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The dignity of a calling is its utility.

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Essay on Weeds.

By B. S. Pickett, '02.

Among the problems which perplex the farmers of our country, few eclipse in importance the eradication and the prevention of the introduction of weeds. That weeds deter greatly the increase of wealth among the individual farmers of our province is most clearly proved in this statement: Ontario loses annually through weeds ten million dollars. When we see such losses occurring, not only through weeds but also in the various other departments of the farm, we cannot wonder at the oft heard exclamation, "farming doesn't pay." For too long a time weeds have been considered necessary adjuncts to the farm, and their presence tolerated with more inward groanings against them than outward labor in their removal.

Any plant which persists in growing where it is not wanted is a weed. In the constant struggle in nature for the survival of the fittest, the same in plants as in animals, our Creator has provided certain species and families of plants with a wonderful power of reproduction, together with almost numberless devices to protect their seeds from injury and to further their distribution. That the greater number of our weeds is to be included among such plants is obvious to every man who knows anything

of their nature. But the ability to produce great numbers of seeds and to scatter this seed is also characteristic and desirable in our various grains; for this reason we must conclude that plants, to become weeds, must possess other objectionable inherent qualities. Among the other objectionable features of weeds may be considered their prevalence and their resistance to measures of eradication, while not less important is their ability to adapt themselves to a great variety of soils and climatic conditions. Besides these, both plants and their seeds possess, as a rule, great vitality, and to this is largely due their prevalence on lands which may have been carefully cultivated for quite long periods of time. Knowing now a few of these characteristics which mark various plants as weeds, we are able, more intelligently, to devise means for their extermination.

The old questions, why, where and how, must now be asked. Why should we endeavor to free our farms of weeds? Where and how do weeds occasion the great loss previously mentioned; and lastly, how are we to prevent their introduction and accomplish their eradication?

The answer to the first problem may be plainly read between the lines of the explanation of the second, where and how weeds reduce the value of our farm produce. Weeds take from the soil large quantities of plant food which should be made entirely available to the growing crop, yet even this is but a small consideration, compared with the value to the crop, of the moisture weeds absorb. Nor less important is the fact that weeds by crowding useful plants deprive them of air, sunlight and growing space. Remember that "where weeds will grow crops will too," but think of this not as a reason for allowing their presence, but as a most excellent reason for their destruction. Weeds increase the cost of handling the crop, in hauling and binding, and in the end obtain for it only the usual low price received for inferior goods. Even animals are greatly inconvenienced by the presence of burs and other sticky seeds in their coats, while the value of wool may be greatly reduced in this way. Lastly weeds are an eyesore and a constant source of worry and vexation to the farmer.

Weeds are migratory, and the direction of their migration has been steadily westward. Nearly all our noxious weeds have come from Europe, while those of our great northwest have

been first found in the eastern provinces. Weed migration has followed the great rail and water transport ways. Man's machinery, man's steamboats, man's railroads and his common highways, his fences and one hundred and one other artificial agents have proven marvellously active weed disseminators. When we add to man's methods of weed distribution nature's own provisions for these her children, we begin to realize the difficulties of preventing the introduction of new weeds on our farms.

By no one means has the number of weeds in our country been so increased as by the sowing of unclean grains and grass seed. In our wheat is found that pest so resistant to measures of eradication, the chess, and that persistently rank grower, the corn cockle. The size and the variation in color of our clover seed affords an opportunity of encroachment for a whole host of the worst enemies of our crops, the list including Rib-grass, Wild Buckwheat, White Cockle, Ragweed, Prickly Lettuce, Peppergrass, Sheep Sorrel, Clover Fodder and Black Medick. Oats permit the entrance of their wild kin of bad repute, the Wild Oat, while many crops are the means of weed distribution. To prevent the sowing of weeds in seed grains and grasses we must recommend the sowing of only such seed as has been carefully cleaned, and in buying from seedsmen to purchase only from those using the most improved machinery. That such seed will cost more is apparent, but the importance of its freedom from noxious weeds is also evident to all who read this statement drawn from tests made by Prof. Panton,—a cheap grade of commercial clover seed contained on an average thirty-five hundred foreign seeds in one ounce, while that ordinarily sold by wholesale dealers did not average higher than ten. The importation of clover and grass seed from Europe is a practice now no longer necessary, and on account of this very danger, one to be discontinued. Moreover, if farmers would proceed definitely to select grains of their own growing, growing them perfectly free of weeds, and refusing exchanges with careless neighbors, a part of this problem would be satisfactorily solved.

Railways and other transportation lines are the next great artificial aids to weed dissemination. The ordinary stock car fairly strews the track with seeds which may have passed in the excrement of the animals or have fallen from the unclean hay in their mangers. The use of clean bedding, the utmost vigilance

on the part of the track men and the construction of a better class of car, are the important precautions to be adopted against weed distribution by railways. Weed seeds from their droppings, or from the hay used by canal tow-horses may introduce noxious plants into new districts, while the roadside weeds are carried long distances by the animals or vehicles travelling over them, and it has been found necessary in many municipalities to enforce their destruction by law.

Of the precautions to be taken against the various other distributing agents of man, only brief observations can be here given. A few minutes spent in removing roots, stems or bulbs, found clinging to the projecting points of borrowed or returned implements, may save hours of costly work in destroying the injurious plants which these will probably produce during the next season. The careful farmer will have that fertile source of weed seeds, the threshing machine, thoroughly cleaned before allowing it to come on his farm. His near brothers, the orchardist and the horticulturist, have learned from experience that such reproducing parts should be removed from nursery stock before setting out, and their experience could be well heeded by all. The floriculturist has, to our sorrow, introduced such plants as the Ox-eye Daisy as ornamentals, while the vegetable gardener first cultivated as useful herbs Wild Garlic and Chicory; such inroads of weeds as these are practically impossible to guard. As regards their likelihood of introducing new weeds too much cannot be said against the practice of buying manure from city liveries, or the use of purchased baled hay. If you would block this line of attack the manure must be thoroughly heated, and, to prevent loss in buying, have it heated at the stables. There is really no efficient means of preventing the introduction of weeds in hay, though doubtless throwing out large weeds in baling would be a great benefit to purchasers. Last, but by no means least, may be mentioned farm fences as remarkable factors in the scattering of weeds. Fortunately modern rotations are making farm fences fewer and farther between. The days of the snake rail fence with its wide fence row are past, and in its place stands the wire structure with its single yard of room, or the light movable fence whose position is altered every year, and certainly the use of these will greatly deter the steady aggressiveness of our plant foes.

The winds, the waters, the birds, the wild animals and the plants themselves are nature's great agents of plant distribution. The unfortunate farmer on low lying river lands may every year find his fields strewn by the spring freshets, with myriads of noxious weed seeds gathered from the lands of the careless farmer above him. The winds carry the pappus winged seed from the fields of the slothful to those of his painstaking neighbor. The birds and the animals bring them sticking to their feet or in their hairy coats as they have occasion to cross his fields. The running roots and rootstocks, the creeping stems and tips, reach under and through, while the seed throwing apparatus with which many weeds are provided, throws their seeds over the fence which divides the weed free land from that which is thus infested, spreading and propagating their kind in new localities. To prevent this natural dissemination of weeds the only practical course, and beyond all doubt the only certain course, is to prevent their seeding and to destroy as far as possible every sign of green which may be shown by any perennial, and this introduces the second part of that last question, how are we to accomplish their destruction.

The possibility of weed eradication has long been considered by many good agricultural authorities a feasible scheme. Though such men are rightly considered enthusiasts, for the reason that the number of species is not fixed but is constantly being augmented by the development and introduction of new varieties, yet I do believe that any farmer may have such absolute control over the weeds on his own farm that they will no longer prove a menace to his crops. The increasing demand for farm produce resulting in more intensive systems of farming is requiring the destruction of weeds. The rapid increase in numbers and a corresponding decrease in price of the various cultivators and weeding machines has made this destruction comparatively cheap and easy. Then the smothering of weeds in dense crops of grain and hay is another great means which the farmers should control, and direct toward the suppression of his plant foes. A combination of these two methods in a well planned rotation is the great step towards weed destruction.

The special object of any rotation decides its arrangement. To better facilitate the destruction of these our plant foes, this order will include a frequent introduction of those crops which

permit thorough cultivation alternating with the smothering crops. For the subjection of weeds no arrangement yet has proved so satisfactory as the three year rotation; first year hoe crops including corn, roots, rape and potatoes, followed the second year by the various cereals, and these are seeded down to clover for the hay crop of the third year. A more popular general rotation, the four year system, differs from the first in leaving the land two years in a mixed clover and timothy sod, instead of taking from it but the one crop of hay.

So far as the destruction of weeds is concerned the principles involved in the two rotations are precisely the same, and may be enumerated about as follows: In importance shallow plowing may be ranked high in the list. Many weeds are indigenous to our farms, and so full has the soil become of their seeds that every successive plowing turns them up in countless numbers. Every additional inch in depth of plowing implies the upturning of more seeds, and, at the same time, the burial for preservation of myriads more. By shallow cultivation in the fall the vast majority of the seeds in the top four inches of soil may be germinated, and then, by the use of improved machinery, destroyed at a minimum cost. Equal in importance to shallow plowing is the frequent introduction of hoe crops, as they permit the use of the most ingenious weeding devices, and besides, require the employment of hard labor, and where these two are skilfully and intelligently employed there is little chance for weeds surviving the summer.

Within the past few years the cultivation of grain crops has been made possible, its practice proved so successful, and its possibilities, especially in this line, so advantageous, that it well deserves notice here under a separate paragraph. The implements employed for such tillage are known as weeders, among which Breed's weeder, a tool made up of a single light beam to which long rake like teeth are attached, is a common example. Its light weight, while too slight to injure the strong growing grain, is sufficient to destroy the newly germinated and weak growing weeds, thus rendering the crop invaluable assistance by enabling it to far outgrow its plant enemies, and to successfully prevent their harmful development. With the hoe crops too the weeder may be used to great advantage. When the young plants are just breaking through the surface an ordinary scuffler

would quite bury them, but the weeder, by removing two teeth over each row, may be most beneficially and safely used, and two applications then will save hours of hoeing later in the season. The methods of cultivation here described are by no means all that may be employed in these rotations, but we shall refer to others under the heading, special methods of weed eradication.

However, there is one method so universally adopted among farmers that it deserves some notice here, although its practice would involve a modification of our crop arrangement; I refer to that modern relic of antiquity, the summer fallow. We all know its management—several plowings, each one bringing up innumerable weeds seeds, and involving a more or less constant cultivation in the dirt and dust of the bare fields through the hot summer and early autumn days. While doubtless it destroys myriads of weeds, yet being almost always succeeded by a grain crop, the land is really left in the most ready condition to become again subject to them. Burning stubble, a plan frequently resorted to in the west to kill the seeds of Russian Thistle, Pigweed, Wild Oats, Penny Cress and Prickly Lettuce, cannot be recommended here, for the reason that it would destroy the young clover with which our cereals are almost invariably seeded. Sometimes too when a weed becomes specially bad some one method must be rigorously employed to overcome it. Canada thistles will require constant spudding; Sheep Sorrel, quack grass and rib grass must have their roots exposed by shallow plowing to the hot sun or the severe winter frosts; the root stocks of Couch Grass may have to be raked off by the use of chain harrows or even horse rakes and burned, while in some cases drainage must be resorted to to rid the land of such plants as Smartweed.

A lack of the knowledge of the habits, the seasons, the reproducing power, the conditions of germination and development, and in short the botany of plants, and particularly of weeds, is largely responsible for their appearance on our farms and in our orchards. Out of forty-two samples of weed seed, including seven common species, which I sent to various farmers of my acquaintance this winter, but twelve were correctly identified, this partly illustrating the correctness of the first statement. The low prices of the past few years have greatly

abetted a feeling of depression among farmers, and this sense of discouragement has resulted in neglect; farmers have lost that pride so necessary to true success, which consists in maintaining the neat and tidy appearance of their farms. The teaching of Agriculture in public schools will do much, and the interest stimulated along agricultural lines by farmers' institutes is doing much to solve all these agricultural problems, while the success of young men sent out from the various agricultural colleges of the United States, and one at least in Canada, testifies to the value of such an education.

In conclusion then we would say in regard to weeds, learn from every available means the most advantageous methods of preventing their introduction and of destroying them, and put your knowledge so acquired into practice, because from an economic standpoint it will pay, and because from a moral standpoint their presence has a most demoralizing effect on the minds of the farmer who permit their presence.

The Farmer as an Investigator.

By Wm. N. Hutt, B. S. A.

There is probably no occupation that has so many problems to solve as agriculture. It is the oldest of known arts, yet truly the most recent. The history of agriculture is coincident with the history of war, yet for all its antiquity it is still full of unsolved problems, while many of its secrets are so deep as to seem almost past finding out.

At first sight the evolution of agricultural thought seems to have been a very slow process. In the literature of agriculture from the Classic *Georgics* to the latest production of Rothamstead, Guelph or Cornell, the renaissance finds itself in the last two decades. The question arises, why in all these centuries has not agriculture, like some other branches of knowledge, been removed from the realm of haphazard to the position of a more exact science. In mathematics, given certain fixed data or axioms, we can from these premises arrive at a certain positive result. Give the farmer the soil, the seed, and means of

cultivation, would it be possible to obtain from these concrete data a certain definite harvest? Experience teaches us that the result far from being certain or definite, would be just as uncertain and variable as nature in her changing moods chose to make it. Instead of the soil representing a single constant quantity it really represents innumerable grades of mechanical texture, infinite, varying, chemical conditions and countless organic influences, the simple formations and combinations of which could only be represented ad infinitum. The seed and cultivation in a similar manner represent a function of any number of variable agents. From the manipulation of this multitude of variable crop conditions somewhat uncertain harvests are not to be wondered at.

From the very nature of his circumstances the farmer finds himself, to a greater or less degree, investigating the causes of success or failure. Let us now, as it were, take stock of his mental equipment as an investigator. In the first place he has good powers of observation, his natural surroundings foster this faculty. He sees a certain result, and though he may not always be able to ascertain the real cause, he is at least acute and fairly accurate in observation. The causes assigned for a certain result will depend of course on the nature and extent of his knowledge. If of the old school and versed in the "signs," the cause of any crop failure or success will be some remote agency "in the heavens above, or in the earth beneath, or in the waters under the earth." The moon is with him a wonder worker of marvellous and far-reaching power, affecting everything from the weather to the weaning of the last calf. It is useless to explain to him that it would not be difficult to calculate the exact position and appearance of the moon for any day in the future, and thus by his theory foretell the kind of weather years ahead. He replies that he does not know anything about that, but he knows that the moon does affect the weather for he has seen it. Such a man has often the eye of the artist to observe the wonders of nations and the heart of the poet to appreciate them, but lacks the knowledge and skill of the scientist to investigate and explain them. A second type of agricultural investigator is the younger man of the present generation who laughs at the old folk-lore of his fathers and who believes nothing but what he can see. He reasons from analogies of his own

limited experience and draws his conclusions therefrom. A man of this class tells me that he has noticed that calves always do best on milk that has become thick or soured, instead of sweet skim milk, assigning as the reason that the skim milk is just like water with nothing in it, but when it becomes thick it has some substance or body to it, and consequently has more nourishment. If you explain to him that the difference between the sweet and sour milk is that the milk sugar of the sweet milk has changed to lactic acid and in consequence has coagulated the casein and become thick and sour, he will look at you as much as to say, "such knowledge is too wonderful for me, it is so high I cannot attain unto it, but nevertheless from the appearance of things I think I am right." A man of this kind, though his method of reasoning may be tolerably correct, yet lacks the fundamental knowledge on which to base a correct conclusion. To a young man of this kind a year or so at an Agricultural College would be of incalculable benefit. Imagine his wonder at his first lesson in chemistry when told that a clean glass bottle is full of Oxygen gas. He does not believe it, he is sure the bottle is empty, and the brilliant light from the inserted match scarcely convinces him. A few weeks of such surprises entirely changes his whole manner of thinking and puts him on the right track for acquiring knowledge and drawing correct practical conclusions therefrom. Let us follow this man after an Agricultural College career. He has now learned many of the underlying principles of the soil, the seed and cultivation, and has solved some of their problems. The soil, the seed and the tillage are not as formerly, three merciless fates whose haphazardous fingers held destiny of his harvest—but rather three wilful coursers to be, manipulated and controlled by brain and hand. From the problem of Agricultural variation he eliminates factors of non-success.

By drainage, judicious cropping, and rotation, he avoids unfavorable conditions of soil. The seed, of which he will have only the best, is freed from all weed impurities, and if necessary is treated to destroy weeds and fungi.

By correct tillage he overcomes unfavorable conditions of flood or drought till old dame nature out of admiration is almost forced to yield him a crop in spite of herself. Indeed nature's best gifts to the farmer are given to the mind, trained to understand them and the strong hand to receive them; or, in other words, success in farming depends on the ability to investigate local conditions and the knowledge to intelligently control them.

Southend, May 24th.

The Insect Plague.

Of late years Ontario has suffered greatly from what may be called a plague of insects. Many species have increased so greatly as seriously to threaten agricultural interests in many ways.

The damage done by these insect foes is almost beyond calculation. Forests and orchards have been stripped of their leaves and in some instances killed outright by the tent caterpillar. Many very valuable maple forests in the eastern section of the province have been thus destroyed during the past two or three years. Grain and grass are destroyed in vast quantities every year by grasshoppers. Potatoes cannot be grown unless protected by poison from the potato beetle. Other crops also suffer in greater or less degree from these insect pests, and the total damage done to agriculture by this means must be very great.

The cause of this state of things appears to be the destruction of that condition known as the "balance of nature." At one time, before man interfered, things were so nicely adjusted that no insect foe increased unduly. When man appeared and changed the face of nature to meet the requirements of agriculture, this balance was destroyed, and, until it can be restored, we must suffer the consequences with all the patience we can muster to our aid.

Before the clearing of so much land in this province, and before the population had become so great, such continuous plagues of insects were unknown. Occasionally some insect foes would appear, and perhaps endure for a season or two in considerable numbers, but they always disappeared in a comparatively short time, instead of staying with us as they have of late. The reason for this is not difficult to see. In those early days the forests that covered the land were alive with birds of all sorts. Men had not yet reduced their numbers by killing, and in the forests nesting places in abundance existed for these feathered warriors, who sallied out into the fields in great numbers and ruthlessly attacked any insects they might find.

Now these conditions are changed. The greater part of our forests are cut down; on many farms hardly a shrub grows where a bird may build her nest. Robins, wood-peckers, and

many other birds have been ignorantly destroyed by farmers because of some slight injury the birds may have done to some of the farmer's property. Many more have been shot through mere wantonness and cruelty. In these ways the numbers of our feathered defenders have been terribly reduced, and the insect foes which were once held in check by them have greatly increased, until now they seriously threaten agriculture.

Clearly, the only real remedy for this state of things is the restoration of the balance of nature as soon as possible. We may kill myriads of destructive insects in various ways, but there will still be myriads more. One only safe defence lies in the increase of insectivorous birds, and we should endeavor by all the means in our power to do this.

The first step in this direction will be to stop the wanton destruction of the birds. Our farmers must be taught the utility of the birds. It would be well if the children in our rural schools were also taught something concerning their life and work. Then, for those who, after being instructed thus, still persist in destroying the birds, sterner measures must be employed. To this end we may use the game law of Ontario, already in force, but too often neglected, which protects the lives of nearly all birds, all we may say except crows and black-birds. Then the next step will be the planting of trees, where the birds may find shelter for their nests.

When these two things are done we may expect to see our birds increase in numbers, until, in the process of time, they become sufficiently numerous to hold insect life in check. Then the farmer will be freed from the insects that at present harass him, and not only his property, but also his comfort and happiness, will be increased greatly.

E. C. D.

The rose that blushes like the morn
 Bedecks the valleys low;
 And so dost thou, sweet infant corn,
 My Angelina's toe.

But on the rose there grows a thorn
 That breeds disastrous woe;
 And so dost thou, remorseless corn,
 On Angelina's toe.

The O. A. C. Review.

Business Managers.

F. S. JACOBS, Secretary.

P. G. MILLS, Treasurer.

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Ex-students are requested to contribute to our columns.

MAY, 1900.

Editorial.

With this issue the Review suspends publication for the college year of '99-'00, and it is with feelings of pleasure, though not unmingled with pain, that we relinquish our charge. There is pleasure in the contemplation of work completed; there are regrets for that which we have been unable to accomplish. It has been our aim to make the College Journal interesting alike to students and ex-students. If by our efforts we have in any degree increased its worth to these, then we are sufficiently rewarded for our labor. We trust that the Review will continue to enlarge its sphere of usefulness, and that the interest in it as the college journal will go on increasing.

Three years have passed, three sessions of study succeeded by three holiday seasons, since the class of '00 entered the halls of the O. A. C. as freshmen, and now the time for graduation has come. Glancing backward one or two years and comparing the class, as it then existed, with its present muster roll, we miss many familiar faces, and are forcibly reminded that the hand of Time has not stayed, but has left its impress even upon a class of three years standing. Upon enquiry we find that a number of the missing ones have returned to the farm, there to wrench from Nature the bounty which she at times so penuriously withholds; a few have drifted into other walks of life and are engaged in divers pursuits; others have enlisted as "Soldiers of the Queen" and are fighting her battles in far distant Africa; while a remnant remains who have chosen to face the difficulties of a final year in order to go forth better equipped for the work

before them. Soon the day of separation will be here and each member of the class will depart in his chosen way to encounter other and greater difficulties, and to pass amid changing scenes. But wherever the men of '00 may be placed, whatever our varying fortunes may be, we can never quite forget the happy years spent at the O. A. C., and it must ever be to us a true pleasure to revive the old associations and grasp anew the hands of companions of the laboratory and campus.

Athletic Notes.

Another college year has drawn to a close. We may now look backward and gather from the experience acquired during its course, hints which we hope will be useful to our successors in their endeavor to promote that all important item of college life: Athletics.

The officers of the late committee were fortunate enough to see their efforts crowned with success in several ways. Not only were they able to meet all the expenses necessitated by the outdoor games, and to give suitable prizes for the field day sports, but they also found it possible for the first time to provide suitable rewards for the successful competitors of the indoor sports. These sports are destined to become, if properly conducted, the important item of the college year. The benefit which the student will derive from a conscientious training in view of these contests can hardly be over-estimated. Too long have the possibilities of our gymnasium been overlooked. Boxing, wrestling, and such exercises should rank on a par with the outdoor games, and it is to be hoped that future students will devote their leisure hours during the winter to the practice of these manly arts more than formerly.

The treasury of the Athletic Association has been permanently enriched of late by the Marshall-Harris cup. This cup, which supplies a long felt want, symbolizes our two national games, Football and Hockey. Of the beauty of its design or the generosity of its donators, little can be said, for both are beyond praise. The desire to see the name of their year in the

roll of honor engraved upon this trophy will no doubt be a strong inducement to all athletes, and will not little help in promoting between the years a spirit of rivalry so conducive to success in all athletic contests. Here we might point to an improvement which should be effected in order to meet with greater success in these contests in the future. The inter year games should be started at the beginning of the season instead of being put off until the end as has formerly been done. This would create from the first a strong interest which would enable our captains of hockey and football teams to secure a much larger number of recruits. The task of our captains, when interest is lacking, is by no means an easy one. Too often has their enthusiasm been checked by a failure of the men to appear at the time appointed for the practice. By creating a spirit of rivalry between the years earlier in the season this defect will be largely overcome.

The election of officers for '00-'01 came off shortly before the college closed. The reins of the A. A. for the coming year were placed in the hands of the following men: President, W. Dryden; vice president, J. Weir; secretary-treasurer, A. Atkinson; committee, Cleal, Hallman. With such an able committee at the head of affairs, the A. A. looks forward to another prosperous year.

College Reporter.

On the evening of May 23rd President and Mrs. Mills gave an enjoyable At Home to the graduating class of '00. The members of the college staff, with their amiable partners, were among the number present. Several young ladies from the city assisted our genial host and hostess, and the Misses Mills, in making the "boys" feel at home. A very pleasant evening was spent together. The members of '00 cannot soon forget the kind hospitality displayed on this occasion, and will disperse, bearing with them pleasant memories of the old associations at the O. A. C.

The young orchard, which was planted three years ago, is in a thriving condition. A large number of the apple, plum and pear trees will, if allowed, bear fruit this year. During this season the Horticultural Department will test the relative merits of over seventy varieties of raspberries and two hundred varieties of strawberries, with lesser quantities of the other small fruits besides. It is also purposed to conduct extensive experiments in Floriculture.

In the Physical Department, Prof. Reynolds is continuing the investigation work concerning the effects of cultivation before and after seeding on soil moisture, temperature of soil and germination of seed. Several experimenters in different parts of the province are engaged in the work, and it is hoped that light may be thrown upon the questions of rolling and cultivation in general.

Prof. Lochhead has had charge of the fumigation work throughout the province again this season. He reports the progress made as being very satisfactory. The remedies recommended for the destruction of mustard will be tested on a larger scale this year, and it is expected that a cheap and efficient method of destroying the weed will be evolved.

Locals.

Important events may always be found registered in the columns of the O. A. C. Review, and not the least important of the past month has been the 'finis' of the graduation exams.

Whose pictures will grace the reading room walls as the graduating class of '00? Truly here is a chance for a day dream of pleasing ideas. We look (in the corner where the light strikes most brightly) and lo! we see a group clothed in black robes, holding scrolls in their hands, majestic and scholarly. We look closer, and as we become more accustomed to the radiant light reflected from those faces, we recognize some we knew.

In the centre, upright and happy, sits a noted chemist, characterized perhaps for his great repugnance to 'honey.' To his right, his head resting on one hand, sits zee gentleman wiz zee foreign accent, the same one who was to write the story for the Review (for which story the Lit. was to give a prize you remember). Next on the left is another chemist, a famous gunner who never missed a pheasant, (at least on the fly) a strong and mighty man. His face no longer expresses the anxiety it showed the evening following the analytic chemistry exam. Brown bread has effaced the last line from his broad deep brow, and the summer's sun has completely overcome his recent tendency to paleness. Other faces, too, appear in the front row, and on the left (farthest from the athletic foreign gentleman) is the great reader, a biologist (botanist, geologist, zoologist, entomologist, etc.) He was of a highly philanthropic turn of mind, and like others he has a history, like many others he endeavored to right many things at the O. A. C., and in doing so disturbed the sacred protectorate of the chairman of the managing committee of the Literary Society, and with what dire results we all know. Nevertheless he is here, a worshipful degree man of '00.

Many more faces we see to complete the picture, though doubtless one would think that it needed nothing more than the sad and pensive face, the lanky body, and the wasted arms of Gladstone Hall H—— who stands behind (since leaving college board for a few weeks no chair will hold him). But we must pass even this broad subject. There sits the tall dairyman whose deep frowning visage, smiling so sourly at the toast every morning, must often have turned its brown hue to a charry black, and whose bad jokes on Father B—— would almost cause the sausages to resume their old vocation, turn tail and howl in dismay.

Standing in the back row beside Cinna's solid figure (looking as any safety valve should look) just ready to blow off, is the frog and turtle man, last fall's winner of the broad jump. We pass, but no, examine closely—on a little stool beneath Linklater's shadowy figure sits the curly headed man from Mark Twain's onion isle. But the rest of the picture we leave our readers to draw for themselves, and we all join in wishing the '00 boys success.

Conundrum—

Now that Rush has gone, why should Yankee so much more rush than before?

Will Mr. Crearer please tell us whether the 'road' to Ireland is block pavement or McAdam?

Before botany exam. Andy—What I don't know about this subject isn't worth knowing, and in the same way, what I know about it isn't worth knowing either.

A valuable discovery.—How to plug on Sunday morning and yet not plug on Sunday morning. Sit up till two o'clock Saturday night.

A visit from Ikey.—Well, I must go over to that "gol darn dairy."

Notice.—Any one wanting standing timber, shade trees, etc., cut down, please apply to H. G. Barnes. Recommendations on application from Wm. Squirrel, O. A. C.

How much did that ball bat cost Bruce? In fifteen minutes the 'boy' had found four prices for it.

Was it Mr. Hunt who was looking for Street the other day in order to go for a wheel right away.

Prof. Toole's philosophy.—We might just as well be here as where we are.

As the poet has wisely said,—
 What's a man without a wife?
 What's a ship without a sail?
 But the meanest thing upon the earth,
 Is a shirt without a—collar button.

To the head of the bird department.—Hostilities opened yesterday, May 30th. Outposts have been engaged all day. Was obliged to withdraw troops in the evening, which movement was conducted in good order. Enemy's loss unknown. —Eftyhithes.

Said Atom unto Molly Cule,
 "Will you unite with me?"
 And Molly Cule did quick retort,
 "There's no affinity."

Beneath the electric light plant's shade
 Poor Atom hoped to meet her,
 But she eloped with a rascal Base
 And now her name's Salt Petre.—M. C. J.

Planting potatoes at the O. A. C.—viz., lying along the fence in the contemplation of the blue sky—tends to make a man kind hearted and generous. The present local editor of the Review, who has thus for many a day enjoyed rosy dreams between two piles of fence rails has not escaped the beneficial influence of this treatment. His heart has become softened, he has become awakened to the charms of the fair sex, and a liberality which he knew not has become one of his attributes; not content with taking his ice cream singly every Saturday night, as he was wont to do, this young convert now surrounds himself with fair friends. Yet, acting with the full belief that all kind acts in this world should meet with their due reward, he has taken good care to sow his seed in proper ground. Nor was he disappointed, for during the week his table is amply supplied with an abundance of watery milk and corn meal pie, things of which our young friend is especially fond. On Saturday night things are reversed, and young P—t, surrounded with four towering samples of the fair sex—like Bobs with his tall generals—goes down town, where he orders no less than one ice cream apiece.

ACT I—Scene 1.—Sunday evening—By all the onions of Bermuda, I believe I have got the measles. See! You must go down town tonight, for I have promised to do so.—Exit.

Scene 2—"The villain".—Telephone—No. — please. Is that you Miss S—? My room mate has a very severe attack of measles of the most infectious kind. The doctor says it is very dangerous.

ACT II—Scene 1.—After church (entering young ladies' home).—

"Telephone girl": O, Mr. Hollis! I thought you had the measles.

Hollis—Me? The measles? Why no, I am all right.

Enter Pater Familis—

Pater—Why, young man, the measles are all breaking out on you.....

Scene 2.—Mater—(wrapping Hollis in coats and shawls) "Now, you just go home and go to bed. The carriage is waiting for you at the door." Exit Hollis, dejected.

ACT III—College, Room 26, 11 p. m. Hollis, in bed. Enters villain. Hollis—You —!! —!! —!! What business had you telephoning to the city about those —!! measles?

The Sixteenth Field Battery.

The 16th Battery of Field Artillery will go under canvas for their annual camp on Tuesday, June 19th, and will remain in camp twelve days. Whether the camp will go to Deseronto, London, or remain in Guelph for camp, is yet undecided, although Deseronto is the most likely place.

All students who intend going out with the College battery should return to Guelph as early as possible, Monday, June 18th, so that uniforms may be obtained and everything in readiness for early Tuesday morning. It would be advisable to send in names and measurements for uniforms to Major Davidson, so that uniforms of the proper size may be reserved.

According to the regulations every man must supply himself with the following: comb, button stick and brush, knife, fork, spoon, razor, clothes and hair brushes, pair extra boots, socks, shirt, drawers, towel, soap, blacking and brush, one pair white cotton gloves, blanco, polishing paste. It is advisable to take a few extra pair of socks and other small articles.

The College Battery has been a noted cup winner, and it is to be hoped that a large number of students will return for camp and help to uphold the reputation of "B" Battery, which has been an honor to the O. A. C. in the past.

J. B. A.

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