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# THE O. A. C. REVIEW.

# THE DIGNITY OF A CALLING IS ITS UTILITY.

Vol. V.

ONTARIO AGRICULTURAL COLLEGE, GUELPH, MARCH, 1894.

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No. 6

#### EDITORIAL.

The state of the s

of many a student drawing near. So quickly does time fly in College halls, that almost before we have recovered from the debilitating effects of one attack of cram and exam, the shadow of another is upon us. By many, the time is looked forward to without fear or anxious foreboding: but these are the faithful few, Who.

" While their companions slept,

Were toiling upward through the night."

To the vast majority, examinations are the bug-bear of College life: and it is not to be wondered at that this is the case, for how very often does the nature of a man's future life-work depend upon the clearness of his brain and the quickness of his thought at the critical time. But to some, shall we say unfortunate ones, it matters not if the power of thought be at its best at the final moment when they call upon the reservoir of the mind to yield up for their present use, its store of knowledge, for they find it filled with—"nothing but leaves," and then, when the results of the test are posted on the College bulletin board, there comes the pathetic wail, "done for again."

It has been so from time immemorial and will continue to be so, we suppose, as long as College exams, form so important factors in our educational system. But surely there is a remedy for this troublesome state of affairs? To a very great extent there is, and although the cure may be rather severe in its operation it is as certain in its effects. It is not to be purchased with gold or rank, for it has long been an established fact that there is no royal road to learning, but its possession follows the old common place plan to "act, act in the living present," and the acting is not to be done in a round of social gayety or pleasant enjoyments, but in the line of steady honest application to each day's duties and demands as they appear. We who enjoy the privileges of College life should ever bear in mind that we are, or should be, in College with an honest purpose in view, and having once set that purpose before our eyes should we not each resolve that it will be through no fault of our own if we fail in the attainment, and so while there still remains to us a part of this College year, let each man resolve in his own mind, that so far as he himself is concerned the next record will be in advance of the last.

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There has just come to hand the Ninetonth Annual Report of our institution, and bound with it The Fifteenth Annual Report of the Experimental Union. The whole report shows that along both lines the past year has been one of very gratifying success, so that it should be

a volumn of much interest to the general public as well as to the Alumni of the College. As a general thing this report does not receive the careful consideration and study which it is entitled to receive, particularly from the farmers of our Province. It is too often looked upon as a compendium of dry statistics, experiment results, etc., from which the practical man can derive no benefit, and in which he consequently can have no interest. Now, this view is entirely erroneous; the practical man, be he ever so practical, and we believe in practical men of the right sort, can find recorded upon its pages very many things which would be of great service to himself would he but diseard his old prejudices against what he so sagely terms "book learning."

Our Experimental Union, as most of our readers already know, conducts the largest system of co-operative experiments, in agriculture, in the world. From the proct mass of speaking facts derived from these, surely even the wisest among us can learn something. We venture to say that if every one into whose hands the report finds its way, were to give it a careful perusal, much of the apathy and even ignorance in regard to our institution would soon disappear.

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It seems to be a universal complaint, that as the year progresses interest in literary and knudred societies gradually does out. At the commencement of the term everyone declares his intention to attend every. Literary Society meeting, health and weather permitting, at which the hearts of the President and Secretary throb joyfully. There is a crowded house for the first few nights and everything goes beau tifully. But soon a small cloud appears on the lovely horizon, gradually it approaches, increasing in size, until at last sofar as the Society is concerned all is dark and comfortless. The crowded house is a thing of the past, and one can readily detect the sorrowful note in the melodious rhyme of the Secretary, as, in a drestry sing-song, ding dong tone, he reads out the long list of mames to which he cannot elicit a reply. And when the once busy reporter is reprimanded for not sending in something, he can only saddy murmur, "there isn's anything to send."

Our meetings will soon be at an end for this year, and we do hope that for the few that remain, more interest will be taken in them Our Literary Society is one of the best educators we have, but most of the follows soom to prefer taking private lessons on the nights wher its meetings are held. Well, after all porhaps they are right, for what is such a meeting when compared with one in which there is soul-followship and—cake, and—, but no, we will draw the curtain and not intrude.

#### AGRICULTURAL.

## Tuberculosis and its Prevention.

ROM a late number of Harper's Magazine we take a few extracts from an article on the dread disease, Tule culosis. The writer, T. Mitchel Prudden, M. D. says that it is neither wise nor necessary for non-professional people to concern themselves much about disease, or weigh auxiously the chauce or mode of its

requirement. But now and then conditions arise which demand general attention and instruction regarding certain diseases in order that a great threatened or actual calamity may be averted. Such a condition faces the people in all lands to-day in the appalling prevalence of tuberculosis. A disease which in mild or severe form affect at least one-half of the whole human race, and which causes the death of fully one-seventh of all who pass away, killing about one-third of those who perish between the ages of fifteen and forty-five—a disease which is most insiduous in its onset, and often relentless in its course, and which may be largely prevented—is one about which we cannot be indifferent, and should not longer be inactive.

There has long been reason for believing that tuberculosis is a communicable disease. Its cause, up to the commencement of the last decade, was altogether unknown, hence its ravages could not be stayed. But in these later years a great light has been thrown upon this and other kindred diseases.

The se2rch and study now in progress in many of the laboratories has had much to do with the present knowledge of diseases which are caused by micro-organisms or bacteria.

Different groups and races among the bacteria have different habitations, and vary widely in their special powers. Complex and powerful as is the aggregate results which they accomplish in the world, the performances of the individual are comparatively simple. They are most liberally endowed with the capacity for multiplication, and each germ acts as a tiny chemical laboratory, taking into itself the organic matter on which it feeds and resolving it into new compounds. Some of the latter are used in backing up and maintaining its own body, while others are given off into the surrounding media.

The diseases caused by the growth of germs in the body are called infectious, the germs of which are given off from the bodies of their victims in such form as to be readily transmitted through the air to others, in whom they may incite similar disease. Such diseases are spoken of as readily communicable, though it is not actually the disease itself but only the germ causing it which is transmitted. In other infectious diseases transmission but farely obcurs.

Without parading the whole list of germ diseases in which tuberculosis stands foremost, we will at once glance at the germ called the tubercle bacillus, the germ which causes and alone can cause the disease under consideration." It does not exist in the body of men or animals in health. Without the entrance of this particular germ into the human body from without, tuberculosis cannot develop in it. Without the transmission of this germ in some way or other in a living condition from the sick to the well, tuberculosis cannot spread. In the life history of this tiny germ lie both the potency for mischief which we deplore and the secret of our release from its bondage. The tubercle bacillus is a little colorless rod-fike plant, so small that even many thousand of them-piled together would make a heap still far too small to be seen with the maked eye. It cannot move about nor can it grow without moisture, nor at a temperature much above or much below that of the human body. The material upon which it fields must be very nicely adapted to its requirements, and it has no lurking or growing place in nature outside of the bodies of men and a few warm-blooded animals. It can be cultivated artifically in the laboratory, and we know more about its life and peculiarities than about almost any other germ. While it can remain alive in a deied state for many weeks, it is readily killed by heat, by sunlight and by many of those chemical substances which we call disinfectants. It does not flourish equally well in the bodies of all human beings.

When once it gains lodgement in a body suited to its growth, it multiplies slowly, each germ dividing and subdividing, taking from the tissues material for its growth, and returning to them certain subtile poisons which it sets free. The action of tubercle bacillus is peculiar in that it stimulates the cells of the body, wherever it may lodge, and grow to the formation of little masses of new tissue, which we call tubercules. These tubercules are as a rule short-lived, and if the disease progresses, tend to disintegrate. If the tubercules have grown in such situation as make this possible, as in the intestinal canal, or the lungs, the disintegrated and broken-down material, often containing myriads of the living germs, may be cast off from the body. In tuberculosis of the lungs, or consumption, this waste material is thrown off with sputure. While almost any part of the body may be affected, tuberculosis of the lungs is by far the most common form of the disease.

It follows from what has been said that tuberculosis comes only from getting into our bodies tubercle bacilli from tubercular men or animals. The only animals liable to convey the disease to man are tubercular cattle, and these through the use of their meat and milk. The danger from the use of uncooked meat and unboiled milk is real and serious, but the prevailing danger of infection comes from another source.

By very careful study and experiment it has been found that the tubercle bacillus cannot be given off into the air of the breath from the moist surfaces of the mouth and air passages, nor from any material which may come from them while it remains moist, nor from healthy unseiled surfaces of the body. The establishment of this fact is of far-reaching consequence because it shows that neither the person nor the breath of the consumptive is a direct source of danger, even to his most constant and intimate attendants.

It is the sputum after its discharge from the body or which our attention must be fixed. While the sputum is moist it can, as a rule do no harm, unless it should be directly transmitted to those who are well by violent coughing, by the use of uncleansed cooking utensils, by soiled hands or by such intimate personal contact as kissing or fondling. But if in any way the sputum becomes dried on floors or walls or bedding, on handkerchiefs or towels, or on the person of the patient is may soon become dissequinated in the air as dust, and can then be breathed into the lungs of exposed persons. This germ-laden material floating in the air may be swallowed, and thus enter the recesses of the body through other portals than the lungs, and these are the most vulnerable and accessible organs.

The wide distribution of tubercle bacilli in the air of living rooms, and in other dusty, places where people go, is due partly to the frequency of the disease, and the large number of living bacilli which are cast off in the sputum (cometimes millions in a day), and partly to the fact that many of the victims of consumption go about among their follows for purposes of business or pleasure for months or years. So each consumptive, if not intelligently careful, may year after year

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be to his fellow-man a source of active and serious and continual infection.

We have learned in the past few years one fact about tuberculosis which is of incalculable comfort to many, and that is that the disease is not hereditary. It is very important that we should understand this, because it seems to contradict a long-provident tradition, and a belief still widely and sorrowfully entertained.

Bacteria, and especially most disease-producing bacteria, are very sensitive in the matter of growth and proliferation to the conditions under which they are placed and especially to the material on which they feed. So that a germ which can induce serious disease in one species of animal is harmless in the body of a different though closely allied form. More than this, different individuals of the same species. or the same individual at different times, may have the most marked differences in susceptibility in the presence of disease-producing germs. What the conditions favorable to susceptibility are we do not know, but we do know that certain individuals are more likely than others to yield to the incursions of the tubercle bacillas. This valnerability in the presence of invading germs we call susceptibility, and susceptability to the action of the tubercle baculus is hereditary. It is not the disease, tuberculosis, which comes into the world with certain individuals or with successive children of the same family, but the aptitude to contract it should external conditions favor. However much the child of tubercular parents or a member of a tubercular family may be predisposed to disease, he cannot arquire tuberculosis unless by some mischance the fateful germ enters his body from without. What has been through all these years regarded as the strongest proof of the hereditary transmission of tuberculosis -namely, the occurrence of the disease in several members of the same household-is in the new light simply the result of household infertion the breathing of air especially liable to contain the noxious germs, or their entrance in -ome other way into the bodies of persons especially sensitive to their

It may well be asked why has not the world been long since depopulated when the germs are so widely diffused? but a knowledge of the bodies safeguards, partially at least, answers this question. It has been found that a person breathing in germ and dust laden air through the nose breathes out again air which is both dust and germ free. The air passages of the no-e are tortuous, and fined with a moist membraie, against which the air impinges in its passage. On these moist surfaces most of the solid suspended particles, the germs among them, are caught and hell fast, and may be thrown off again in the secretion. In breathing through the mouth this safeguard is not utilized. Again, the upper air passages leading to the lungs are fined with a delicate membrane of cells, whose free surfaces are thickly beset with tiny hair like projection. These projections are constantly moving back and forth with a quick sweep, in such a way that they carry away small particles, which may have escaped the barriers, above, up into the mouth from which they may be readily discharged. In this way much of the evil of breathing dust and germ-laden air is averted. But it spite of these natural safeguards a great deal of foreign matter does, under the ordinary conditions of life indoors or in dusty places, find lodgem, nt in the delimite recesses of the lungs. The body tolerates a good deal of deleterious material, but its overtasked toleration fails at last, when serious disease may ensue.

In the presence of tubercle bacillus the body cells are often ablandability and deuse enclosing wall around the affected region, shutting it off from the rest of the body. This is one of the modes of natural cure. The body cells are sometimes able, if sustained by nourishing food and abundance of fresh air, to carry on year after year, a sucrest struggle with the invading germs, so that the a cfulness and enjoyment of life are but little interfered with. Finally a certain proportion of human beings seemed to be endowed at birth with some as yet unknown quality in the cells or fluids of the body which naturally unfits them for the life uses of the tubercle bacillus and so renders thuslyidual for longer or shorter period practically intunue. Otherson the contrary, are, as we have seen, from birth amusually susceptible.

The degree of success which may attend our crastle against takerculosis will largely depend upon the wide diffusion of the knowledge of its communicability by means of the sputum dried and powdered and floating in the air as dust, and the intelligent persistence with which peccant material may be safely cared for at its sources. The resolute avoidance by consumptives of the not only fifthy but dangerous practice of spitting up in floors or streets or anywhere else except into proper receptacles; the use of receptacles which may be and are thoroughly cleaned, and, best of all, of water-proof paper cups, which with their contents may be burned; or, when circumstances require the receiving of the dangerous material on cloths or Japaneso paper mapkins, which may be destroyed by fire, and not on more valuable handkerchiefs, on which the sputum is allowed to dry while in use or before disinfecting and washing; scrupulous care by others of the sputum of those too ill to care for it themselves; these are the comparatively simple means from vaich we may most confidently expect relief.

To the consumptive himself those measures are not without a vital significance. For his chances of recovery may be in no small degree diminished if he be more or less constantly liable to a fresh infection from material which he has once got rid of, and which should have been destroyed.

In ordinary out-door life little apprehension need be felt from the presence of moving germs, but in crowded cities precautions are necessary. If a street sweeper passes over a dry surface, it must set affoat myriads of germs along with the dust which it arises. Municipal authority should demand that thorough sprinkling precede pavement sweeping. This principle should also be observed in house sweeping and dusting. By the use of moist tea leaves in the sweeping of carpets, by the use of soft textured fabrics, frequently shaken out-of-doors, or, by moist cloths or chamois in dusting, much useless dust-scattering may be avoided. By no matter what the means employed, the final purpose of every household cleaning should be to get the just, not affoat, but away.

The members of families bearing a hereditary susceptibility to the acquirement of this discuse should strive to foster those conditions which favor a healthy, vigorous life, in occupation, ford, exercise and amusement, and remember that for them more than for others it is important to avoid such occupations and places as favor the distribution, in the air or otherwise, of the tubercle bacillus.

But when the individual has done what he can in making his surroundings clean, and in thus limiting the spread of tubercle bacilli, there still remains work for municipal and state and national authorities in diffusing the necessary knowledge of the disease, and its modes of prevention; in directly caving for those unable to care for themselves; in securing for all, such freedom from contact with sources of the disease as the dictates of science and humanity may require and the law permit.

To health boards, either national or local, must be largely entrusted the primary protection of the people against the danger from tubercular cattle.

The dreams and aspirations and strennous labors of the students of this disease have looked steadily towards the discovery of some definite and positive means of cure, but as yet full success lingers beyand their grasp. The methods for the early detection of this renlosis which science has pointed out make it possible for affected per sons to plan such modes of life and early seek such salubrious climate as promises a hope of recovery. What is now understood by science has enalled us to realize that the outlook for those in the earlier stages of this disease is in a considerable proportion of cases extreme. h encouraging. It is no longer the hopeless malady which it was carlier believed to be. A long and happy and useful life may yet be his, on whom the finger of the disease has fallen, if the conditions which favor his case be early and intelligently fixed upon, and faithfully and patiently persisted in. The wise physician is here the best adviser in climate and regimen, as well as in the proper selection of remedial measures, and the earlier his counsel is sought and and on, the brighter will usually be the outlook for recovery.

The givent and beneficient work which has been accomplished by Tradeau in the Adirondack words, in at once widening the bounds of knowledge of tuberculosis and in carrying to a successful issue in so many the varied and delicate processes of cure, is a cheering example of what may be accomplished with persistent devotion, by the light of our new knowledge, in mastering a malady so long considered hopeless.

# The O. A. C. Revielv,

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MARCH, 1894.

## Business Ways Overdone.

HERE is a big talk about business in farming nowadays. but it seems to me, judging from the practice of some that the thing must be overdone. Now, my neighbor had forgotten just when to expect the next litter of pigs and not having provided for them, some of them

about half, succumbed to the cold. His neighbors said he needed a little more system and business in his farming. But look at the bother of looking up a peucil and note book to put down every little thing, and besides the remaining five will do better than the nine would, and they will need less grain to fatten them, and this is quite a consideration, you see, for when grain is cheap a farmer needs to well all he can to make a little.

Again some men seem to think that it pays to draw as much manure on to the land in winter as possible, saying that it eases the ardnous summer work and that they get the benefit of it one year sooner, &c. but there are two sides to the question. You see if you do things that way you lose the chance of rotting the manure well by leaving it in the farm yard all summer. Besides this latter method keeps the yard nice and wet, and very dirty, thus keeping the hired help from getting too proud over their clean boots; it also furnishes extra work to the teamsters keeping their horses legs in order, thus preventing them from getting lazy. If a wet summer it will likely be lighter work drawing out the manure in the fall, as the richest parts of it will probably have taken a trip down the nearest ditch, and any way a very rich fertilizer is likely to make the crops run too much to straw.

Others make all haste to get their wood supply, for the entire year, ready for the stove in winter time. But we have known several who nk otherwise. Of course it is alright to have a heap of nice dry d at hand, but then you see if there comes a wet spell next harat are you going to put your hiredmen at if you have no wood to saw or split? And if you have to stop teams and men in the middie of some pressing work next summer to draw up a cord of wood

why you know "a change of work is as good as a rost." the farmer's wife and the hiredgirl have to split the wood themselves, now and then, it will prevent the former from becoming too proud for her position, and from spending all her time in the parior entertain. ing company, while the latter will not stay so long that you will forget all about the pleasure and novelty of securing domestic help.

Again we have heard of farmers so particular that they kept account of what it actually cost to raise a colt ton working age, of others who reckoned up the cost of feeding a milch cow twenty.four hours for the purpose of knowing if her product equalled in value the cost of her feed, and who experimented on the effect of currying and brushing on the milk flow; while some, it is said, have calculated the exact cost of raising a bushel of grain in order to know if it paid to raise such and such grains for feed and such and such grains for sale ; while it is recorded of one man that he actually went to the far side of the place, a distance of at least forty-seven rods, to bring in a plow and house it from the effects of winter. But, my! what a heap of reckoning and hard thinking it must take. Even if it does take half as much more to raise a work horse than to buy one, surely it is better to have a horse to sell than one to buy. We do not protend to be up in logic but that seems to sound right. And we don't see who a cow is going to give any more milk because her feed is weighed and her milk messured, and I presume we are not going to wear out combs and brushes just for the benefit of the tanuer. As to housing implements, just look at the amount of time wasted just for the pleasure of unhousing them the next spring, whereas they might have been left where they were wanted. And suppose they do get a little rust, and perhaps break we have to get new implements every little while in order to keep up with the improvements. Oh, no; we are not quite so simple as to swallow all this talk about business and system We have not been farmin' nigh on forty years without in farmin'. being too old for that.

Yours.

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

UR Y. M. C. A. has experienced much of the Divine blessing dur-ing the past few weeks Name of the Divine blessing durlieve, been more thoroughly awakened to the extreme need of more intensely earnest personal work. But very much, fellow students, yet remains to do. To the members of the personal worker's classes we would beg to say, take time to ponder well the lesson set for each week's consideration. Go to your class prepared to offer something as the result of careful thought and earnest prayer.

We were glad to be able to send a representative of our Association to the "Students' Volunteer Convention" lately held at Detroit. Eleven of our members attended that soul-stirring convention, among whom were: Mr. A. H. Christian, President of our Association, Mr. J. W. Widdifield, vice-president; Mr. A. M. High, treasurer; and Mr. J. J. Ferguson, chairman of the Missionery Committee. Already our Y. M. C. A. has felt the impulse of the close touch with the Master and His great work, experienced by our delegation. May it indeed be a growing impulse, ever-widening with the years.

We are much pleased to see the younger members of our Association taking such an active interest in the work. Our Thursday even ing meetings continue to be times of added grace and blessing. Since finishing the Epistle to the Hebrews, our Bible Class, which meets on Sabbath afternoon at 3 o'clock, has taken up the International S. S. Lessons.

# Agriculture at the World's Fair.

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IE Agricultural Fair is a modern institution, and in America has grown in importance as rapidly as any other. The first stock show in America consisted in the exhibition of one pair of Merino sheep, on the public square in Pittsfield, in the year eighteen-hundred

and seven. From that time have Agricultural Fairs and stock shows grown and extended their influence in every part of the land; until the climax was reached in Chicago last year. Then we saw the place Agriculture holds in the world, and then our eyes were opened to the great advancement she has made in late years. Agriculture at the World's Fair occupied the position it is entitled to; that of first importance.

The building was one of she finest, and its position on the Court of Honor rendered it most striking. From the water-front and the pier it was most imposing, appearing second only in importance of position to the Administration Building. It covered an area of thirteen acres, including the annex; it was sixty-five feet high to the cornice, and one-hundred and thirty to the summit of the dome, while the cost was eight-hundred thousand dollars. The architectural design of the building was classic and very striking. Symmetrical Corinthian pillars ran around the cutire structure, and these were most noticeable at the main entrance which was massive and Grecian. The haudsome dome gave a pleasing effect to the building and added to the appreciation of the statuary. The statuary was very imposing, and would have moved those who are least artistic to wonder and admiration. There was a bronze statue of Diana, by A. St. Gaudens, which was seen from a long distance. Then the four " Pilir " groups at the corners added to the building's appearance as well as bore interest for themselves. Among other noticeable groups were the different "Ceres," "Seasons," and "Abundance" groups, and the "Glorification of Ceres," by L. G. Mead, the Indian sculptor, which was situated at the main pediment.

The character of the exhibits was as varied as were the races whose products were there brought together. While the Americans and Canadians, for the most part, took pains to arrange the raw products of the field to the best advantage, the foreign exhibitors often included manufactured articles which sometimes had no distinct connection with Agriculture. The exhibit of countries less favored for Agriculture than our own often developed into a natural history display; or perhaps curies, indicating savage and fierce neighbors, flanked the scanty products of the tilled soil. Types of the buildings, implements, and utensils, of some foreign countries served increase the interest taken in their Agricultural products. On the whole, however, a careful study showed that nowhere is Agriculture at a standwill; there is no country, however unsettled or wild, but seems to say: "We are advancing in Agriculture."

The American States vied with each other in the excellence and the artistic display of their products. The thought which came as each pavilion was viewed was: "This must be the best; it cannot be beaten." As there are poets who have never written, there are many attists who have never wielded brush or pencil. Where are the artists who planued and arranged those pavilions so that the most artistic would not fail to be pleased, and none could find a flaw? These while the consisted, for the most part, of grains and grasses exhibited just as grown, or perhaps only the heads, and often the threshod seed. Corn, in many different forms, was prominent. An attempt to describe even once of these pavalions would occupy more time than to

picture the interior of a fairy palace, and would involve more uncommon terms than the latest goror of a modisto. There were figures. implements, and pieces of furniture made entirely from the products of the field. Crosts mottoes and figures woven with cereals called to mind the tapestries of old-time fame. There were arches of corn, pillars of wheat, and gables of grasses; all in tuste, all unique, and all beautiful. California, Queen of the Universe, was there; Iowa, Wisconsin, Oluo, Connecticut, Washington, and many others, each claiming praise for her offspring. Pennsylvania displayed evidences of her silk industry to advantage. Nebraska had an interesting exhibit of beet sugar. The decorations of the Kentucky pavilion consisted mainly of tobacco in different forms, which was pleasingly set off by that pretty grey moss we never see in the north. The South Dakota exhibit was a very large one; to enter the pavillon one had to pass under a series of arches which rested on the trunks of trees. From some of these trunks came fresh sprouts, which made the effect more pleasing. The exhibit of North Carolina would call to mind our difference of position: cotton tobacco and pea-muts were its chief features. Masse usetts took a novel course: she claimed little for the soil as it now is; but did claim, and attempted by showing results to prove, that, with the aid of artificial fertilizers she could excel all the

The Agricultural Colleges made an especially interesting and instructive exhibit. The sciences of Botany, Physiology, Physics. Chemistry, Dairying, and Veterinary Science, were well represented. Tables, charts, figures, and objects, would have repaid a study of weeks to the Agricultural student. The Ontario student would also have approciated the reading material and fine photographs relating to the different Colleges throughout the country. If we were to criticise these exhibits it would be on account of their apparent distance from the principles of actual practice. There was notempt made to ead the farmer to see the relation between his wheat or cattle and Agricultural science as it now is; and while we allow the difficulty of making the exhibit more instructive to the farmer we think something might have been done to that end.

It would be impossible to give even a general idea of the foreign exhibits in a short account. England and France showed us what can be done with small plots of land; and their exhibits seemed to indicate a spirit of intensive farming. France had a complicated exhibit illustrating the methods of the technical schools. Therewas an exact model of the Brookfield Stud Farm stables. Australia had a very prominent exhibit of wool, which was very much in keeping with the country. Japan did remarkably well in everything connected with the Fair, and was not behind in her unique exhibit in the Agricul tural building. Strange smelling grasses, bamboo, tea, rice, silk, and tobacco were its chief features.

The exhibition of implements could not fail to interest all. Here again one who reminded that not only our country, or our continent, was represented, but the World. Many machines were a mystery to the American, and more to the Canadian farmer. The splendid representative exhibit of the Massey Harris Company was flanked by machines which are not known to us. We were reminded that cot ton and tobsoco, as well as wheat and oats, were being cultivated with the aid of complicated machinery. There were corn-harvesters, has presses, corn-planters, and potato-harvesters in great number. There were many interesting and elegant exhibits of plows, harrowsbinders, mowers, and other ordinary machines. Some of the threshing-machines were exceptionally handsome. Those symmetrical brightly polished and painted plows seemed quite at home on the soft

carret of the tastily arranged apartment which they occupied. It seemed impossible that these were the types of implements that unearthed the elements and withstood the ups and downs of a common unachine's career. This exhibit was very significant: it seemed to suggest the question, "Where will this end?" "Will there come a time when the machine will entirely replace the man?" "Will the mind of man in machinery replace labor; or will laborers become engineers?"

The Canadian exhibit was excellent and a credit to us, as far as it went: but some of our people showed lack of spirit and failed to do their best for the country. The absence of the Manitoba exhibit is a thing to be regretted. As far as the material of this exhibit was concerned, it stood head; but its position outside the grounds rendered it so unlikely to be visited that comparatively few were fortunate enough to view it. Our sister province, Quebec, did well. And what shall be said of Ontario? We cannot fail to give great praise to Ontario, and think others should do the same. It must be taken for granted that the cheese was inspected, as it would be absurd to attempt to enlarge on its reputation. Then the exhibit of biscuits, which were excellent in their way, need no comment. Who ever thought of connecting Mr. Christie with Agriculture? To return to our Ontario exhibit in Agriculture proper, we can say it compared very favorably with the other exhibits. large pavilion was well filled with splendid samples of what Ontario Konsas learned that Ontario has corn, and Dakota that Ontano can produce wheat, as fine as her own. The grains were shown artistically arranged in sheaves and in other ways. Above this were grains in long glass columns which rose nearly to the gallery in a rather obscure and darkened part of the exhibit the pictures from our College were placed. It did one good to see them; but how lonely a feeling crept over one as he looked around and saw only dead things to remind bim of the place in view. No one from Ontario, from Canada visitor chatting pleasantly under his own roof, as it were, and with his own neighbor; but here no one was in charge. The nearest neighbor was a pleasant old gentleman in charge of the Massachusetts exhibit. He was not without his experience of an Agricultural College. He spoke of some of his "boys" who were under him twenty years ago when he was superintendent on some other "model farm."

In conclusion, it may be said that the Agricultural exhibit at the World's Fair exceeded in every way the expectations of the most san-In extent, in excellence, and in every detail, Agriculture reigned supreme. We can say she did her part in making that spot on Lake Michigan forever noted in history; for there was witnessed a scene of beauty, wealth, and power which eclipsed the fabulous glory of ancient States.

TRAMP.

# Literary Society.



HE Literary meetings still continue to be the centre of attraction on Friday evenings. Seldom, if ever, is one of it's members attracted down town on that evening, no matter how pressing the invitation, or how urgently Cupid tugs at his heart strings. Early in the evening

crowds are seen wending their way towards the Convocation Hall. some wearing looks of anxious care, others with countenances beaming with pleasure. Some carrying queer shaped and likely looking instruments under their arms; others carrying airs of satisfaction in every limb. All seem to be bent on enjoying themselves and making things enjoyable for others. Shortly before the hour announced for beginning the proceedings the President is in his chair wearing a look of complacency on his classic countenance, and as he surveys the assembled audience before him, his "timid, pleading eyes" "roll in their harmonious way" around the room, the clock strikes seven. Promptly on time the last man takes his seat. The President arises and in sweet musical cadence informs the Secretary that it is now time to begin. The first item on the programme of course is reading of the minutes of last meeting and as no one challenges the correctness of the efficient Secretary's work, the next announcement is, "the min utes minutes stand approved." Item after item of the programme is thus disposed of. Songs, readings, recitations, impromptu-speeches follow each other in rapid succession. The debate is listened to with rapt attention by every one, Secretary included. One after the other the speakers come forward and in a few well-known words of apology begin their speeches. The arguments are always pointed and driven home with a will, but seldom are they clinched. After the allotted time for the debate has expired, the committee appointed to decide upon the merits of the debaters get together and decide upon the winners. In the meantime the open discussion is entered upon and as one after another arises to air his knowledge of the subject in hand, one is almost tempted to exclaim in the words of the noct, "Oh for an axe!" Presently, however, the President comes to the rescue by announcing that the half-hour devoted to discussion has expired and that those who wish to say anything further will be given an opportunity after adjournment. After the discussion the critic has his turn. He suggests changes here and improvements there, and after having criticised everyone to his heart's content, takes his scat with the air of one who has done his duty; someone moves for an ad journment, and all go to their rooms well pleased with the evening's entertainment.

C. A. D.

#### Locals.

W. D. Kennedy-

" He uttereth common things in an uncommon way."

Prof. -- Why is Richard II. lacking in interest? Doherty (promptly) -Because there are no female characters in it.

Shorey- Do they enforce the game laws in Muskoka?

Bard -- Indeed they do. I was up before the Magistrate just before leaving there for killing snakes out of season.

W. A. K. -To find the proportion of crude fat in a fodder you mul tiply the amount of albuminoids by .25 and divide the result by the amount of circulatory protem.

It was with much sorrow we heard that the trusted cashier of the Standard Oil Company, which has been doing such a flourishing business here lately, has been proved guilty of embezzling large sums

of money. There is considerable excitement over the affair as it is feared that the public will get hold of it. Great sympathy is felt for his wife and family.

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Bard—There are worse places in the world than much-abased Muskoka.

Elliott (after smoking a cigar)-

I feel a wish that I had never been, a

Wonder that I am, an ardent and hopeless desire not to be.

Dunn I have a consistence of the dairy, but have not yet been able to find it.

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Whetter The first time I danced I felt horrid awkward, but one of the best ladies in the crowd took me and put me through, and after that I fell into it right lively.

Lang

"When these prodigies

Do so conjointly meet, let not men say,

These are their reasons,-they are natural."

Patterson-

" Indeed, it is a strange-disposed time,

But saw you anything more wonderful?"

Lang-

Yes, Harvard's got his hair cut.

•••

Cook at library wicket-Will you give me "Erratum," please?

Librarian--What is the character of the book, I don't think we have it in the library?

Cook-It is a work on Political Economy: Symes advises it as a book of reference.

•••

Ferguson-Well: you bet I'll never try it again.

Iteinke-We must have been going fifteen miles an hour.

Graham-I'll wait till the thing stops the next time.

High -Did you find your watch, Ferguson?

Graham--Hold my valise, will you, Widdifield, till I scrape some of he mud off my clothes.

Spencer-I'd leave that alone, Dick, till it dries; it'll come off alright.

Forguson--You fellows haven't any court plaster have you?

Kennedy ~(Serenely viewing the scene from the rear platform of the recoding train) "My ticket calls for Guelph."

Clark--Well, boys, it's lots of fun anyway.

Christian -All's well that ends well.

Graham -- All that ends well is well, but that doesn't cut any figure in this case.

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The concert given by the O. A. C. students in the Norfolk Street Methodist Church was an acknowledged success, and we think we may justly be proud of our entertaining abilities.

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Prof.—His hand being amputated, he waved the blesding stump in the air and cried "Long live Queen Elizabeth."

Kennedy-That would be a stump speech would it not, professor?

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The thanks of the students are due to Mr. Houston, of Toronto, for his very instructive lectures in Literature and Political Economy, recently delivered at the College.

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Simpson -1 suppose, Dunn, you know most of the girls down a Chalmers'?

Dunn - O. I don't know 'em all but I talk to 'em just the same.

# Personal Work in the College.

To the Review.

To the readers of the Review it might be well to say that this paper was prepared on request of the programme committee for the "Provincial Convention of the Young Men's Christian Association of Ontario and Quebec," which was held in Toronto, January 25th to 28th, 1894, and read at that convention for the benefit of those interested in "Personal Work."

The subject of this paper is one with which every active christian. in the College and elsewhere, should be familiar. The importance of "Personal Work," every christian will admit, is very great. We reergnized the importance of it in our own experience, when that friend, in whom we had all confidence, came and personally spoke to us of our soul's eternal welfare. What a burning it sent to our heart as that kind friend told us, perhaps, in only a few words, the blessed experience he had realized, in his own soul, since he had accepted Jesus Christ as his Muster. The power of his words, the tone of his voice. made us think, and if you can get a man to think of his soul's welfare you have accomplished the first important step towards his salvation. As we thought of that friend's words, there seemed to be some magic power in them; knowing he was our friend, we had confidence in what he said, for we could see it all borne out in his conduct and conversation whenever and wherever we meet him. His words were backed home to our conscience by the spirit of his Master, to whom he failed not to remember us in prayer, until he had won us for Him-This is what I understand to be "Personal Work."

We are not left without example in this work of helping men to Christ. We goto the sacred Scriptures for our example. First of all we see it fully exemplified in our Blessed Master Himself. We watch him as he moves about among men, He is ever ready, with a smile of Divine love, to brighten the downcast and sorrowing heart. He never passes by a discouraged and melancholy soul, needing a kind word, without giving it, and more also. His cars were ever open to the cry of those in need of help, and his hands ever ready and willing to help the helpless. Such is our example in Christ, and none but those who have exercised their love and sympathy in such work know the blessings derived therefrom.

We go further, and we find the Apostles, Evangelists, Reformers, and Christian Ministers all earnestly engaged in Personal Work, not in Colleges only, but el cwhere. But when we come into the College it seems doubly important, for there we are associated with our class-

J. A. C. KRYIEW.

mates day after day, and our conduct as followers of Christ is marked by the non-Christian.

The question may a. : e, where is the best place to do this work? In answer to that puestion, I would say: Begin first at home, in faith and prayer, alone with Christ in the closed closet. Have the assurance of our acceptance with Christ first. And then, the second place, in the class and class room, by honest, straightforward work, for romember how we watched that friend who spoke to us. So the unsaved watch the Christian every time. Therefore, let us be true every time. The third place to work is on the play ground, while engaged in an exciting game; for the Christian can play, and should play, in the proper time, and truly enjoy a recreation, and show a light for bis Master at the same time. Work, in the fourth place, in the College Halls, and on the street, by keeping a close guard on your words and acts, taking Paul's advice to Timothy, " Se then an example to them that believe, in word, in manner of life, in love, in faith in purity."

The Personal Worker must exercise good judgment and aptness in approaching his subject to his friend.

First, be sure you are right with Christ yourself, and in the second place, be sure you have the confidence of him whom you desire to help or win for Christ. This is a very important part of the work, and a place where prayer and good judgment must be exercised. bering the admonition, "Be wise as serpents, and harmless as doves." Therefore, be sure you choose a congenial character, and approach the subject in a manner that will not be repulsive. Let some one else deal with those, whose society is not congenial to yours for there is some one who has an influence over such character, and herein is the "Personal Worker's Class" of vast importance, because in these classes, those characters should be studied in connection with the Scripture lesson, and the case you are working for should be thoroughly discussed. Therefore, it is important that the members of the class have the utmost confidence in each other in order that they may speak freely and openly to each other of their friend's troubles and difficulties, feeling assured that what they say will go no further than the members of the class. Thus the class can discuss and suggest methods of help for your case, and in that way be a means of help to each other, and through their combined help, and prayer, be the means of saving that precious soul, whom you could not reach singlehanded.

The benefit derived from true Personal Work in Colleges cannot be estimated by what the eye sees. The benefits and blessings that come to workers themselves are many, when done in the true spirit, for the Master. We know not the good we may do to those with whom we associate when we live Christ before them, and have regard unto our words and acts, bearing them constantly before Christ, by our prayers, in faith believing that what we ask we shall receive. For He that promised cannot lie. When he said, "Ask and receive that your joy may be full," he surely meant it. The result of such Personal Work will be made manifest: it will be felt in the church, in the society or the association, with which we are connected.

Many will admit of the importance of Personal Work, but it is deplorable how few there are actively engaged in it. Therefore, it becomes us as Christian College-men, to stimulate a spirit of Personal Work in our associations, that this lamentable lack of christian work may be remedied, and the world won for Christ. Exchanges.

A well bred man never loafs. Ex.

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The faculty of Cornell has decided to abolish final examinations, and the knowledge of the student will be decided by his daily recitations and the short examinations during the term.

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The Adelphian is one of the neatest and most attractive of our exchanges. It rather excels the average College journal by adding to its otherwise attractive appearance, a splendid photo-gravure each month.

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The President of the University of Wisconsm has offered three prizes for the best three College songs, written by the students of the University.

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The article on "A Teacher's Influence," in the Jan.-Feb. issue of *The Sunbeam*, is both comprehensive and unique.

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The University of Michigan has over fifty of its own graduates upon its faculty.—Ex.

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Two maids as fair as maids can be,
Fair maids, both blonde are they;
But both coquetes and shallow souled,
Dressed up in style to-day.

They paint sometimes when color fails,
Delight in laces fine;
Two maids, two ready-mades are they,
Thes, russet shoes of mine,—Ex.

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The last number of *The Manutoba College Journal* has in it an excellent article on "Robert Burns," by Mr. J. W. Maclean. "How true of Burns," as one of the late English critics justly remarks, " is the same old story; we slay the prophets, and then build their sepulchres; to the living in their need we measure out neglect, and reserve our praises for the dead who are beyond our charity."

In days of old
When knights were bold
And Barons held their sway,
Men got together
And swore at the weather,
Just as they do to-day.—Ex.

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We acknowledge the following correction by Messrs. Graesser and Wood, of the statement in our last issue, clipped from an "Exchange." that "No College in all England publishes a College paper":

We beg to correct this, as we know that several of the Oxford and Cambridge Colleges; Owens College, Manchester; BedfordGrammar School; The City of London School and others publish them."