. (Not later than 5th January).  
First meeting of Municipal Boards of Education. (Thursday after first Monday in January).
7. Principals of High Schools and Collegiate Institutes to forward list of teachers, etc. (Not later than 7th January).
9. Appointment of High School Trustees by Municipal Councils other than County. (2nd Monday in January).  
Annual meeting of Rural Municipal Public Library Associations. (2nd Monday in January).
10. Clerks of Municipalities to be notified by Separate School supporters of their withdrawal. (Before 2nd Wednesday in January).

14. Annual Reports of Boards in cities and towns to Department, due. (Before 15th January).  
Secretaries of Rural School Boards to notify Inspector and Municipal Clerk of names and post office address of Trustees and Teachers. (Before 15th January).
14. Trustees' Annual Reports to Inspectors, due. (On or before 15th January).  
Annual Reports of Kindergarten attendance to Department, due. (Not later than 15th January).  
Annual Reports of Separate Schools, due. (On or before 15th January).  
Annual Reports from High School Boards to Department, due. (On or before 15th day January).
18. First meeting of Public School Boards in cities, towns and incorporated villages. (3rd Wednesday in January).
24. Appointment of High School Trustees by County Councils. (4th Tuesday in January).

### February:

1. Inspectors' Annual Reports to Department, due. (On or before 1st February).  
First meeting of High School Boards and Union Boards of Education. (1st Wednesday in February).  
Rural Boards of Trustees may appoint Trustee Officer if Township Council neglects to. (Council to appoint before 1st February).



WE SHOW MANY EXCLUSIVE MODELS  
IN MEN'S AND YOUNG MEN'S  
SUITS AND OVERCOATS.

that cannot be procured in this locality outside of this store.

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We call for and Deliver Promptly.

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Shoes for street wear.

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No waiting.

The College Boys Always Go to The  
**OPERA HOUSE BARBAR SHOP**

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Guaranteed.

James Smith,  
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Bacon, Oysters, Fancy Biscuits,  
Olives, Pickles, Chocolates, etc.

J. A. McCrea & Son.

"Reserlutions" by Uncle Reuben.

It seems t'er me the wisest reserlution t'er make on the thirty-first of December, is t'er finish breaking the old one, afore you begin making an other bunch that none but un angel cud tackle with any symptoms of success.

Ther only kind of promises ter make is ter resolve not ter indulge in all ther bad habits that yer ain't got, and ter leave off swearin' in yer sleep—yer liable to keep these provided the old habits keep yer busy, and yer conscience keeps yer awake all night.

Old Jem Cornhusk is er good example of er man, whose reserlutions are kept as well as a woman cun keep a secret, Jem was curious, and his curiosity was a thorn in the flesh, un he knowed it, well last Xmas he resolved

ter mind es own busyness in the future and he did purty well, until some one left er bottle er bug exterminator on the table, Jem's curiosity overcame him because he suspicioned whiskey. Well sir, he was full of information in er minit, and his curiosity was satisfied. Jem never got curious agen, acourse he didn't get the chance. We planted him next day, and those who saw his face afore the coffin was closed, said: "How surprised he looks." I calculate that the recording angel was er showing him the list of broken reserlutions he'd made.

Take er word of advise from er old man whose broke more reserlutes than ther senate ever passed.

Reserlutions like tin horn sports, er allus broke, therefore say nothin', but get down ter work and break yer old reserlution and then make n'er more.



Everything in Jewelry.

Repairing a Specialty.

**E. F. Nicholson**  
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## Christmas Gifts

**C**HINA is always appreciated;  
so is **C**ut Glass and **P**ottery.  
**B**rassware is especially  
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We have all four—they're gifts that  
are sure to please.

*Prices from 5c upwards*



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Gymnasium Shoes, Football Boots, Slippers and Rubbers.

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Manufacturers Oiled Clothing, Tarpaulins, Tents, Awnings, Stack and Binder Covers.

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Molasses Taffy, Walnut Cream and Maple Cream. Best in the City.  
Fresh Everyday.

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THE NEW SHOE STORE,

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CANADIAN AGENTS,  
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promptly.

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It removes the scale or incrustation from boiler without injury to the irons, packings or connections, and prevents foaming.

The only reliable boiler compound on the market to-day. We also handle cylinder, engine and machine oils, Lile sodium phosphate engine supplies, etc. Specialty departments, Crystal Separator Oil, Waxine Floor Oil. Correspondence invited.

The Electric Boiler Compound Co., Limited  
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Magnifying Glasses, all qualities  
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surpassed in Guelph, and Guelph is as  
good as any of them.

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## FOR PARTICULAR MEN

We like to make clothes for the particular man. Anyone can suit the fellow who is easily satisfied, but it takes good workmanship, honest materials and the best of tailoring experience and ability to suit the really careful dresser. Ask the particular man what he thinks of the last suit or overcoat we made for him. It is likely he will tell you they are the best he ever had, even for double the price. Suits and overcoats \$18.00 to \$30.00.

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**Caustic  
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A Safe Speedy and Positive Cure

The Safest, Best BLISTER ever used. Takes  
the place of all liniments for mild or severe action.  
Removes Blisters or Blomishes from Horses  
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OR FIRING.** Impossible to produce scar or blemish.

Every bottle sold is warranted to give satisfaction  
Price \$1.50 per bottle. Sold by druggists, or  
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for its use. Send for descriptive circulars.  
**TUB LAWRENCE-WILLIAMS CO., Toronto, Ont.**

**Shoe Boils, Capped  
Hock, Dursitis  
are hard to cure, yet**

**ABSORBINE**



will remove them and leave no blemish. Does not blister or remove the hair. Cures any puff or swelling. Horses can be worked. \$2.00 per bottle, delivered. Look G D free. **ABSORBINE, JR.** (mankind, \$1.00 bottle.) For Boils, Bruises, Old Sores, Swellings, Gout, Varicose Veins, Variococles, Ailans Pain.  
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Dear Sir,—Have been using Absorbine for three months and I have great faith in it. I first tried it on a colt that had got his leg cut in a barbed-wire fence. It healed up and began to swell. I applied Absorbine and it removed swelling in twelve days.

Yours truly,

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Velvet Collars	- - - - -	75c to \$1.25
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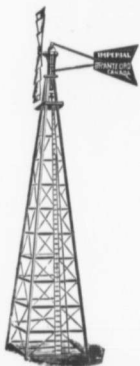
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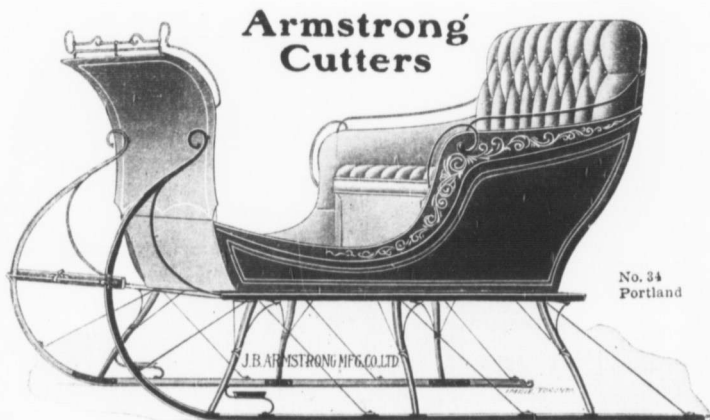
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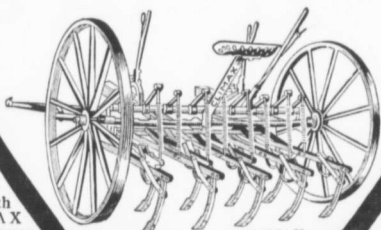
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In any soil, on any farm, the CLIMAX  
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**Very  
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You can rip sod land with the CLIMAX and a 3-horse team—so it MUST be built strong! Yet the teeth won't smash if they strike a stone—their joints unlock and fly back to pass over unharmed.

Manitoba College used a CLIMAX on land rank with wild mustard; got rid of that bad weed; and grew oats 71 inches in the straw without a weed in the whole crop! The CLIMAX certainly does destroy weeds!

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Each pole has a tilting lever; and these, with the pressure lever—all in easy reach of operator—exactly regulate depth of cut. Teeth go right for the roots of the weeds, and rip them out of the soil.

This is the stiff-tooth cultivator that gets the weeds OUT of the soil—not merely cuts off their tops or just tickles the roots a little. On dirty land you surely need the

# Frost & Wood Climax Cultivator

You can have your choice of points—2, 4, 7 or 10 inch. You ought to learn all the merits of this money-making weed-banisher. May we send you Catalogue ?

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ARE  
HERE**



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FRESH FROM THE  
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The College is a Government institution designed primarily for the purpose of giving instruction in all branches of military science to cadets and officers of the Canadian Militia. In fact it corresponds to Woolwich and Sandhurst.

The Commandant and military instructors are all officers on the active list of the Imperial army, lent for the purpose, and there is in addition a complete staff of professors for the civil subjects which form such an important part of the College course. Medical attendance is also provided.

Whilst the College is organized on a strictly military basis the cadets receive a practical and scientific training in subjects essential to a sound modern education.

The course includes a thorough grounding in Mathematics, Civil Engineering, Surveying, Physics, Chemistry, French and English.

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The total cost of the course, including board, uniform, instructional material, and all extras, is about \$800.

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