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The dignity of a calling is its utility.

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EDITORS.

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Selection and Management of Dairy Cows.

By L. S. KLINCK.

HE dairy industry in Canada is one which has of late years attracted a great deal of attention. interest is constantly increasing because the fact is now becoming generally recognized that dairying is not only the most scientific, but also the most profitable branch of agriculture. Modern developments in dairy farming, and the many departures of which it has proved capable has shown that great possibilities lie before this industry, and, therefore, the present outlook for this branch of farming in Canada is brighter than in any previous period in its history. Dairying is now conducted scientifically, because the progressive dairymen of this Dominion have realized that the slip-shod methods of the past are not only detrimental but ruinous to the industry, and therefore, under the present keen competition, they have called into requisition their skill and business ability, and have succeeded in placing this branch of agriculture in the fore-front.

One of the prime requisites of a dairy farm is a good manager. The qualifications of a good feeder and manager of a dairy herd are many and varied. He must be a man who takes a deep and intelligent interest in the animals under his care. In order that he secure the largest returns for the least outlay, he must understand the composition of the foods at his command, and feed scientifically. He must know not only what to feed, but how and when to feed it. It is absolutely necessary that he treat the animals at all times with the greatest kindness, as an animal cannot do its best if it does not receive kind treatment. His treatment of them should be such that the animals will place entire confidence in him; and then, and only then, will he be able to secure the best results.

There is a wide range of opinion as to what breed is the best for the dairy farmer, and on this point it is impossible to give a definite answer. Each man prefers the breed which comes the nearest to his ideal as a dairy cow, and which gives him the largest return. There are good and bad in dairy animals in all breeds, and no doubt more depends on the individuality of the cow than on the breed. The only scientific method of ascertaining whether the animals in the herd are yielding a profit is to test their milk frequently by means of a Babcock tester. In almost every herd there are found animals which not only do not give a profit, but are maintained at an actual loss to the owner. All such cows should be disposed of immediately.

The selection of a sire to head the dairy herd is a matter of primary importance. First, be sure he is of a deep milking strain. I wish to emphasize this point particularly, because he is sure to leave his mark upon the herd. It is not good practice to buy a young animal and raise him for service, unless you have good reason to believe he will develop into an exceptionally valuable bull. It is better to select an animal that has done service and has left good stock, even if the price is much higher than that of an untried bull, because you are then tolerably sure that his get will be animals of superior merit. Never allow the bull to run with the cows. He should be kept in a comfortable box stall where he will be out of sight of the cows and free from anything which would tend to irritate or annoy him. In the summer allow him to run in a paddock and keep him in good, hard condition, especially when his services are most required.

As far as possible have your cows calve in the fall. This season is becoming more popular for a number of reasons. Not only do the calves make more substantial gains for the food consumed, but they develope into better dairy cows, as they get a much better start than they would in the spring. Conditions enabling the dam to maintain her full flow of milk for a longer period are then at their maximum. If a cow calves in the spring her flow of milk is generally arrested after several months by heat, flies, and the scarcity of pasture, so that after several mouths she falls off in her supply, and does not keep up her flow for the desired length of time. If she calves in the fall she will begin to fail in her milk supply at the time the June grass comes This will greatly increase her milk flow, and by the time the pastures fail she may be dried up in order to give her six or eight weeks to recuperate and get in good condition for the rearing of a calt in the spring.

Cows should be bred at from thirteen to fifteen months of age, depending on size and circumstances. Keep the animal in a thrifty condition in order that she may produce stock of a strong and vigorous constitution. Great care should be exercised in her feeding and management during her first period of lactation, as this is the most critical time in the life of a dairy cow. Feed the animal liberally in order to develop her milking powers to the utmost. She will require special feeding and attention during the first few months of lactation, and if necessary, this should be continued, that the period of milking may be prolonged to at least ten months.

It is generally conceded to be poor practice to allow a calf to suck its dam for any considerable time. The calf will do just as well if fed by hand. If allowed to suck its mother for some time the mother becomes attached to it, and weaning it is sure to derange her nervous system and cause a loss in milk. It is well to remove the calf after it has had two or three meals, and then feed it its mother's milk. Calves should be fed on whole milk three times a day until they are old enough to eat, when a gradual change may be made from whole milk to warm separator milk. It is important to teach the calf to eat at as early an age as possible. Bran is the best to begin with; then feed a little ground oats from which the hulls have been removed. At

this stage it has been found that a little oil meal mixed with the chop gives good results. As soon as the animal will eat coarse food feed some choice clover hay, and give a few pulped roots. A mixed ration of ensilage, cut clover hay, and a little chaff, makes a very nutritious and muscle-forming food, which, fed in conjunction with a few quarts of milk per day and a little oat chop and oil cake, produces a thrifty animal.

The cow should receive very careful attention for several weeks before parturition. Place her in a comfortable box stall which is only moderately well lighted. When possible, she should be removed from the rest of the herd, and given a quiet place where she will be free from all excitement. It is good practice to feed laxative food for a few days before calving. Frequently it is advisable to administer a mild purgative, and for this purpose nothing is better than Epsom salts. One to two pounds makes a good dose. After parturition, keep the animal in a state of rest, feed lightly, avoid all draughts or sudden changes of temperature, and warm her water slightly for several days, to avoid chills.

Perhaps in no point do dairymen differ so widely as in the matter of feeding to produce the greatest flow of milk. Much depends on the circumstances in which the dairyman finds himself placed, the milk-producing foods he can obtain at a moderate cost, and the crops to which his farm is particularly adapted. A mixed ration is absolutely essential. Both the yield and the quality of the milk has been greatly improved during the last fifty years, owing chiefly to better feeding and management. In order to secure a generous return it is necessary that the cow be fed a liberal ration of milk-producing foods. As only 40 per cent. of the total food consumed is used for the production of milk, we can easily see how necessary it is that the cow be fed liberally, as the percentage assimilated is the only food from which a profit can be made.

While much rough fodder may be used, providing it is nutritious, it is necessary to add concentrates if good results would be obtained. Succulent feed of some kind, such as silage or roots, is essential. As clover hay contains a high percentage of protein, it makes an excellent coarse food for milch cows, while in some cases good chaff or cut straw may be fed to advantage.

Ground oats and peas form an excellent concentrate to feed along with silage. Bran is almost indispensible, while oil cake, cotton seed meal, and a few other by-products, make excellent foods and may be fed to good advantage. At the Central Experimental Farm, Ottawa, the following ration has been found to give the best results: For a 1000-lb. cow, 30 lbs. silage, 10 lbs. clover hay, 8 lbs. chopped peas and oats, 2 lbs. bran, and 1 lb. oil meal. If any of the concentrates in the above ration were left out it would necessitate increasing the others, preferably the clover hay.

There is a variety of opinions as to the best method of feeding the ration decided upon. Some prefer to run the rough feed through the cutting box, mix it with the silage, and add the concentrates. Sometimes roots are pulped and added to this mixture. One point in favor of this method of feeding is that the animal is induced to eat much roughage, which, though nutritious, would otherwise be wasted. Another system, and one which is largely followed, is to feed the animals the concentrates mixed with a little cut hay or chaff to prevent the animal eating it too rapidly. The roughage may then be fed by itself. If the feed is of good quality, never give the animal more than it will eat up clean.

In the spring the animals may be turned out to pasture about the last week in May, or the beginning of June. Care should be exercised to see that the change is made gradually. For the first few days leave the animal on the grass for an hour or two at a time, and by the end of a week they may safely be allowed to stay on the pasture all the time. As long as the supply of grass is abundant, under ordinary circumstances it will not be necessary to feed chop; but as soon as the pasture begins to grow scarce the cows should be fed silage and grain in order to keep them up to the full flow of milk. During extremely hot weather, keep the cows stabled during the day, especially if the flies are bad. Where ensilage is not fed during the summer, it has been found good practice to sow a mixture of oats and tares or oats and peas, and feed this to the cattle when the pasture begins to dry up. By sowing these mixtures on different dates, say at intervals of two weeks, it is possible to have an abundant supply of green fodder until the corn is sufficiently matured to be profitably fed.

Cows should have free access to fresh pure water at all times. In many stables troughs have been constructed for carrying water to each animal, and have been found to give good results. If the chill can be taken off the water in extremely cold weather before it reaches the cows, they will do better. Salt should be given daily; one ounce per day is sufficient for mature animals.

The winter quarters should be warm and dry. Cows exposed to rains or cold piercing winds will not only require a greater amount of food to keep up the animal heat, but will fall off in their milk supply. Although warmth is desirable in a stable it must not be secured at the expense of a pientiful supply of fresh air. The foul air must have a means of escape, and provision must be made for the admittance of pure air without causing draughts. Much of the sickness among stabled cattle is due to improper ventilation. It is poor economy to crowd stock to keep them warm. One of the most effective methods of stamping out tuberculosis in our dairy herds is to supply the cows with an abundance of fresh, pure air.

All dairy cows should have regular exercise. If the weather is extremely cold it would not be advisable to turn the animals out unless they had a well sheltered yard; but frequent exercise is essential to good health. Too many farmers think that exercise means turning the cows out to the stack for a whole day. Such treatment does the animals more harm than good. If the weather is bright and mild cows may be left out for several hours, and the fresh air will not only tone their systems, and aid in milk production, but will tend to make their progeny more robust. In some countries dairymen have erected large, well lighted sheds into which they turn their cows immediately after their morning and noon-day meals. Where these sheds are provided the ordinary stables do not require to be so large or so expensive.

The dairy stable should be kept scrupulously clean, and its surroundings neat and tidy. Every spring and fall the cobwebs which too frequently festoon the walls and ceilings of our dairy stables should be swept down, and a coat of whitewash applied at least once.

When the cows are stabled in the fall, the hair should be carefully clipped from their thighs and udders, in order that they may be kept reasonably clean. Before milking, wash off the udder with warm water and dry it thoroughly. See that the stables are cleaned at least twice a day, before milking, and that all the utensils are kept clean. Remove the milk from the stable as soon as possible, strain it, and set in a cool place where it may be free from all bad odors. Nothing taints more readily than milk, and until our farmers realize the necessity of using the utmost vigilance to keep the milk pure we cannot expect to command the highest price for our dairy products in the markets of the world.

Some Rotes on the Massey Memorial Library and Ball.

Y the time this number of the Review reaches its readers, the tenders for the Massey Memorial Library and Hall will have been received and the contracts let. The site chosen for this building is on the triangular plot on the opposite side of the reservoir from the Chemical Laboratory, and it will be so placed that a line drawn lengthwise through it will point direct north and south. This will put it at an angle with the buildings already erected, as well as with the new building (Biological Laboratories, Physical Laboratories, and Museum), which is to be placed just below the site of the old greenhouse. This position will be most convenient for both instructors and students, and the building will add greatly to the general appearance of the compus.

The tenders call for red, hard-burned, stock brick, and the trimmings (foundations above ground, main entrance to tower, window trimmings, etc.,) are to be of Credit Valley brown stone; the roof is to be covered with unfading green slate, while the exposed iron work on the outside of the building is to be painted the same color as the brick.

The outside dimensions of the building are 104 feet long, 38 feet wide at library end, and 45 feet wide at the reading-room end, which will face the north. Wings, 31 ft. by 22 it., will

project on either side of the main building from about the On the ground floor, under the library portion there will be six rooms for the accommodation of Fellows and Assistants in the different departments of the Institution, while that portion of the ground floor immediately under the reading-room will consist of a hall 65 feet long by 45 feet wide, with a 19-foot This hall will be used for roll-call, Literary Society meetings, Experimental Union meetings, etc. Seminaries, 14 ft 6 inches by 20 feet, and 28 feet by 20 feet, will be provided on this floor for the use of advanced classes. The upper story to the north end of the building will be used for the reading-room and will be well lighted, both from the roof and from the sides; and in the two wings provision will be made for an Assistant Librarian's room, 21 feet by 15 feet; a Professors' room, (for consulting periodicals, magazines, etc.,) 21 feet by 17 feet, and a small room, 21 feet by 11 feet. in which papers and periodicals The southern portion of the main for students will be kept. building, above the ground floor, will consist of three stack rooms, 38 feet square and 7 feet high. These rooms will be fitted with the most modern equipment, and the hall will be enclosed by fire-proof walls and floors. The stacks in this room will be made of iron. Above the main entrance, which will be in the north-west angle formed by the junction of the main building and the west wing, will be erected a most artistic tower, some 71 feet high, and the architects, C. B. Miller & Co., Toronto, deserve credit for the most pleasing architectural effect which will be given by this tower, and the general outline of the main building.

[&]quot;There's a new style of spring bonnet out, my dear," remarked Mr. Snaggs to his wife.

[&]quot;What sort of a spring bonnet is it?" asked she, in some surprise. "I thought I knew more than you about the styles, but you seem to be taking notice in your old age."

[&]quot;It's a backward spring bonnet, my dear." - Chicago Record-Herald.

[&]quot;Good resolutions," says a lecturer, "are like babies at a concert. They ought to be carried out."

Agriculture in Japan.

We take much pleasure in publishing the following letter from Mr. Stephen H. Cartwright, an ex-student of '97, on 'Agriculture in Japan,' in which country Mr. Cartwright is at present a missionary.

35 Kitamache, Fukushima, 15th March, 1901.

DEAR PROF. DAY,-

It is now three years since I left the O. A. C., and two since I came to Japan as a missionary. Since coming here I have often thought of writing to you to tell you so tething about Japanese farming, to put in the Review, if you think it worth while. Probably few of the readets of the Review know very much about Japan, so a short letter may not be uninteresting.

When I let Canada to come here I knew absolutely nothing about the country or the people. I knew that I would arrive at the port of Yokohama, and was going to friends in Tokyo, but as to the distance from Yokohama to Tokyo, and what size the two places were, etc., I was perfectly ignorant.

I did not come out here with the immediate intention of doing missiomary work, but soon after I arrived circumstances arose which caused my thoughts to turn in that direction, and now I am the only foreigner in a place called Fukushima, (Happy Island) 170 miles north of Tokyo, a town with a population of about 13,000.

The climate of Japan is very damp. The sun, when it shines, is hot, even in winter. The rain fall is very great, an average of 70 in. per annum, I believe, whereas Canada has only about half that, I think.

The country is very mountainous, and the towns and the villages lie in the valleys, the size of the towns being in direct proportion to the size of the valley. As a rule there is one large town and a number of villages in each valley, unless the latter is very large, in which case there may be more than one town or city.

Until a comparatively short time ago the whole of Japan was divided into a number of small States, generally comprising one of these valleys and the surrounding mountains, and communication with other parts was difficult and intermittent.

Rice is, of course, the principal grain grown in Japan; besides it they raise wheat and barley, two kinds of mullet, many kinds of beans and peas, Irish and sweet potatoes, and various kinds of roots, and, among other things, two of the commonest Canadian weeds—wild mustard and burdocks—only here they are not looked upon as weeds at all. Besides these, mulberry and silkworm culture forms an important part of the farming operations in Japan.

The first thing that strikes a newcomer to Japan, in the farming line, is the size of the fields. They are really not fields at all in our sense of the word; they are very small garden plots divided off into queer shapes by little dykes about a foot high. A farmer who owns a couple of acres is a fair-sized land owner, so far as I have been able to find out, and he will employ a couple of extra men and some women to help work it during the busy season. From this you will see that farming in Japan is really gardening.

Soon after coming here I went into the mountains near Tokyo for a conple of days, and on my return was in a tram car with an Australian, who remarked on the impossibility of growing wheat under water. He saw the wheat growing in the middle of the paddy fields and did not notice that the land where the wheat was had been raised 18 inches above the surrounding paddy fields; this is done by carrying the top soil of the paddy fields and piling it up until the required elevation is obtained. Besides this, wheat is generally grown on land that is not irrigated and so is fairly dry.

The farm work begins about this time of the year (15th March), when the men go into the rice fields with an implement like a hoe, with a very long, narrow blade and a short handle. With this they take off about 2 inches of the top soil and place it in banks, i. e., ridge it up, and leave it until June. After the rice fields, the mulberry bushes require attention, and give employment until the end of August.

In May the wheat is ready for cutting. The Japanese cut all their grain and rice with sickles, tie it in very small sheaves, and place it butt up to dry; as the ground is more or less damp, the reason for this is difficult to understand.

About the middle of may the seed rice is sown thickly in special plots, and grows to the height of 4 or 5 inches by the middle of June. About the beginning of June the men break down the ridges that they made in March and April, and the water is turned into the paddy fields. After that the farmers are busy up to their knees in mud and water, breaking the lumps and getting the land ready for the rice. Often a horse is used to pull a kind of rake, made of a board with half a dozen iron teeth set at intervals of 4 inches or so. A man leads the horse round and round, and another man holds the implement, which is called a clod-breaker.

The 15th of June sees the beginning of the rainy season and the transplanting of the rice. The young plants are pulled up and tied in bundles, and are then placed in the paddy fields, the men and women planting them in rows about 16 inches apart and 6 or 7 inches apart in the row. This necessitates standing all day in the mud up to the knees, as it seems, and generally with the rain adding to other discomforts. After the rice planting the farmers have little to do, unless they raise silk worms as well as rice. In September the wheat and barley is sown.

Before coming to Japan, and while I was at the O. A. C., I read a book by an American agriculturist. and one passage struck me particularly at the time, viz.: "The time will come when farmers will sow wheat, barley and oats in rows wide apart, and will cultivate between the rows, as is done with corn to-day." I came to Japan more than a year later, and found that that is just what they do here, so far as the planting in rows far apart goes. They sow their wheat and barley very thick in the rows and leave 18 inches or more between them. They probably sow a bushel of seed to the acre, or perhaps a little more, and the yield looks quite as heavy as at home, though I have no statistics as to yield.

In November the rice is ready for cutting. The sheaves are set heads down on the ground, or often slung on poles placed horizontally. Millet is often grown along the borders of the mulberry plantations.

A certain amount of cultivation is done in the autumn, when the ground is generally put up in ridges, this being always done with the mulberry plantations. This latter is not to protect the roots, because often the ridge is placed in the middle of the rows of bushes, leaving the bushes in the hollow.

In winter the chief work is hauling manure out of the towns and putting it on the fields. The manure is drawn in large buckets on a two-wheeled cart. The buckets are slung on a pole placed horizontally above the frame of the cart, and a bucket is hung at each end of the pole. This is their chief manure.

The interesting things to me in this are the system of shallow cultivation that Mr. Rennie used to make so much of, and the growing of grain in rows wide apart. Has Mr. Zavitz ever tried doing that in his experiments?

The Japanese use horses very little, except for packing, though they are used occasionally for drawing carts. Cows are uncommon, though there are dairies in all the larger towns now. Sheep, apparently, cannot be raised out here, though at a few of the government experimental stations they have them. Pigs are increasing, I think.

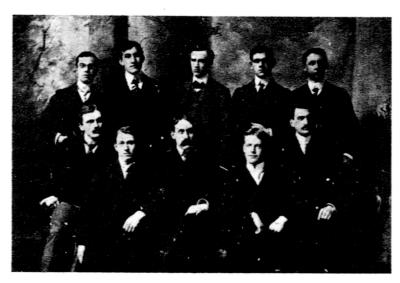
I often long for the sight of a pure-bred sheep or cow out here; all the animals, from horses to dogs, are mongrels, poorly kept, and a walk through the O. A. C. stables again, to see the sheep and other animals, especially if Sandy stevens is still in charge, would be a great joy.

Please remember me to the old professors. I sometimes see familiar names in reports of dairy, fruit, and agricultural meetings.

If you would like another letter at any time on some of the customs of the people, etc., please let me know. I hope this will be interesting, but am not sure; it may seem more so to me out here than to the readers of the O.A.C.

With kindest regards for your own kindness to me in the past. Believe me,

Yours sincerely, STEPHEN H. CARTWRIGHT.



Goodliffe. Cutting. Pipes.

Newcomb.

Cumming.

Dysart. Colter. Murray. Elderkin.

Logan. The cut for the above was kindly loaned by "The Co-operative Farmer and Maritime Dairyman." N. S.

Maritime Province Boys at the O. A. C.

The group whose photo we present in this issue is composed of students from the Maritime Provinces who are at present at the Ontario Agricultural College, Guelph. Among the number are representatives from Cape Breton, Nova Scotia and New Brunswick. Prince Edward Island is not represented this year, but its prestige was well upheld last year by Messrs. E. J. McMillan, New Haven, P. E. I., and T. Ross, B. A., the former of who is graduated with the class of 1900. Of those whose photos are in this group, some are taking the regular undergraduate four year course, and the rest are taking shorter special courses with a view to preparing themselves for various special lines of farming. It may be of interest to note that at the annual oratorical contest of 1900 three of the first prizes, first, second and fourth went to Maritime Province men, Messrs. Cummings, Ross and Cutting.

The O. A. C. Review.

Business Managers.

D. T. ELDERKIN, Secretary. L. S. KLINCK, Treasurer.

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Ex-students are requested to contribute to our columns.

MAY, 1901.

Editorial.

HIS being the closing number of the Review for the year 1900-01, its managers take this opportunity to thank their many friends for their support during its months of publication. While we have come far short of the ideals toward which we strove, we feel satisfied that some advancement has been made. Nevertheless, the fact remains that we have failed in one thing: we have reached but a comparative few of the great body of exstudents of this College. It scarcely seems possible, under the present system of management, to make the Review equally interesting to both students and graduates; nor can the paper cater to the wishes of the ex-student, so long as it receives its The Review, having always main support from the students. been a student enterprise, lacks the financial backing necessary to make it in every respect a satisfactory periodical for both graduates and undergraduates; consequently, if our paper is to meet the requirements of all its readers some new plan of operations, well backed financially, and providing for at least one permanent editor, must be suggested, and it rests with all the alumni to say whether, in addition to our present number of agricultural papers such a periodical is necessary, and it rests with them, too, to carry out any such project formed.

While the work connected with the publication of the Review has often been difficult and sometimes discouraging, we,

its editors, must acknowledge that it carries with it many advantages, and many sources of satisfaction. Satisfaction is ours because we have faithfully endeavored to uphold the honor of our College and our vocation, and to promote the growth of an O.A.C. spirit. Then, too, the literary work of each of its editors is in itself a partial compensation for the time spent in its behalf. But just in this connection we should like to ask the faculty for more encouragement than has usually been afforded us. Every month considerable time is spent in writing up various columns, and it would be only fair that an allowance for this time be made on our term work in English. This would be an incentive to more careful and thoughtful writing on the part of the editors. We are convinced that the training received in writing for publication, even in our College journal, merits a bonus of twenty per cent. of the total marks in English received by an editor during that year. Let the faculty consider this, and if the proposal be fair let the next editorial board be given the promise of such a bonus as an encouragement and incentive at the beginning of the year.

B. S. P.

CLOSING THOUGHTS.

During their College course, and especially in their final year, students of an agricultural college engage in considerable thought as regards their vocation when they leave the college halls. It is very plain that all graduates cannot get positions as college lecturers, and many are apt to consider anything lower than this somewhat out of their sphere of action. It should not be so. Occasionally a first-class man gets a fellowship, or an assistantship, upon graduation, but only very few cases hope for this. With the knowledge obtained in a post graduate course situations are more readily obtained, but insurmountable obstacles prevent many from taking such a course.

A certain number must, of course, return to their farms at home as leaders in agricultural operations in their own neighborhood, where, besides making their influence felt in a practical way, there are always opportunities in the Farmers' Institutes, Horticultural Societies, &c., where they may explain many problems which purely practical men cannot.

At present Institutes are not at a loss for successful practical men, but many progressive farmers are no longer content with being told how to perform an operation, but must know why they perform it, and it should be within the sphere of the Agricultural College graduate to fill this place.

Athletics.

We wish to call the attention of those students who are to return next fall to the fact that a valuable trophy will be presented for cross-country running by Prof. M. W. Doherty and Mr. W. Dryden, '99. The trophy goes to the student who wins a five-mile cross-country run, arranged for every fall by the Athletic Association, three times in succession. The trophy, which will be in the form of a cup, will be provided with bangles on which will be inscribed the names of the winners for the various years. A large number should spend a little time during the summer in preparing for this race, and at the same time for the Thanksgiving day races in Guelph.

A REVIEW OF THE YEAR'S SPORTS.

We have had a year of progressive sport, a year that stands boldly to the front in athletic success. The success of the first event—the out-door sports—proves that the O.A.C. had men of unusual strength, skill and endurance. The championship was won by J. Weir. At the Guelph Thanksgiving day races the College won her fair share of honor. J. P. Cleal won third place in the twenty-mile road race; H. L. Martinson won third place in the boys' race, and E. C. Hallman won first place in the ten-mile cross-country race. We anticipate a much larger list of entries (as well as of winners) from the College for these races next autumn. In foot ball the students found a great deal of recreation, though but few matches were played against cut-side teams. Can we not make our muscle and our brain and our "combination" work together for a successful foot ball campaign next year?

The five-mile cross-country race held at Toronto by the O. A. A. A. was well represented by three men, all of whom finished the race, in competition with eighteen starters, with

success. E. C. Hallman won first prize; J. Weir fifth place, and J. Stephens won ninth place. Our College has a reputation throughout the Province as a College whose students are made of the stuff that wins in athletic contests. Let us maintain such a worthy reputation.

In-door sports, too, have been a feature of interest and of great benefit to the students. They are a stimulus to that systematic training and regular exercise which is so essential to health.

We have had a year of athletic progress, and we may fittingly congratulate the president of the A. A. and his staff on the success which attended their efforts to promote the athletic interests of the students. If we have the material in our College—and we have—the material cut of which the first-class athletes are made, why can we not hope to develop that material and win for our Alma Mater a Provincial reputation as standing second to none in all manly sports.

Personals.

Mr. and Mrs. C. A. Zavitz have gone on a tour to Europe. Mr. Zavitz will visit the important agricultural stations there and expects to obtain information that will be of much use to him in his experimental work here.

W. J. Price, B.S.A., '96, after spending two years with Prof. Day, has commenced mixed farming at Marsfield, Dufferin Co. He expects soon to enter the field as a breeder of purebred cattle and swine.

J. Buchanan, B.S.A., '95, has severed his connection with the Experimental Department. For some time John has been suffering with rheumatism; he will try the climate of Manitoba during the summer, afterwards going to California.

"The Review" extends "Doc." Hopkins, '97, congratu-

Judson Clark, B.S.A., late resident master here, has been appointed Assistant Professor of Forestry at Cornell University-Mr. Clark will further pursue his studies in Germany before entering upon his work as lecturer.

- H. Gardiner, '98, manager of the poultry department at the *Montana Agricultural Experiment Station, has issued a very creditable bulletin on the production of poultry.
- G. H. Murdock, B.S.A., '96, was recently married to Miss Katie White, of Verulam. "The Review" wishes the young couple every success on the matrimonial sea.

Tennyson Jarvis, B. S. A., '97, has been appointed Assistant Biologist at the O.A.C.

Two more boys from Argentine have arrived at the College. The students from the Southern Republic gave a very enjoyable ball to their friends in the city on the evening of May 24th.

Melville Cumming, B.A., B.S.A., has accepted the position of Fellow in Agriculture under Prof. Day.

H. Counsel, '93, is now married and settled on a farm near Burlington.

Harry Story, B.S.A., '93, is now a court reporter at Denver, Colorado.

H. Goodliffe has been in Ontario for some time buying stock for his large dairy farm at Sussex, N.B. Allan Sutton returned with him to spend the summer on the farm.

Calmly and peacefully he released all claims to the farm cart and to the tender affections of the student body. During his last illness the memory of the faithful old horse seemed to reach far back into the old century and dwell on the characteristics of the students who had attended the College during the past 25 years. He had known them all; but now he is known no more. Old "Fred" is dead.

A man of letters.-The Postman.

Query: Is a Knight of Labor equal to a day's work?

First Boy-" My, but turnips are as large as footballs down south."

Second Boy-" Pshaw, that's nothing; I saw three policemen sleeping on one beat in St. Louis."

[&]quot;What are you going to give for Christmas?"

[&]quot;A chance to the cheerful giver."

College Reporter.

GRADUATING CLASS OF 1901.

Owing to the lengthening of the College course the graduating class for the year consists of but one member.

Melville Cumming is a son of Rev. T. Cumming, of Scotsburn, Pictou Co., N. S. Mr. Cumming enjoyed the advantages of a good early education at Truro Academy, and afterwards at Dalhousie College, Halifax, and is a graduate of both of these institutions. Despite his scholastic training his natural inclination led him to the farm, so that with the exception of two winters spent partly at the Ontario and partly at the Iowa Agricultural Colleges, he has devoted the greater part of the past five years to life on the farm. During this time he has seen farming in a good many phases, having been on the old homestead in Pictou Co., N. S., and afterwards with such men as F. L. Fuller, of Truro, N. S., Wm. Rennie, of Guelph, Ont., W. B. Watt, the shorthorn breeder, of Salem, Out., W. D. Flatt, the shorthorn breeder and importer, of Hamilton, Ont., and Mr. E. S. Donahey, the well known breeder, of Iowa, He assisted Mr. Flatt at his record-breaking sale of shorthorns in Chicago last summer, and afterwards spent some time in Iowa, completing the trip with a three months' course at the Iowa Agricultural Collage; at the end of which he was awarded the B.S.A. degree. Mr. C. is now a fourth year student at Guelph, and is specializing in Field Agriculture and Animal Husbandry. During his course here he has contributed several bright and interesting articles to the "Review."

College Jottings.

The contract for the building of Massy Memorial Hall and Library has been let to Schultz Bros., Brantford. The plans and specifications for the new Physical and Biological laboratories are now complete and tenders for the work are now being received.

The work of turning that part of the College recently occupied by the museum and library into dormitories is well under way. The framework for a considerable number of rooms is already in place, and the shop department is pushing the work rapidly. A poultry house for fattening fowls has been constructed from the lumber of the old greenhouse shed. The poultry department is rapidly ssuming a state of high efficiency.

"Strong drink will take the coat off a man's stomach," asserted the temperance lecturer.

"Worse," remarked the fellow with the pawn ticket; "it will take the coat off his back."

Locals.

Kilgour is having an 'Evanly time since Reed left.

The language of the residents of Lower Hunt may be judged by the following extract from a dairy picked up on the campus:

March 28th.-Went down to call on the fellows on L. Hunt. Pausing a moment at Brodrick's door. I was greeted with a pitcher of water and the following epithet sifted through the key-hole, "I'll give you a few bone shakers," and Mason chimed in with, "Get out, you shark's teat," and before I could recover my senses I received a hypodermic injection in the neck such as would make the old mare flinch. Tried Mack's room next, was admitted and rather pleased with the reception, in fact thought his room-mate, Partridge, was a bird, but after a short pause Mack said, "Get to your den, you old bag of mud, my old woman wants to plug." I then meandered on to call on Klinck and Gunn. K- was asleep as usual, and the first thing G- did was to inform me, "Every race has a flag but the coon." I spent some time reading some of the mottos on the walls, as "Labor omnia vincit," and "Tempus fugit," when K- wakened up and calmly and plainly told me I was a "dog on fish-head," and that if I didn't run away he would "put me out of the business." With a parting glass of H2O in the back of the neck from G- I rushed to 48, the home of Atkinson and Elderkin. I was surprised to find the door and fan-light both locked and was told to "Get off the street at once, and sooner if possible," while A- asked, "Did you ever see whiskers on a duck egg?" and told me to "keep the change." Two freshies

were next visited and were found to be "not dead but sleeping." Kicked at 46 and was informed by Reed "That I was all balled up," and that if I didn't leave at once he would "Bust my kisser," while "Scottie" chimed in with "Rubber, old man." Horton and Johnston pronounced a few phrases of blessing, while Miller declared he would throw any man who would come on the flat; Goodchild declared he "Never see the like of that, never no more before." But I had stayed too long: the whole street turned out, and as I fled wildly down the hall a few cool zephyrs floating in at the window carried these expressions to my ear: "Man off his street, tap him," "Put a damper on him," "Well, I'd be cow kicked," "I have a tin-type," "I'd be hit with a brick," "Ye old horse's neck," "Run away and sell your papers," "He's woolly eyed," "Low bred lobster." Someone said, "This is enough to drive a man to commit matrimony," and as my foot-prints gradually died away all returned to plugging and in a few minutes you could hear a cough drop anywhere on the flat.

Rive's prayer on Experimental—"Guard while I sleep."

The usual thing on Hunt Street since the term closed:—
9.30—As usual, the quieter residents of the flat seek a well earned repose.

11.15-Mr. McLean returns to his room.

11.45-Ceases to knock over the furniture and gets to bed.

12.30—Mr. Atkinson is heard humming a new song. Exercises his heavy, thick-soled, deep-toned boots in the hall till 12.45, then becomes quiet.

2 a.m.—The Dean gets home in haste; jingles his keys till he is persuaded the occupants of the flat are awake; then he retires satisfied.

3.30—Mr. Klinck steals in. Absent-mindedly he tries the doors of the various rooms till he reaches his own quarters, quoting from Julius Caesar the while. Stumbles around his room till 3.45 in search of a match. Falling over a pair of boots he rolls under the bed, exclaiming, "In truth I have the falling sickness."

4.30—Mr. Rutherford arrives to waken Mr. Bray. Then hastens to keep the poultry off the experimental pots.

4.45—Mr. Bray gets out; ascends the stairs to call a friend and stamps his dainty-shod feet to keep away the cold.

5.15-Both go out gently (?)

6.00-First bell.

6.30-Breakfast.

Monday evening, 10.15:

Eddy E., meeting Bray—" Hello, Bray. Just going out to farm cattle?"

Bray-" No; if I went out so early as this I might meet myself just coming in from down town."

Alf., in despair—"I've eight appointments for this week, and only seven nights to fulfil them in."

A recent bacteriological examination of the milk received from the farm stable by the dairy revealed the presence of the following bacili:—Bacili Nodreamibus, Bacili Stableorum, Bacili Brayum, Bacili Dogisorum, and Bacili McIlwraithii distinctibus.

It's whispered around that Gregg had Barnum's circus sidetracked for five hours at Galt on his recent trip to Harrisburg.

The angel, after watching Dysart carefully hoeing around the motherworts—" What are you leaving those for, apostle?"

Dysart—"Why, you don't want me to hoe off the young gooseberries, do you?"

With this number of the Review the local editor's work is finished for another year. The position is not at all times an easy position to fill satisfactorily, and if by any means your name has been missed in these columns we beg to tender you our humblest apologies. We wish to thank those students who have aided us in collecting the material for this department, and to wish to all an exceedingly pleasant and profitable holiday after the term's hard work, and to our successor, every success in the editorship of this column.

Who Wrote Shakespeare?

Hamlet overheard Julius Caesar tell King Lear, on the Twelfth Night After the Tempest, that Anthony and Cleopatra had told Coriolanus that Two Gentlemen of Verona were the authors of Shakespeare. Lear said: "You may take it As You Like it, but I don't believe it, for I heard Romeo and Juliet say Love's Labor was Lost when Trolius and Cressida stole the Comedy of Errors and sold it to the Merchant of Venice for forty bottles of old Bourbon and a package of poker checks. of Athens and Cymbeline were parties to the theft, and after drinking Measure for Measure with the Merry Wives of Windsor, told King John all about it. Kichard III., (a competent critic) said, Bacon could not write even a Winter's Tale, and Henry VIII. says that settles it. So, why make so Much Ado About Nothing? Othello was busy dealing a five-cent game of faro to the IV., V., VII. Henrys and the only remark made by them was an occasional "Drindle don't turn; hold on," and a few other remarks of a cursory nature; and, as Richard II. was absent Taming the Shrew, I could get no further evidence as to who wrote Shakespeare. But All's Well That Ends Well. Don't it?

"My son, how is it that you are always behind in your studies?"

"Mother, dear, If I were not behind them I could not pursue them."

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ators placed, we thought perhaps you would like to hear from us. It is with pleasure we say that the Creamery outfit is most satisfactory, and to add that our patrons are "delighted" with the Baby Separators, is using a mild term, more particularly as the majority of our Dairymen looked upon the promised results as the "Stock in Trade" of the talkative agents. They have, however, got over that stage and have now settled down to solid work, which has given us encouragement and confidence in the enterprise that will be of great advantage to stock raisers, who will have their own milk feed in a normal condition without artificial heating. The expert assistance you gave us was of the utmost importance to the success of the undertaking in explaining and creating confidence in the minds of our Patrons, who are with us solid now.

We have the proof already of the uniformity and smoothness of the cream from the Alphas as compared with that from another make, which is quite hampy and unsatisfactory.

Yours faithfully

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Arch. Russell.

BABIES

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